

PROPOSED RULEMAKINGS

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 271 AND 287]

[Correction]

Safe Fill

The Secretary of the Budget has submitted for publication in the *Pennsylvania Bulletin* a corrected fiscal note 7-372 for the proposed rulemaking which appeared at 32 Pa.B. 564, 573 (February 2, 2002).

The corrected version of fiscal note 7-372 is as follows:

Fiscal Note: 7-372. (1) General Fund; (2) Implementing Year 2001-02 is \$10,000; (3) 1st Succeeding Year 2002-03 is \$0; 2nd Succeeding Year 2003-04 is \$0; 3rd Succeeding Year 2004-05 is \$0; 4th Succeeding Year 2005-06 is \$0; 5th Succeeding Year 2006-07 is \$0; (4) 2000-01 Program—\$41,471,000; 1999-00 Program—\$40,200,000; 1998-99—\$33,123,000; (7) Environmental Program Management; (8) recommends adoption.

[Pa.B. Doc. No. 02-172. Filed for public inspection February 1, 2002, 9:00 a.m.]

STATE BOARD OF EDUCATION

[22 PA. CODE CH. 4]

Academic Standards and Assessment for Arts and Humanities; Health, Safety and Physical Education; and Family and Consumer Sciences

The State Board of Education (Education) proposes to amend Chapter 4 (relating to academic standards and assessment) to add academic standards in arts and humanities; health, safety and physical education; and family and consumer sciences, to read as set forth in Annex A, under authority of the Public School Code of 1949 (24 P. S. §§ 1-101—27-2702).

Purpose

The proposed amendments will add academic standards in arts and humanities; health, safety and physical education; and family and consumer sciences. The purpose of adding these requirements is to specify academic standards to be achieved by students enrolled in the public schools (including public charter schools) of this Commonwealth.

Requirements of the Regulations

Standards for arts and humanities are organized in four areas: (1) production, performance and exhibition of dance, music, theatre and visual arts; (2) historical and cultural contexts; (3) critical response; and (4) aesthetic response. Specific standards describe what students should know and be able to do by the end of third, fifth, eighth and twelfth grade.

Standards for health, safety and physical education are organized in five areas: (1) concepts of health; (2) healthful living; (3) safety and injury protection; (4) physical

activity; and (5) concepts, principles and strategies of movement. Standards for family and consumer sciences are organized in four areas: (1) financial and resource management; (2) balancing family, work and community responsibility; (3) food science and nutrition; and (4) child development. Specific standards for health, safety and physical education, and family and consumer science describe what students should know and be able to do by the end of third, sixth, ninth and twelfth grade.

Affected Parties

The proposed amendments will affect the students and professional employees of the public schools of this Commonwealth (including intermediate units, area vocational-technical schools, public charter and alternative schools).

Cost and Paperwork Estimates

Costs to implement this proposed rulemaking may include curriculum development and the professional development of teachers. These costs vary by school district. Curriculum development is an ongoing activity for schools and is typically part of their normal budgeting. Costs associated with aligning curricula with these standards at the local level will be minimized by the following efforts: technical assistance in curriculum development provided by Department of Education (Department) staff; detailed implementation materials developed by the Department, intermediate units and professional associations and provided to school districts; and the Standards Implementation Project which funds intermediate unit services throughout this Commonwealth supporting the implementation of these and other standards.

Professional development of teachers is an ongoing activity for schools and is addressed in the normal budgeting of school districts. Specific programs designed to support the implementation of these standards will minimize any financial impact on school districts. Professional development is provided through Governor's Institutes for Teachers (currently provided in the arts, humanities, and health safety and physical education). In addition, the act of November 23, 1999 (P. L. 529, No. 48) establishing a requirement for all educators to engage in continuing professional education, further requires the Department to provide 40 hours of professional development annually at no cost to teachers. Online, professional development courses are being developed for arts and humanities and family and consumer science. Current year funds available to the Department to support professional development are \$340,000.

Effective Date

These proposed amendments will become effective upon final-form publication in the *Pennsylvania Bulletin*.

Sunset Date

The effectiveness of Chapter 4 will be reviewed by the Board every 4 years, in accordance with the Board's policy and practice respecting all regulations promulgated by the Board. Thus, no sunset date is necessary.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on January 31, 2002, the Board submitted a copy of this proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Committees on Education. In addition to submitting the proposed rule-

making, the Board has provided IRRC and the Committees with a copy of a detailed Regulatory Analysis Form prepared by the Board in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, if IRRC has objections to any portion of the proposed rulemaking, it will notify the Board within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria which have not been met by that portion. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the amendments, by the Board, the General Assembly and the Governor of objections raised.

Public Comments and Contact Person

Interested persons are invited to submit written comments, suggestions or objections regarding this proposal to Peter H. Garland, Executive Director of the State Board of Education, 333 Market Street, Harrisburg, PA 17126-0333 within 30 days following publication in the *Pennsylvania Bulletin*.

Persons with disabilities needing an alternative means of providing public comment may make arrangements by calling Dr. Peter Garland at (717) 787-3787 or TDD (717) 787-7367.

PETER H. GARLAND,
Executive Director

Fiscal Note: 6-276. (1) General Fund; (2) Implementing Year 2001-02 is \$340,000; (3) 1st Succeeding Year 2002-03 is \$340,000; 2nd Succeeding Year 2003-04 is \$340,000; 3rd Succeeding Year 2004-05 is \$340,000; 4th Succeeding Year 2005-06 is \$340,000; 5th Succeeding Year 2006-07 is \$340,000; (4) 2000-01 Program—\$180,000; 1999-00 Program—\$120,000; 1998-97 Program—\$0; (7) For teacher professional development associated with new academic standards, etc.; (8) recommends adoption.

Annex A

TITLE 22. EDUCATION

PART I. STATE BOARD OF EDUCATION

CHAPTER 4. ACADEMIC STANDARDS FOR ASSESSMENT

APPENDIX D

Proposed Academic Standards for the Arts and Humanities

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THE ACADEMIC STANDARDS

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XXVI. INTRODUCTION

The Proposed Academic Standards for the Arts and Humanities describe what students should know and be able to do at the end of grades 3, 5, 8 and 12 in the visual and performing arts and the understanding about humanities context within the arts. The arts include dance, music, theatre and visual arts. The arts and the humanities are interconnected through the inclusion of history, criticism and aesthetics. In addition, the humanities include literature and language, philosophy, social studies and world languages. The areas encompassed in the humanities such as jurisprudence, comparative religions and ethics are included among other standards documents. The interconnected arts and humanities areas are divided into these standards categories:

- 9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts
- 9.2. Historical and Cultural Contexts
- 9.3. Critical Response
- 9.4. Aesthetic Response

The Proposed Academic Standards for the Arts and Humanities define the content for planned instruction that will result in measurable gains for all students in knowledge and skills and provide a basis of learning for continued study in the arts. The unifying themes of production, history, criticism and aesthetics are common to each area of study within the Proposed Academic Standards in the Arts and Humanities.

- Dance Education is a kinesthetic art form that satisfies the human need to respond to life experiences through movement of the physical being.
- Music Education is an aural art form that satisfies the human need to respond to life experiences through singing, listening and/or playing an instrument.
- Theatre Education is an interdisciplinary art form that satisfies the human need to express thoughts and feelings through written text, dramatic interpretation and multimedia production.
- Visual Arts Education is a spatial art form that satisfies the human need to respond to life experiences through images, structures and tactile works.

- Humanities Education is the understanding and integration of human thought and accomplishment.

Knowledge of the Proposed Academic Standards for the Arts and Humanities incorporates carefully developed and integrated components:

- Application of problem solving skills
- Extensive practice in the comprehension of basic symbol systems and abstract concepts
- Application of technical skills in practical production and performance
- Comprehension and application of the creative process
- Development and practice of creative thinking skills
- Development of verbal and nonverbal communication skills

These standards provide the targets essential for success in student learning in arts and humanities. They

describe the expectations for students' achievement and performance throughout their education in Pennsylvania schools. Utilizing these standards, school entities can develop a local school curriculum that will meet their students' needs.

The arts represent society's capacity to integrate human experience with individual creativity. Comprehensive study of the arts provides an opportunity for all students to observe, reflect and participate both in the arts of their culture and the cultures of others. Sequential study in the arts and humanities provides the knowledge and the analytical skills necessary to evaluate and critique a media-saturated culture. An arts education contributes to the development of productive citizens who have gained creative and technological knowledge necessary for employment in the 21st Century.

A glossary is included to assist the reader in understanding terminology contained in the standards.

9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts			
9.1.3. GRADE 3	9.1.5. GRADE 5	9.1.8. GRADE 8	9.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Know and use the elements and principles of each art form to create works in the arts and humanities.</p> <ul style="list-style-type: none"> • Elements <ul style="list-style-type: none"> • Dance: • energy/force • space • time • Music: • duration • intensity • pitch • timbre • Theatre: • scenario • script/text • set design • Visual Arts: • color • form/shape • line • space • texture • value • Principles <ul style="list-style-type: none"> • Dance: • choreography • form • genre • improvisation • style • technique • Music: • composition • form • genre • harmony • rhythm • texture • Theatre: • balance • collaboration • discipline • emphasis • focus • intention • movement • rhythm • style voice • Visual Arts: • balance • contrast • emphasis/focal point • movement/rhythm • proportion/scale • repetition unity/harmony 			
<p>B. Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts.</p> <ul style="list-style-type: none"> • Dance: • move • perform • read and notate dance • create and choreograph • improvise • Music: • sing • play an instrument • read and notate music • compose and arrange • improvise • Theatre: • stage productions • read and write scripts • improvise • interpret a role • design sets • direct • Visual Arts: • paint • draw • craft • sculpt • print • design for environment, communication, multi-media 			
<p>C. Recognize and use fundamental vocabulary within each of the arts forms.</p>	<p>C. Know and use fundamental vocabulary within each of the arts forms.</p>	<p>C. Identify and use comprehensive vocabulary within each of the arts forms.</p>	<p>C. Integrate and apply advanced vocabulary to the arts forms.</p>
<p>D. Use knowledge of varied styles within each art form through a performance or exhibition of unique work.</p>	<p>D. Describe and use knowledge of a specific style within each art form through a performance or exhibition of a unique work.</p>	<p>D. Demonstrate knowledge of at least two styles within each art form through performance or exhibition of unique works.</p>	<p>D. Demonstrate specific styles in combination through the production or performance of a unique work of art (e.g., a dance composition that combines jazz dance and African dance).</p>
<p>E. Demonstrate the ability to define objects, express emotions, illustrate an action or relate an experience through creation of works in the arts.</p>	<p>E. Know and demonstrate how arts can communicate experiences, stories or emotions through the production of works in the arts.</p>	<p>E. Communicate a unifying theme or point of view through the production of works in the arts.</p>	<p>E. Delineate a unifying theme through the production of a work of art that reflects skills in media processes and techniques.</p>

9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts			
9.1.3. GRADE 3	9.1.5. GRADE 5	9.1.8. GRADE 8	9.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>F. Identify works of others through a performance or exhibition (e.g., exhibition of student paintings based on the study of Picasso).</p> <p>G. Recognize the function of rehearsals and practice sessions.</p> <p>H. Handle materials, equipment and tools safely.</p> <ul style="list-style-type: none"> • Identify materials used. • Identify issues of cleanliness related to the arts. • Recognize some mechanical/electrical equipment. • Recognize differences in selected physical space/environments. • Recognize the need to select safe props/stage equipment. • Identify methods for storing materials in the arts. <p>I. Identify arts events that take place in schools and in communities.</p>	<p>F. Describe works of others through performance or exhibition in two art forms.</p> <p>G. Identify the function and benefits of rehearsal and practice sessions.</p> <p>H. Use and maintain materials, equipment and tools safely.</p> <ul style="list-style-type: none"> • Describe some materials used. • Describe issues of cleanliness related to the arts. • Describe types of mechanical/electrical equipment usage. • Know how to work in selected physical space/environments. • Identify the qualities of safe props/stage equipment. • Describe methods for storing materials in the arts. <p>I. Describe arts events that take place in schools and in communities.</p>	<p>F. Explain works of others within each art form through performance or exhibition.</p> <p>G. Explain the function and benefits of rehearsal and practice sessions.</p> <p>H. Demonstrate and maintain materials, equipment and tools safely.</p> <ul style="list-style-type: none"> • Analyze the use of materials. • Explain issues of cleanliness related to the arts. • Explain the use of mechanical/electrical equipment. • Demonstrate how to work in selected physical space/environment. • Demonstrate the selection of safe props/stage equipment. • Demonstrate methods for storing materials in the arts. <p>I. Know where arts events, performances and exhibitions occur and how to gain admission.</p>	<p>F. Analyze works of arts influenced by experiences or historical and cultural events through production, performance or exhibition.</p> <p>G. Analyze the effect of rehearsal and practice sessions.</p> <p>H. Incorporate the effective and safe use of materials, equipment and tools into the production of works in the arts.</p> <ul style="list-style-type: none"> • Evaluate the use and applications of materials. • Evaluate issues of cleanliness related to the arts. • Evaluate the use and applications of mechanical/electrical equipment. • Evaluate differences among selected physical space/environment. • Evaluate the use and applications of safe props/stage equipment. • Evaluate the use and apply safe methods for storing materials in the arts. <p>I. Distinguish among a variety of regional arts events and resources and analyze methods of selection and admission.</p>

9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts			
9.1.3. GRADE 3	9.1.5. GRADE 5	9.1.8. GRADE 8	9.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>J. Know and use traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> • Know and use traditional technologies (e.g., charcoal, pigments, clay, needle/thread, quill pens, stencils, tools for wood carving, looms, stage equipment). • Know and use contemporary technologies (e.g., CDs/software, audio/sound equipment, polymers, clays, board-mixers, photographs, recorders). <p>K. Know and use traditional and contemporary technologies for furthering knowledge and understanding in the humanities.</p>	<p>J. Apply traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> • Experiment with traditional technologies (e.g., ceramic/wooden tools, earthen clays, masks, instruments, folk shoes, etching tools, folk looms). • Experiment with contemporary technologies (e.g., color fills on computers, fonts/point systems, animation techniques, video teleconferencing, multimedia techniques, internet access, library computer card catalogues). <p>K. Apply traditional and contemporary technology in furthering knowledge and understanding in the humanities.</p>	<p>J. Incorporate specific uses of traditional and contemporary technologies within the design for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> • Explain and demonstrate traditional technologies (e.g., paint, tools, sponges, weaving designs, instruments, natural pigments/glazes). • Explain and demonstrate contemporary technologies (e.g., MIDI keyboards, internet design, computers, interactive technologies, audio/sound equipment, board-mixer, video equipment, computerized lighting design). <p>K. Incorporate specific uses of traditional and contemporary technologies in furthering knowledge and understanding in the humanities.</p>	<p>J. Analyze and evaluate the use of traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> • Analyze traditional technologies (e.g., acid printing, etching methods, musical instruments, costume materials, eight track recording, super 8 movies). • Analyze contemporary technologies (e.g., virtual reality design, instrument enhancements, photographic tools, broadcast equipment, film cameras, preservation tools, web graphics, computer generated marching band designs). <p>K. Analyze and evaluate the use of traditional and contemporary technologies in furthering knowledge and understanding in the humanities.</p>

9.2. Historical and Cultural Contexts			
9.2.3. GRADE 3	9.2.5. GRADE 5	9.2.8. GRADE 8	9.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to identify, compare, contrast and analyze works in the arts in their historical and cultural context appropriate for each grade level in concert with districts' social studies, literature and language standards.</i>			
<p>A. Explain the historical, cultural and social context of an individual work in the arts.</p> <p>B. Relate works in the arts chronologically to historical events (e.g., 10,000 B.C. to present).</p> <p>C. Relate works in the arts to varying styles and genre and to the periods in which they were created (e.g., Bronze Age, Ming Dynasty, Renaissance, Classical, Modern, Post-Modern, Contemporary, Futuristic, others).</p> <p>D. Analyze a work of art from its historical and cultural perspective.</p> <p>E. Analyze how historical events and culture impact forms, techniques and purposes of works in the arts (e.g., Gilbert and Sullivan operettas).</p> <p>F. Know and apply appropriate vocabulary used between social studies and the arts and humanities.</p> <p>G. Relate works in the arts to geographic regions:</p> <ul style="list-style-type: none"> • Africa • Asia • Australia • Central America • Europe • North America • South America <p>H. Identify, describe and analyze the work of Pennsylvania Artists in dance, music, theatre and visual arts.</p> <p>I. Identify, explain and analyze philosophical beliefs as they relate to works in the arts (e.g., classical architecture, rock music, Native American dance, contemporary American musical theatre).</p>			

9.2. Historical and Cultural Contexts			
9.2.3. GRADE 3	9.2.5. GRADE 5	9.2.8. GRADE 8	9.2.12. GRADE 12
<p><i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to identify, compare, contrast and analyze works in the arts in their historical and cultural context appropriate for each grade level in concert with districts' social studies, literature and language standards.</i></p>			
<p>J. Identify, explain and analyze historical and cultural differences as they relate to works in the arts (e.g., Shakespeare, works by Michelangelo, ethnic dance and music).</p>			
<p>K. Identify, explain and analyze traditions as they relate to works in the arts (e.g., story telling—plays, oral histories—poetry, work songs—blue grass).</p>			
<p>L. Identify, explain and analyze common themes, forms and techniques from works in the arts (e.g., Copland and Graham's <i>Appalachian Spring</i> and Millet's <i>The Gleaners</i>).</p>			

9.3. Critical Response			
9.3.3. GRADE 3	9.3.5. GRADE 5	9.3.8. GRADE 8	9.3.12. GRADE 12
<p><i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i></p>			
<p>A. Recognize critical processes used in the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> • Compare and contrast • Analyze • Interpret • Form and test hypotheses • Evaluate/form judgments 	<p>A. Identify critical processes in the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> • Compare and contrast • Analyze • Interpret • Form and test hypotheses • Evaluate/form judgments 	<p>A. Know and use the critical process of the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> • Compare and contrast • Analyze • Interpret • Form and test hypotheses • Evaluate/form judgments 	<p>A. Explain and apply the critical examination processes of works in the arts and humanities.</p> <ul style="list-style-type: none"> • Compare and contrast • Analyze • Interpret • Form and test hypotheses • Evaluate/form judgments
<p>B. Know that works in the arts can be described by using the arts elements, principles and concepts (e.g., use of color, shape and pattern in Mondrian's <i>Broadway Boogie-Woogie</i>; use of dynamics, tempo, texture in Ravel's <i>Bolero</i>).</p>	<p>B. Describe works in the arts comparing similar and contrasting characteristics (e.g., staccato in Grieg's <i>In the Hall of the Mountain King</i> and in tap dance).</p>	<p>B. Analyze and interpret specific characteristics of works in the arts within each art form (e.g., pentatonic scales in Korean and Indonesian music).</p>	<p>B. Determine and apply criteria to a person's work and works of others in the arts (e.g., use visual scanning techniques to critique the student's own use of sculptural space in comparison to Julio Gonzales' use of space in <i>Woman Combing Her Hair</i>).</p>
<p>C. Know classification skills with materials and processes used to create works in the arts (e.g., sorting and matching textiles, musical chants, television comedies).</p>	<p>C. Classify works in the arts by forms in which they are found (e.g., farce, architecture, graphic design).</p>	<p>C. Identify and classify styles, forms, types and genre within art forms (e.g., modern dance and the ethnic dance, a ballad and a patriotic song).</p>	<p>C. Apply systems of classification for interpreting works in the arts and forming a critical response.</p>
<p>D. Explain meanings in the arts and humanities through individual works and the works of others using a fundamental vocabulary of critical response.</p>	<p>D. Compare similar and contrasting important aspects of works in the arts and humanities based on a set of guidelines using a comprehensive vocabulary of critical response.</p>	<p>D. Evaluate works in the arts and humanities using a complex vocabulary of critical response.</p>	<p>D. Analyze and interpret works in the arts and humanities from different societies using culturally specific vocabulary of critical response.</p>
<p>E. Recognize and identify types of critical analysis in the arts and humanities.</p> <ul style="list-style-type: none"> • Contextual criticism • Formal criticism • Intuitive criticism 	<p>E. Describe and use types of critical analysis in the arts and humanities.</p> <ul style="list-style-type: none"> • Contextual criticism • Formal criticism • Intuitive criticism 	<p>E. Interpret and use various types of critical analysis in the arts and humanities.</p> <ul style="list-style-type: none"> • Contextual criticism • Formal criticism • Intuitive criticism 	<p>E. Examine and evaluate various types of critical analysis of works in the arts and humanities.</p> <ul style="list-style-type: none"> • Contextual criticism • Formal criticism • Intuitive criticism

9.3. Critical Response			
9.3.3. GRADE 3	9.3.5. GRADE 5	9.3.8. GRADE 8	9.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>F. Know how to recognize and identify similar and different characteristics among works in the arts (e.g., Amish and Hawaiian quilts, Navaho weavings and Kente cloth from West Africa).</p> <p>G. Know and demonstrate what a critic's position or opinion is related to works in the arts and humanities (e.g., I like patriotic songs; The movie was enjoyed for its exceptional special effects).</p>	<p>F. Know how to recognize the process of criticism in identifying and analyzing characteristics among works in the arts.</p> <p>G. Describe a critic's position or opinion about selected works in the arts and humanities (e.g., student's presentation of a critical position on Walt Disney's <i>Evolution of Mickey and Minnie Mouse</i>).</p>	<p>F. Apply the process of criticism to identify characteristics among works in the arts.</p> <p>G. Compare and contrast critical positions or opinions about selected works in the arts and humanities (e.g., critic's review and comparison of Alvin Ailey's <i>Revelations to Tchaikovsky's Swan Lake</i>).</p>	<p>F. Analyze the processes of criticism used to compare the meanings of a work in the arts in both its own and present time.</p> <p>G. Analyze works in the arts by referencing the judgments advanced by arts critics as well as one's own analysis and critique.</p>

9.4. Aesthetic Response			
9.4.3. GRADE 3	9.4.5. GRADE 5	9.4.8. GRADE 8	9.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Know how to respond to a philosophical statement about works in the arts and humanities (e.g., "Can artworks that depict or are about ugly or unpleasant things ever be beautiful?").</p> <p>B. Know how to communicate an informed individual opinion about the meaning of works in the arts (e.g., works of an artist of the month).</p> <p>C. Recognize that the environment of the observer influences individual aesthetic responses to works in the arts (e.g., the effect of live music as opposed to listening to the same piece on a car radio).</p> <p>D. Recognize that choices made by artists regarding subject matter and themes communicate ideas through works in the arts and humanities (e.g., artist's interpretation through the use of classical ballet of the American West in Agnes De Mille's <i>Rodeo</i>).</p>	<p>A. Identify uses of expressive symbols that show philosophical meanings in works in the arts and humanities (e.g., American TV ads versus Asian TV ads).</p> <p>B. Investigate and communicate multiple philosophical views about works in the arts.</p> <p>C. Identify the attributes of various audiences' environments as they influence individual aesthetic response (e.g., Beatles' music played by the Boston Pops versus video taped concerts from the 1970s).</p> <p>D. Explain choices made regarding media, technique, form, subject matter and themes that communicate the artist's philosophy within a work in the arts and humanities (e.g., selection of stage lighting in Leonard Bernstein's <i>West Side Story</i> to communicate mood).</p>	<p>A. Compare and contrast examples of group and individual philosophical meanings of works in the arts and humanities (e.g., group discussions on musical theatre versus the individual's concept of musical theatre).</p> <p>B. Compare and contrast informed individual opinions about the meaning of works in the arts to others (e.g., debate philosophical opinions within a listserv or at an artist's website).</p> <p>C. Describe how the attributes of the audience's environment influence aesthetic responses (e.g., the ambiance of the theatre in a performance of Andrew Lloyd Weber's <i>Cats</i>).</p> <p>D. Describe to what purpose philosophical ideas generated by artists can be conveyed through works in the arts and humanities (e.g., T. Ganson's <i>Destructive Periods in Russia During Stalin's and Deniken's Leadership</i> conveys her memories and emotions of a specific incident).</p>	<p>A. Evaluate an individual's philosophical statement on a work in the arts and its relationship to one's own life based on knowledge and experience.</p> <p>B. Describe and analyze the effects that works in the arts have on groups, individuals and the culture (e.g., Orson Welles' 1938 radio broadcast, <i>War of the Worlds</i>).</p> <p>C. Compare and contrast the attributes of various audiences' environments as they influence individual aesthetic response (e.g., viewing traditional <i>Irish</i> dance at county fair versus the performance of <i>River Dance</i> in a concert hall).</p> <p>D. Analyze and interpret a philosophical position identified in works in the arts and humanities.</p>

XXVII. GLOSSARY

Aesthetics:	A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce.
Aesthetic criteria:	Standards on which to make judgments about the artistic merit of a work of art, derived from cultural and emotional values and cognitive meaning.
Artistic choices:	Selections made by artists in order to convey meaning.
Arts criticism:	The act or process of describing and evaluating the media, processes and meanings of works in the arts and making comparative judgments.
Arts integration:	The act or process of incorporating the arts disciplines—dance, music, theater and visual art—as equal partners with the other disciplines in the curriculum in order to enhance meanings and relationships between, within and across all the disciplines in the curriculum.
Arts resource:	An outside community source of arts performances or exhibitions.
Assess:	To analyze and determine the nature and quality of the process/product through means appropriate to the art form.
Community:	A group of people who share a common social, historical, regional or cultural heritage.
Contemporary technology:	Tools, machines or implements emerging and used today for the practice or production of works in the arts.
Context:	A set of interrelated background conditions (e.g., social, economic, political) that influence and give meaning to the development and reception of thoughts, ideas or concepts and that define specific cultures and eras.
Create:	To produce works of art using materials, techniques, processes, elements, principles and analysis.
Critical analysis:	The process of examining and discussing the effective uses of specific aspects of a work of art.
Contextual criticism:	Discussion and evaluation with consideration of factors surrounding the origin and heritage to works in the arts and humanities.
Formal Criticism:	Discussion and evaluation of the elements and principles essential to works in the arts and humanities.
Intuitive Criticism:	Discussion and evaluation of one's subjective insight to works in the arts and humanities.
Critical process:	The use of sequential examination through comparison, analysis, interpretation, formation and testing of hypothesis and evaluation to form judgments.
Culture:	The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing.
Elements:	Core components that support the principles of the arts.
Formal production/exhibition:	The showing or performance of a work in the arts for an audience.
Genre:	A type or category (e.g., music—opera, oratorio; theater—tragedy, comedy; dance—modern, ballet; visual arts—pastoral, scenes of everyday life).
Humanities:	The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment.
Improvisation:	Spontaneous creation requiring focus and concentration.
MIDI keyboard:	(Musical Instrument Digital Interface) A piece of equipment that interacts with a computer that uses a MIDI language set-up to notate and play music.
Original works in the arts:	Dance, music, theatre and visual arts pieces created by performing or visual artists.
Principles:	Essential assumptions, basic or essential qualities determining intrinsic characteristics.
Repertoire:	Prepared works in the art that a group/person is ready to perform that demonstrates a range of abilities.
Style:	A distinctive or characteristic manner of expression.
Synthesis:	The reassembling of separate parts into a new form.
Technique:	Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts.
Timbre:	A unique quality of sound.
Traditions:	Knowledge, opinions and customs a group feels is so important that members continue to practice it and pass it on to other generations.

Traditional technology: Tools, machines or implements used for the historical practice or production of works in the arts.

Vocabulary: Age and content appropriate terms used in the instruction of the arts and humanities that demonstrate levels of proficiency as defined in local curriculum (i.e., fundamental—grade 3, comprehensive—grade 5, discriminating—grade 8 and advanced—grade 12).

Proposed Academic Standards for Health, Safety and Physical Education

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XXIX. INTRODUCTION

This document includes Proposed Academic Standards for Health, Safety and Physical Education in these categories:

- 10.1 Concepts of Health
- 10.2 Healthful Living
- 10.3 Safety and Injury Prevention
- 10.4 Physical Activity
- 10.5 Concepts, Principles and Strategies of Movement

The Proposed Academic Standards for Health, Safety and Physical Education describe what students should know and be able to do by the end of third, sixth, ninth and twelfth grade. The standards are sequential across the grade levels and reflect the increasing complexity and rigor that students are expected to achieve. The Proposed Standards define the content for planned instruction that will result in measurable gains for all students in knowledge and skill. School entities will use these standards to develop local school curriculum and assessments that will meet the needs of the students.

The Proposed Academic Standards for Health, Safety and Physical Education provide students with the knowledge and skills that will enable them to achieve and maintain a physically active and healthful life. The attainment of these standards will favorably impact their lives and the lives of those around them. By becoming and remaining physically, mentally, socially and emotionally healthy, students will increase their chances of achieving to their highest academic potential.

The Proposed Academic Standards for Health, Safety and Physical Education provide parents with specific information about the knowledge and skills students should be developing as they progress through their educational programs. With the standards serving as clearly defined targets, parents, students, teachers and community members will be able to become partners in helping children achieve educational success.

A glossary is included to assist the reader in understanding terminology contained in the standards.

10. 1. Concepts of Health			
10.1.3. GRADE 3	10.1.6. GRADE 6	10.1.9. GRADE 9	10.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Identify and describe the stages of growth and development.</p> <ul style="list-style-type: none"> • infancy • childhood • adolescence • adulthood • late adulthood <p>B. Identify and know the location and function of the major body organs and systems.</p> <ul style="list-style-type: none"> • circulatory • respiratory • muscular • skeletal • digestive <p>C. Explain the role of the food guide pyramid in helping people eat a healthy diet.</p> <ul style="list-style-type: none"> • food groups • number of servings • variety of food • nutrients <p>D. Know age appropriate drug information.</p> <ul style="list-style-type: none"> • definition of drugs • effects of drugs • proper use of medicine • healthy/unhealthy risk-taking (e.g. inhalant use, smoking) • skills to avoid drugs 	<p>A. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes.</p> <ul style="list-style-type: none"> • education • socioeconomic <p>B. Identify and describe the structure and function of the major body systems.</p> <ul style="list-style-type: none"> • nervous • muscular • integumentary • urinary • endocrine • reproductive • immune <p>C. Analyze nutritional concepts that impact health.</p> <ul style="list-style-type: none"> • caloric content of foods • relationship of food intake and physical activity (energy output) • nutrient requirements • label reading • healthful food selection <p>D. Explain factors that influence childhood and adolescent drug use.</p> <ul style="list-style-type: none"> • peer influence • body image (e.g., steroids, enhancers) • social acceptance • stress • media influence • decision-making/refusal skills • rules, regulations and laws • consequences 	<p>A. Analyze factors that impact growth and development between adolescence and adulthood.</p> <ul style="list-style-type: none"> • relationships (e.g., dating, friendships, peer pressure) • interpersonal communication • risk factors (e.g., physical inactivity, substance abuse, intentional/unintentional injuries, dietary patterns) • abstinence • STD and HIV prevention • community <p>B. Analyze the interdependence existing among the body systems.</p> <p>C. Analyze factors that impact nutritional choices of adolescents.</p> <ul style="list-style-type: none"> • body image • advertising • dietary guidelines • eating disorders • peer influence • athletic goals <p>D. Analyze prevention and intervention strategies in relation to adolescent and adult drug use.</p> <ul style="list-style-type: none"> • decision-making/refusal skills • situation avoidance • goal setting • professional assistance (e.g., medical, counseling, support groups) • parent involvement 	<p>A. Evaluate factors that impact growth and development during adulthood and late adulthood.</p> <ul style="list-style-type: none"> • acute and chronic illness • communicable and non-communicable disease • health status • relationships (e.g., marriage, divorce, loss) • career choice • aging process • retirement <p>B. Evaluate factors that impact the body systems and apply protective/preventive strategies.</p> <ul style="list-style-type: none"> • fitness level • environment (e.g., pollutants, available health care) • health status (e.g., physical, mental, social) • nutrition <p>C. Analyze factors that impact nutritional choices of adults.</p> <ul style="list-style-type: none"> • cost • food preparation (e.g., time, skills) • consumer skills (e.g., understanding food labels, evaluating fads) • nutritional knowledge • changes in nutritional requirements (e.g., age, physical activity level) <p>D. Evaluate issues relating to the use/non-use of drugs.</p> <ul style="list-style-type: none"> • psychology of addiction • social impact (e.g., cost, relationships) • chemical use and fetal development • laws relating to alcohol, tobacco and chemical substances • impact on the individual • impact on the community

10. 1. Concepts of Health			
10.1.3. GRADE 3	10.1.6. GRADE 6	10.1.9. GRADE 9	10.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
E. Identify types and causes of common health problems of children. <ul style="list-style-type: none"> • infectious diseases (e.g., colds, flu, chickenpox) • noninfectious diseases (e.g., asthma, hay fever, allergies, lyme disease) • germs • pathogens • heredity 	E. Identify and describe health problems that can occur throughout life. <ul style="list-style-type: none"> • cancer • diabetes • STD/HIV/AIDS • stroke • heart disease 	E. Analyze how personal choice, disease and genetics can impact health maintenance and disease prevention.	E. Identify and analyze factors that influence the prevention and control of health problems. <ul style="list-style-type: none"> • research • medical advances • technology • government policies/regulations
10.2. Healthful Living			
10.2.3. GRADE 3	10.2.6. GRADE 6	10.2.9. GRADE 9	10.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
A. Identify personal hygiene practices and community helpers that promote health and prevent the spread of disease.	A. Explain the relationship between personal health practices and individual well-being. <ul style="list-style-type: none"> • immunizations • health examinations 	A. Identify and describe health care products and services that impact adolescent health practices.	A. Evaluate health care products and services that impact adult health practices.
B. Identify health-related information. <ul style="list-style-type: none"> • signs and symbols • terminology • products and services 	B. Explain the relationship between health-related information and consumer choices. <ul style="list-style-type: none"> • dietary guidelines/food selection • sun exposure guidelines/sunscreen selection 	B. Analyze the relationship between health-related information and adolescent consumer choices. <ul style="list-style-type: none"> • tobacco products • weight control products 	B. Assess factors that impact adult health consumer choices. <ul style="list-style-type: none"> • access to health information • access to health care • cost • safety
C. Identify media sources that influence health and safety.	C. Explain the media's effect on health and safety issues.	C. Analyze media health and safety messages and describe their impact on personal health and safety.	C. Compare and contrast the positive and negative effects of the media on adult personal health and safety.
D. Identify the steps in a decision making process.	D. Describe and apply the steps of a decision making process to health and safety issues.	D. Analyze and apply a decision making process to adolescent health and safety issues.	D. Examine and apply a decision making process to the development of short and long-term health goals.
E. Identify environmental factors that affect health. <ul style="list-style-type: none"> • pollution (e.g., air, water, noise, soil) • waste disposal • temperature extremes • insects/animals 	E. Analyze environmental factors that impact health. <ul style="list-style-type: none"> • indoor air quality (e.g., second-hand smoke, allergens) • chemicals, metals, gases (e.g., lead, radon, carbon monoxide) • radiation • natural disasters 	E. Explain the interrelationship between the environment and personal health. <ul style="list-style-type: none"> • ozone layer/skin cancer • availability of health care/individual health • air pollution/respiratory disease • breeding environments/lyme disease/West Nile virus 	E. Analyze the interrelationship between environmental factors and community health. <ul style="list-style-type: none"> • public health policies and laws/health promotion and disease prevention • individual choices/maintenance of environment • recreational opportunities/health status

10.3. Safety and Injury Prevention			
10.3.3. GRADE 3	10.3.6 GRADE 6	10.3.9. GRADE 9	10.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Recognize safe/unsafe practices in the home, school and community.</p> <ul style="list-style-type: none"> • general (e.g., fire, electrical, animals) • modes of transportation (e.g., pedestrian, bicycle, vehicular) • outdoor (e.g., play, weather, water) • safe around people (e.g., safe/unsafe touch, abuse, stranger, bully) <p>B. Recognize emergency situations and explain appropriate responses.</p> <ul style="list-style-type: none"> • importance of remaining calm • how to call for help • simple assistance procedures • how to protect self <p>C. Recognize conflict situations and identify strategies to avoid or resolve.</p> <ul style="list-style-type: none"> • walk away • I-statements • refusal skills • adult intervention <p>D. Identify and use safe practices in physical activity settings (e.g., proper equipment, knowledge of rules, sun safety, guidelines of safe play, warm-up, cool-down).</p>	<p>A. Explain and apply safe practices in the home, school and community.</p> <ul style="list-style-type: none"> • emergencies (e.g., fire, natural disasters) • personal safety (e.g., home alone, latch key, harassment) • communication (e.g., telephone, Internet) • violence prevention (e.g., gangs, weapons) <p>B. Know and apply appropriate emergency responses.</p> <ul style="list-style-type: none"> • basic first aid • Heimlich maneuver • universal precautions <p>C. Describe strategies to avoid or manage conflict and violence.</p> <ul style="list-style-type: none"> • anger management • peer mediation • reflective listening • negotiation <p>D. Analyze the role of individual responsibility for safety during physical activity.</p>	<p>A. Analyze the role of individual responsibility for safe practices and injury prevention in the home, school and community.</p> <ul style="list-style-type: none"> • modes of transportation (e.g., pedestrian, bicycle, vehicular, passenger, farm vehicle, all-terrain vehicle) • violence prevention in school • self-protection in the home • self-protection in public places <p>B. Describe and apply strategies for emergency and long-term management of injuries.</p> <ul style="list-style-type: none"> • rescue breathing • water rescue • self-care • sport injuries <p>C. Analyze and apply strategies to avoid or manage conflict and violence during adolescence.</p> <ul style="list-style-type: none"> • effective negotiation • assertive behavior <p>D. Analyze the role of individual responsibility for safety during organized group activities.</p>	<p>A. Assess the personal and legal consequences of unsafe practices in the home, school or community.</p> <ul style="list-style-type: none"> • loss of personal freedom • personal injury • loss of income • impact on others • loss of motor vehicle operator's license <p>B. Analyze and apply strategies for the management of injuries.</p> <ul style="list-style-type: none"> • CPR • advanced first aid <p>C. Analyze the impact of violence on the victim and surrounding community.</p> <p>D. Evaluate the benefits, risks and safety factors associated with self-selected life-long physical activities.</p>

10.4. Physical Activity			
10.4.3. GRADE 3	10.4.6. GRADE 6	10.4.9. GRADE 9	10.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Identify and engage in physical activities that promote physical fitness and health.</p> <p>B. Know the positive and negative effects of regular participation in moderate to vigorous physical activities.</p>	<p>A. Identify and engage in moderate to vigorous physical activities that contribute to physical fitness and health.</p> <p>B. Explain the effects of regular participation in moderate to vigorous physical activities on the body systems.</p>	<p>A. Analyze and engage in physical activities that are developmentally/individually appropriate and support achievement of personal fitness and activity goals.</p> <p>B. Analyze the effects of regular participation in moderate to vigorous physical activities in relation to adolescent health improvement.</p> <ul style="list-style-type: none"> • stress management • disease prevention • weight management 	<p>A. Evaluate and engage in an individualized physical activity plan that supports achievement of personal fitness and activity goals and promotes life-long participation.</p> <p>B. Analyze the effects of regular participation in a self-selected program of moderate to vigorous physical activities.</p> <ul style="list-style-type: none"> • social • physiological • psychological

10.4. Physical Activity			
10.4.3. GRADE 3	10.4.6. GRADE 6	10.4.9. GRADE 9	10.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>C. Know and recognize changes in body responses during moderate to vigorous physical activity.</p> <ul style="list-style-type: none"> • heart rate • breathing rate 	<p>C. Identify and apply ways to monitor and assess the body's response to moderate to vigorous physical activity.</p> <ul style="list-style-type: none"> • heart rate monitoring • checking blood pressure • fitness assessment 	<p>C. Analyze factors that affect the responses of body systems during moderate to vigorous physical activities.</p> <ul style="list-style-type: none"> • exercise (e.g., climate, altitude, location, temperature) • healthy fitness zone • individual fitness status (e.g., cardiorespiratory fitness, muscular endurance, muscular strength, flexibility) • drug/substance use/abuse 	<p>C. Evaluate how changes in adult health status may affect the responses of the body systems during moderate to vigorous physical activity.</p> <ul style="list-style-type: none"> • aging • injury • disease
<p>D. Identify likes and dislikes related to participation in physical activities.</p>	<p>D. Describe factors that affect childhood physical activity preferences.</p> <ul style="list-style-type: none"> • enjoyment • personal interest • social experience • opportunities to learn new activities • parental preference • environment 	<p>D. Analyze factors that affect physical activity preferences of adolescents.</p> <ul style="list-style-type: none"> • skill competence • social benefits • previous experience • activity confidence 	<p>D. Evaluate factors that affect physical activity and exercise preferences of adults.</p> <ul style="list-style-type: none"> • personal challenge • physical benefits • finances • motivation • access to activity • self-improvement
<p>E. Identify reasons why regular participation in physical activities improves motor skills.</p>	<p>E. Identify factors that have an impact on the relationship between regular participation in physical activity and the degree of motor skill improvement.</p> <ul style="list-style-type: none"> • success-oriented activities • school-community resources • variety of activities • time on task 	<p>E. Analyze factors that impact on the relationship between regular participation in physical activity and motor skill improvement.</p> <ul style="list-style-type: none"> • personal choice • developmental differences • amount of physical activity • authentic practice 	<p>E. Analyze the interrelationships among regular participation in physical activity, motor skill improvement and the selection and engagement in lifetime physical activities.</p>
<p>F. Recognize positive and negative interactions of small group activities.</p> <ul style="list-style-type: none"> • roles (e.g., leader, follower) • cooperation/sharing • on task participation 	<p>F. Identify and describe positive and negative interactions of group members in physical activities.</p> <ul style="list-style-type: none"> • leading • following • teamwork • etiquette • adherence to rules 	<p>F. Analyze the effects of positive and negative interactions of adolescent group members in physical activities.</p> <ul style="list-style-type: none"> • group dynamics • social pressure 	<p>F. Assess and use strategies for enhancing adult group interaction in physical activities.</p> <ul style="list-style-type: none"> • shared responsibility • open communication • goal setting

10.5. Concepts, Principles and Strategies of Movement			
10.5.3. GRADE 3	10.5.6. GRADE 6	10.5.9. GRADE 9	10.5.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Recognize and use basic movement skills and concepts.</p> <ul style="list-style-type: none"> • locomotor movements (e.g., run, leap, hop) • non-locomotor movements (e.g., bend, stretch, twist) • manipulative movements (e.g., throw, catch, kick) • relationships (e.g., over, under, beside) • combination movements (e.g., locomotor, non-locomotor, manipulative) • space awareness (e.g., self-space, levels, pathways, directions) • effort (e.g., speed, force) <p>B. Recognize and describe the concepts of motor skill development using appropriate vocabulary.</p> <ul style="list-style-type: none"> • form • developmental differences • critical elements • feedback <p>C. Know the function of practice.</p> <p>D. Identify and use principles of exercise to improve movement and fitness activities.</p> <ul style="list-style-type: none"> • frequency/how often to exercise • intensity/how hard to exercise • time/how long to exercise • type/what kind of exercise <p>E. Know and describe scientific principles that affect movement and skills using appropriate vocabulary.</p> <ul style="list-style-type: none"> • gravity • force production/absorption • balance • rotation 	<p>A. Explain and apply the basic movement skills and concepts to create and perform movement sequences and advanced skills.</p> <p>B. Identify and apply the concepts of motor skill development to a variety of basic skills.</p> <ul style="list-style-type: none"> • transfer between skills • selecting relevant cues • types of feedback • movement efficiency • product (outcome/result) <p>C. Describe the relationship between practice and skill development.</p> <p>D. Describe and apply the principles of exercise to the components of health-related and skill-related fitness.</p> <ul style="list-style-type: none"> • cardiorespiratory endurance • muscular strength • muscular endurance • flexibility • body composition <p>E. Identify and use scientific principles that affect basic movement and skills using appropriate vocabulary.</p> <ul style="list-style-type: none"> • Newton's Laws of Motion • application of force • static/dynamic balance • levers • flight 	<p>A. Describe and apply the components of skill-related fitness to movement performance.</p> <ul style="list-style-type: none"> • agility • balance • coordination • power • reaction time • speed <p>B. Describe and apply concepts of motor skill development that impact the quality of increasingly complex movement.</p> <ul style="list-style-type: none"> • response selection • stages of learning a motor skill i.e. verbal cognitive, motor, automatic • types of skill i.e. discrete, serial, continuous <p>C. Identify and apply practice strategies for skill improvement.</p> <p>D. Identify and describe the principles of training using appropriate vocabulary.</p> <ul style="list-style-type: none"> • specificity • overload • progression • aerobic/anaerobic • circuit/interval • repetition/set <p>E. Analyze and apply scientific and biomechanical principles to complex movements.</p> <ul style="list-style-type: none"> • centripetal/centrifugal force • linear motion • rotary motion • friction/resistance • equilibrium • number of moving segments 	<p>A. Apply knowledge of movement skills, skill-related fitness and movement concepts to identify and evaluate physical activities that promote personal lifelong participation.</p> <p>B. Incorporate and synthesize knowledge of motor skill development concepts to improve the quality of motor skills.</p> <ul style="list-style-type: none"> • open and closed skills • short-term and long-term memory • aspects of good performance <p>C. Evaluate the impact of practice strategies on skill development and improvement.</p> <p>D. Incorporate and synthesize knowledge of exercise principles, training principles and health and skill-related fitness components to create a fitness program for personal use.</p> <p>E. Evaluate movement forms for appropriate application of scientific and biomechanical principles.</p> <ul style="list-style-type: none"> • efficiency of movement • mechanical advantage • kinetic energy • potential energy • inertia • safety

10.5. Concepts, Principles and Strategies of Movement			
10.5.3. GRADE 3	10.5.6. GRADE 6	10.5.9. GRADE 9	10.5.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>			
F. Recognize and describe game strategies using appropriate vocabulary. <ul style="list-style-type: none"> • faking/dodging • passing/receiving • move to be open • defending space • following rules of play 	F. Identify and apply game strategies to basic games and physical activities. <ul style="list-style-type: none"> • give and go • one on one • peer communication 	F. Describe and apply game strategies to complex games and physical activities. <ul style="list-style-type: none"> • offensive strategies • defensive strategies • time management 	F. Analyze the application of game strategies for different categories of physical activities. <ul style="list-style-type: none"> • individual • team • lifetime • outdoor

XXX. GLOSSARY

Abstinence:	Choosing not to do something or completely giving something up in order to gain something.
Acute illness:	A health condition of sudden onset, sharp rises and short course.
Adolescence:	The period of life beginning with puberty and ending with completed growth.
Aerobic:	Physical activity or exercise done at a steady pace for an extended period of time so that the heart can supply as much oxygen as the body needs (e.g., walking, running, swimming, cycling).
Agility:	A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy.
AIDS	Acquired Immune Deficiency Syndrome: a condition that results when infection with HIV causes a breakdown of the body's ability to fight other infections.
Allergen:	A substance that stimulates the production of antibodies and subsequently results in allergic reactions (e.g., mold spores, cat/dog dander, dust).
Anaerobic:	Physical activity or exercise done in short, fast bursts so that the heart cannot supply oxygen as fast as the body needs (e.g., 100-yard dash, basketball, football).
Assertive:	The expression of thoughts and feelings without experiencing anxiety or threatening others.
Automatic Stage of Learning:	Movement responses flow and the individual can focus on what to do without thinking about it.
Balance:	A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving.
Biomechanics:	The science concerned with the action of forces, internal or external, on the living body.
Body composition:	A health-related component of physical fitness that relates to the percentage of fat tissue and lean tissue in the body.
Body systems:	Anatomically or functionally related parts of the body (e.g., skeletal, nervous, immune, circulatory systems).
Caloric content:	The amount of energy supplied by food. The more calories in the food, the more fattening.
Cardiorespiratory endurance:	A health related component of physical fitness relating to the ability of the circulatory and respiratory systems to supply oxygen during sustained physical activity.
Centrifugal:	The force that seems to pull an object away from the center as it moves in a circle.
Centripetal:	The force that is required to keep an object moving around a circular path.
Chronic illness:	A health condition of long duration or frequent recurrence.
Circuit training:	Exercise program, similar to an obstacle course, in which the person goes from one place to another doing a different exercise at each place.
Closed:	Skills that are performed in an environment that does not change or that changes very little, such as archery or the foul shot in basketball.
Communicable:	Illness caused by pathogens that enter the body through direct or indirect contact and can be transmitted from one host to another.
Continuous:	Two or more repetitions of the same skill such as dribbling in basketball or soccer.
Cool-down:	Brief, mild exercise done after vigorous exercise to help the body safely return to a resting state.
Coordination:	A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately.
CPR:	A first aid technique, which involves rescue breathing and chest (heart) compressions, that is used to revive a person whose heart has stopped beating.

Critical elements:	The important parts of a skill.
Decision-making process:	An organized approach to making choices.
Developmental differences:	Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners developmental status will affect their ability to learn or improve.
Developmentally appropriate:	Motor skill development and change occur in an orderly, sequential fashion and is age and experience related.
Directions:	Forward, backward, left, right, up, down.
Discrete:	Single skill performed in isolation from other motor skills such as the soccer penalty kick and golf stroke.
Dynamic balance:	Equilibrium used when in motion, starting and stopping.
Eating disorders:	Food-related dysfunction in which a person changes eating habits in a way that is harmful to the mind or body (e.g., bulimia, anorexia nervosa).
Efficiency of movement:	The state or quality of competence in performance with minimum expenditure of time and effort.
Equilibrium:	State in which there is no change in the motion of a body.
Feedback:	Information given to the learner about how to improve or correct a movement.
Flexibility:	A health-related component of physical fitness that relates to the range of motion available at a joint.
Food guide pyramid:	A visual tool used to help people plan healthy diet according to the Dietary Guidelines for America.
Force:	Any external agent that causes a change in the motion of a body.
Form:	Manner or style of performing a movement according to recognized standards of technique.
Good performance:	The ability to correctly select what to do and the ability to execute the selection appropriately.
Health:	A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity.
Health education:	Planned, sequential K—12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health.
Health-related fitness:	Components of physical fitness that have a relationship with good health. Components are cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition.
Heimlich maneuver:	A first aid technique that is used to relieve complete airway obstruction.
HIV:	Human immunodeficiency virus that infects cells of the immune system and other tissues and causes acquired immunodeficiency syndrome (AIDS).
I-statement:	A statement describing a specific behavior or event and the effect that behavior or event has on a person and the feelings that result.
Inertia:	A body at rest will remain at rest and a body in motion will remain in motion unless acted upon by a force.
Inhalant:	Chemicals that produce vapors that act on the central nervous system and alter a user's moods, perceptions, feelings, personality and behavior such as airplane glue and aerosols.
Integumentary system:	Body system composed of the skin, hair, nails and glands.
Intensity:	How hard a person should exercise to improve fitness.
Interval training:	An anaerobic exercise program that consists of runs of short distance followed by rest.
Kinetic:	Energy that an object possesses because it is moving, such as a pitched baseball or a person running.
Levels:	Positions of the body (e.g., high, medium, low).
Linear motion:	Movement which occurs in a straight path.
Locomotor movement:	Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop.
Long-term memory:	Ability to recall information that was learned days or even years ago.
Manipulative movements:	Control of objects with body parts and implements. Action causes an object to move from one place to another.

Mechanical advantage:	The ratio between the force put into a machine and the force that comes out of the same machine.
Moderate physical activity:	Sustained, repetitive, large muscle movements (e.g., walking, running, cycling) done at less than 60% of maximum heart rate for age. Maximum heart rate is 220 beats per minute minus participant's age.
Motor skills:	Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (e.g., tennis serve, shooting a basketball).
Motor stage of learning:	Individual is working to perfect the motor skill and makes conscious adjustments to the environment.
Movement skills:	Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities.
Muscular endurance:	A health-related component of physical fitness that relates to the ability of a muscle to continue to perform without fatigue.
Muscular strength:	A health-related component of physical fitness that relates to the ability of the muscle to exert force.
Newton's Laws of Motion:	Three laws by Sir Isaac Newton that explain the relations between force and the motions produced by them: The Law of Inertia, Force and Acceleration, Reacting Forces.
Noncommunicable:	Illness that is not caused by a pathogen that is not transmitted from one host to another.
Nonlocomotor movement:	Movements that do not produce physical displacement of the body.
Nutrient:	A basic component of food that nourishes the body.
Open:	Skill is performed in an environment that varies or is unpredictable such as the tennis forehand or the soccer pass.
Overload:	A principle of exercise that states that the only way to improve fitness is to exercise more than the normal.
Pathways:	Patterns of travel while performing locomotor movements (e.g., straight, curved, zigzag).
Physical activity:	Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure.
Physical education:	Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life.
Physical fitness:	A set of attributes that people have or achieve and that relate to their ability to perform physical activity. Generally accepted to consist of health-related fitness and skill-related fitness.
Potential:	Energy stored in a body because of its position such as the crouch position prior to a jump.
Power:	A skill-related component of physical fitness that relates to the rate at which one can perform work.
Principles of exercise:	Guidelines to follow to obtain the maximum benefits from physical activity and exercise.
Principles of training:	Guidelines to follow to obtain the maximum benefits from an exercise plan.
Progression:	A principle of exercise that states that a person should start slowly and increase exercise gradually.
Reaction time:	A skill-related component of physical fitness that relates to the time elapsed between stimulation and the beginning of the response to it.
Reflective listening:	An active listening skill in which the individual lets others know he/she has heard and understands what has been said.
Refusal strategies:	Systematic ways to handle situations in which a person wants to say no to an action and/or leave an environment that threatens health or safety, breaks laws, results in lack of respect for self and others or disobeys guidelines set by responsible adults.
Repetitions:	Number of times an exercise is repeated.
Rescue breathing:	Technique used to supply air to an individual who is not breathing.
Rotary motion:	Force that produces movement that occurs around an axis or center point such as a somersault.
Safety education:	Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury.
Self-space:	All the space that the body or its parts can reach without traveling from a starting location.
Serial:	Two or more different skills performed with each other such as fielding a ball and throwing it or dribbling a basketball and shooting it.

Set:	A group of several repetitions.
Short-term memory:	Ability to recall recently learned information, such as within the past few seconds or minutes.
Skill-related fitness:	Consists of components of physical fitness that have a relationship with enhanced performance in sports and motor skills. The components are agility, balance, coordination, power, reaction time and speed.
Specificity:	A principle of exercise that states that specific kinds of exercises must be done to develop specific aspects of the body and specific aspects of fitness.
Speed:	A skill-related component of physical fitness that relates to the ability to perform a movement or cover a distance in a short period of time.
Static balance:	Maintaining equilibrium while holding a pose or remaining motionless.
STD:	Sexually transmitted disease.
Universal precautions:	An approach to infection control. All human blood and body fluids are treated as if known to be infectious.
Warm-up:	Brief, mild exercise that is done to get ready for more vigorous exercise.
Verbal cognitive stage of learning:	The individual is attempting to move from verbal instruction to trying to figure out how to actually do the skill. The first attempts at the skill are generally mechanical and success is inconsistent. The individual thinks through each step of the movement.
Vigorous physical activity:	Sustained, repetitive, large muscle movements (e.g., running, swimming, soccer) done at 60% or more of maximum heart rate for age. Maximum heart rate is 220 beats per minute minus the participant's age. Activity makes person sweat and breathe hard.

Proposed Academic Standards for Family and Consumer Sciences

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XXXII. INTRODUCTION

This document includes proposed Academic Standards for Family and Consumer Sciences at four grade levels (third, sixth, ninth and twelfth) with the emphasis on what students will know and be able to do in the following areas:

- 11.1. Financial and Resource Management
- 11.2. Balancing Family, Work, and Community Responsibility
- 11.3. Food Science and Nutrition
- 11.4. Child Development.

The focus of the Academic Standards for Family and Consumer Sciences education is the individual, the family and the community. The economic, social and political well-being of our state depends on the well-being of Pennsylvania's families. The family is responsible for nurturing its members. Family experiences, to a great extent, determine who a person is and what a person becomes. Family and Consumer Sciences, working with Pennsylvania's families, supports the development of the knowledge and skills that students need as family members both now and in the future. The 21st Century requires students to develop the ability to transform information into knowledge by using standards to certify that this information is meaningful, categorizing it to a purpose and then transforming their knowledge into wisdom by applying it to real life.

Family and Consumer Sciences is a discipline composed of strong subject matter concentrations with a commit-

ment to integration. Concepts form a framework for learning based on these tenets:

- Families are the fundamental unit of society.
 - A life-span approach to individual and family development contributes to creating lifelong learners.
 - Meeting individual and family needs inside and outside the home are shared responsibilities.
 - Individual, family and community well-being is strengthened through an awareness of diversity.
 - The use of diverse modes of inquiry strengthens intellectual development.
 - The content learning in Family and Consumer Sciences classes' enhances the mastery of academic standards.
 - Standards-based learning within Family and Consumer Sciences' classrooms can best be demonstrated through performance based assessment.
- Learners in Family and Consumer Sciences nurture

themselves and others, taking increased responsibility for improving their quality of living.

The Proposed Academic Standards for Family and Consumer Sciences are written to empower individuals and families to manage the challenges of living and working in a diverse, global society. These Proposed Academic Standards address the functioning of families and their interrelationships with work, community and society. The focus is on the recurring, practical problems of individuals and families. An integrative approach is used to help individuals and families identify, create and evaluate goals and alternative solutions to significant problems of everyday life. Students are taught to take responsibility for the consequences of their actions. Comprehensive classroom experiences allow students to develop the knowledge and skills needed in making choices to meet their personal, family and work responsibilities.

A glossary is included to assist the reader in understanding terminology contained in the standards.

11.1. Financial and Resource Management			
11.1.3. GRADE 3	11.1.6. GRADE 6	11.1.9. GRADE 9	11.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Identify money denominations, services and material resources available as trade-offs within the home, school and community.</p> <p>B. Define the components of a spending plan (e.g., income, expenses, savings).</p> <p>C. Explain the need for shelter for the purpose of safety, warmth and comfort.</p> <p>D. Explain consumer rights and responsibilities.</p> <ul style="list-style-type: none"> • To be safe • To be informed • To be heard • To choose • To redress <p>E. Explain the relationship between work and income.</p>	<p>A. Justify the decision to use or not use resources based on scarcity.</p> <p>B. Know the relationship of the components of a simple spending plan and how that relationship allows for managing income, expenses and savings.</p> <p>C. Describe the adaptability to meet basic human needs of the different types of housing available (e.g., single home, apartment, mobile home, shelter, recreational vehicle, public housing).</p> <p>D. Analyze information in care instructions, safety precautions and the use of consumable goods as a demonstration of understanding of consumer rights and responsibilities.</p> <p>E. Explain the principles of child labor laws and the opportunity cost of working by evaluating the advantages and disadvantages of holding a job while a teenager.</p>	<p>A. Analyze current conservation practices and their effect on future renewable and non-renewable resources.</p> <ul style="list-style-type: none"> • Refuse • Reduce • Reuse • Recycle <p>B. Explain the responsibilities associated with managing personal finances (e.g., savings, checking, credit, noncash systems, investments).</p> <p>C. Delineate and assess the factors affecting the availability of housing (e.g., supply and demand, market factors, geographical location, community regulations).</p> <p>D. Explain how consumer rights and responsibilities are protected (e.g., government agencies, consumer protection agencies, consumer action groups).</p> <p>E. Compare the influences of income and fringe benefits to make decisions about work.</p>	<p>A. Evaluate the impact of family resource management on the global community.</p> <p>B. Analyze the management of financial resources across the lifespan.</p> <p>C. Analyze the relationship among factors affecting consumer housing decisions (e.g., human needs, financial resources, location, legal agreements, maintenance responsibilities).</p> <p>D. Evaluate the role of consumer rights and responsibilities in the resolution of a consumer problem through the practical reasoning process.</p> <p>E. Compare and contrast factors affecting annual gross and taxable income and reporting requirements (e.g., W-2 form, Income tax form).</p>

11.1. Financial and Resource Management			
11.1.3. GRADE 3	11.1.6. GRADE 6	11.1.9. GRADE 9	11.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
F. Describe criteria needed to identify quality in consumer goods and services (e.g., food, clothing, furniture, home technology, health care, transportation, services).	F. Explain practices to maintain and/or repair consumer goods and services.	F. Evaluate different strategies to obtain consumer goods and services.	F. Compare and contrast the selection of goods and services by applying effective consumer strategies.
G. Identify the services that communities provide for individuals and families.	G. Identify the public and nonpublic services that are available to serve families within the community.	G. Analyze how public, nonpublic and for-profit service providers serve the family.	G. Compare the availability, costs and benefits of accessing public, nonpublic and for-profit services to assist the family.

11.2. Balancing Family, Work and Community Responsibility			
11.2.3. GRADE 3	11.2.6. GRADE 6	11.2.9. GRADE 9	11.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Examine consequences of family, work or career decisions.	A. Contrast the solutions reached through the use of a simple decision making process that includes analyzing consequences of alternative solutions against snap decision making methods.	A. Solve dilemmas using a practical reasoning approach <ul style="list-style-type: none"> • Identify situation • Identify reliable information • List choices and examine the consequences of each • Develop a plan of action • Draw conclusions • Reflect on decisions 	A. Justify solutions developed by using practical reasoning skills.
B. Identify the importance of routines and schedules while differentiating between short and long term goals.	B. Deduce the importance of time management skills (e.g. home, school, recreational activities).	B. Know FCCLA action planning procedure and how to apply it to family, work and community decisions.	B. Evaluate the effectiveness of action plans that integrate personal, work, family and community responsibilities.
C. Indicate the benefits and costs of working as an individual or as a team member and of being a leader or follower.	C. Classify the components of effective teamwork and leadership.	C. Assess the effectiveness of the use of teamwork and leadership skills in accomplishing the work of the family.	C. Analyze teamwork and leadership skills and their application in various family and work situations.
D. Explain the importance of organizing space for efficiency and a sense of comfort (e.g., desk space, classroom space).	D. Identify the concepts and principles used in planning space for activities.	D. Analyze the space requirements for a specified activity to meet a given need (e.g., family room, home office, kitchen).	D. Based on efficiency, aesthetics and psychology, evaluate space plans (e.g., home, office, work areas) for their ability to meet a variety of needs including those of individuals with special needs.
E. Analyze the effectiveness of technology used for school and home in accomplishing the work of the family (e.g., security, entertainment, communication, education).	E. Describe the role of technology within a community in maintaining a safe and healthy living environment (e.g., safety, hospitals, waste treatment, water quality, schools).	E. Evaluate the impact of technology and justify the use or nonuse of it (e.g., safety, cost/budget, appearance, efficiency).	E. Assess the availability of emerging technology that is designed to do the work of the family and evaluate the impact of its use on individuals, families and communities.

11.2. Balancing Family, Work and Community Responsibility			
11.2.3. GRADE 3	11.2.6. GRADE 6	11.2.9. GRADE 9	11.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>F. Explain daily activities that fulfill family functions in meeting responsibilities (e.g., economic, emotional support, childcare and guidance, housekeeping, maintaining kinship, providing recreation).</p> <p>G. Identify the life stages by identifying their developmental task (e.g., infant, pre-schooler, school age, teen-age, adult, senior citizen).</p> <p>H. Identify how to resolve conflict using interpersonal communications skills.</p> <ul style="list-style-type: none"> • Speaking and listening • I messages • Active listening • Checking for understanding • Following directions • Empathy • Feedback 	<p>F. Compare and contrast how different cultures meet family responsibilities within differing configurations (e.g., new parent, just married, single adult living alone, "empty nest," retired, senior citizen).</p> <p>G. Identify the characteristics of the stages of the family life cycle (e.g., beginning, expanding, developing, launching, middle years, retirement, variations).</p> <p>H. Describe positive and negative interactions within patterns of interpersonal communications.</p> <ul style="list-style-type: none"> • Placating • Blaming • Distracting • Intellectualizing • Asserting 	<p>F. Contrast past and present family functions and predict their probable impact on the future of the family.</p> <p>G. Explain the influences of family life cycle stages on the needs of families and communities (e.g., a large number of young families needing day care, fixed income senior citizens, school age children).</p> <p>H. Justify the significance of interpersonal communication skills in the practical reasoning method of decision making.</p>	<p>F. Assess the relationship of family functions to human developmental stages.</p> <p>G. Hypothesize the impact of present family life-cycle trends on the global community (e.g., over population, increase in an aging population, economic base).</p> <p>H. Evaluate the effectiveness of using interpersonal communication skills to resolve conflict.</p>
11.3. Food Science and Nutrition			
11.3.3. GRADE 3	11.3.6. GRADE 6	11.3.9. GRADE 9	11.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Know the production steps that a food travels from the farm to the consumer.</p> <p>B. Describe personal hygiene techniques in food handling (e.g., handwashing, sneeze control, signs of food spoilage).</p> <p>C. Explain the importance of eating a varied diet in maintaining health.</p>	<p>A. Demonstrate knowledge of techniques used to evaluate food in various forms (e.g., canned, frozen, dried, irradiated).</p> <p>B. Describe safe food handling techniques (e.g., storage, temperature control, food preparation, conditions that create a safe working environment for food production).</p> <p>C. Analyze factors that effect food choices.</p>	<p>A. Explain how scientific and technological developments enhance our food supply (e.g., food preservation techniques, packaging, nutrient fortification).</p> <p>B. Identify the cause, effect and prevention of microbial contamination, parasites and toxic chemicals in food.</p> <p>C. Analyze the impact of food addictions and eating disorders on health.</p>	<p>A. Analyze how food engineering and technology trends will influence the food supply.</p> <p>B. Evaluate the role of Government agencies in safeguarding our food supply (e.g., USDA, FDA, EPA and CDC).</p> <p>C. Evaluate sources of food and nutrition information.</p>

11.3. Food Science and Nutrition			
11.3.3. GRADE 3	11.3.6. GRADE 6	11.3.9. GRADE 9	11.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
D. Classify foods by food group within the food guide pyramid including the serving size and nutrient function within the body.	D. Describe a well-balanced daily menu using the dietary guidelines and the food guide pyramid.	D. Analyze relationship between diet and disease and risk factors (e.g., calcium and osteoporosis; fat, cholesterol and heart disease; folate and birth defects; sodium and hypertension).	D. Critique diet modifications for their ability to improve nutritionally-related health conditions (e.g., diabetes, lactose-intolerance, iron deficiency).
E. Define energy-yielding nutrients and calories.	E. Explain the relationship between calories, nutrient and food input versus energy output; describe digestion.	E. Analyze the energy requirements, nutrient requirements and body composition for individuals at various stages of the life cycle.	E. Analyze the breakdown of foods, absorption of nutrients and their conversion to energy by the body.
F. Identify components of a basic recipe (e.g., volume, weight, fractions, recipe ingredients, recipe directions, safety techniques).	F. Analyze basic food preparation techniques and food-handling procedures.	F. Hypothesize the effectiveness of the use of meal management principles (e.g., time management, budgetary considerations, sensory appeal, balanced nutrition, safety, sanitation).	F. Evaluate the application of nutrition and meal planning principles in the selection, planning, preparation and serving of meals that meet the specific nutritional needs of individuals across their lifespan.
G. Classify foods according to senses (e.g., taste, touch, smell, mouth feel, sight, sound).	G. Describe the physical, biological, and chemical changes that take place in food preparation.	G. Analyze the application of physical and chemical changes that occur in food during preparation and preservation.	G. Analyze the relevance of scientific principles to food processing, preparation and packaging.

11.4. Child Development			
11.4.3. GRADE 3	11.4.6. GRADE 6	11.4.9. GRADE 9	11.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Identify characteristics in each stage of child development. <ul style="list-style-type: none"> • Infancy • Early childhood • Middle childhood • Late childhood • Adolescence 	A. Compare and contrast child development guided practices according to the stage of child development.	A. Analyze physical, intellectual and social/emotional development in relation to theories of child development.	A. Analyze current research on existing theories in child development and its impact on parenting (e.g., Piaget, Erikson and prior findings versus new brain development research).
B. Identify health and safety needs for children at each stage of child development.	B. Identify ways to keep children healthy and safe at each stage of child development.	B. Evaluate health and safety hazards relating to children at each stage of child development.	B. Analyze current issues in health and safety affecting children at each stage of child development.
C. Identify the characteristics of a learning environment.	C. Identify the role of the caregiver in providing a learning environment (e.g., baby-sitting, daycare, preschool).	C. Evaluate various environments to determine if they provide the characteristics of a proper learning environment.	C. Analyze practices that optimize child development (e.g., stimulation, safe environment, nurturing caregivers, reading to children).
D. Identify community resources provided for children.	D. Identify considerations prior to selecting childcare providers.	D. Analyze the roles, responsibilities and opportunity for family involvement in schools.	D. Analyze plans and methods to blend work and family responsibilities to meet the needs of children.

11.4. Child Development			
11.4.3. GRADE 3	11.4.6. GRADE 6	11.4.9. GRADE 9	11.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
E. Explain how the home and community help a person learn to read, write and compute.	E. Identify characteristics of quality literature for children and other literacy enhancing activities.	E. Explain how storytelling, story reading and writing enhance literacy development in children.	E. Identify practices that develop the child's imagination, creativity and reading and writing skills through literature.

XXXIII. GLOSSARY

Aesthetics:	Appreciation of and responsive to beauty.
CDC:	Center for Disease Control
Child-care provider considerations:	Criteria to use in evaluating child care facilities. These include well-trained and highly motivated staff, pleasant sanitary surroundings, variety in toys and supplies, ratio of staff to children.
Child development stage:	An age range with similar growth characteristics: infancy, toddler, preschooler, school age, adolescent.
Consumer responsibilities:	The need to interpret information in care instructions, safety precautions and proper use of consumable goods as a user of goods and services.
Consumer rights:	The guarantee to be safe, the right to be informed, to be heard, to choose consumer education and to redress as a user of goods and services.
Dietary guidelines:	A set of seven recommendations developed by the United States Department of Agriculture and Health and Human Services to help healthy people over age 2 know what to eat to stay healthy.
Developmental tasks:	Changes in the thinking and behavior of individuals over time.
Empathy:	The action of understanding another's thoughts, feelings and behaviors.
EPA:	Environmental Protection Agency
FCCLA Action planning procedure:	The decision making process endorsed by the Family, Career and Community Leaders of America, involving five steps: <ol style="list-style-type: none"> 1. Identify concerns—brainstorm and evaluate, narrow choices to workable ideas. 2. Set your goals—write what you want to accomplish as an achievable objective. 3. Form a plan—who, what, when, where and how. 4. Act—carry out the plan. 5. Follow up—determine if your goal was met and create an improvement plan.
FDA:	Food and Drug Administration
Family, Career and Community Leaders Of America:	Vocational student organization sponsored by Family and Consumer Sciences classrooms.
Food guide pyramid:	A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America.
Guided practices:	Interaction with a child based on age appropriate developmental principles.
I message:	A statement containing three parts: <ol style="list-style-type: none"> 1. The situation 2. How it makes the speaker feel 3. What will happen if it continues.
Kinship:	Relationships or relatives.
Leadership skills:	The ability to: <ul style="list-style-type: none"> • Use resources • Delegate authority • Communicate effectively • Assess composition of group • Determine and rank goals • Evaluate consequences.
Microbial contamination:	Most common food contaminants causing foodborne illnesses.
Nutrient:	A basic component of food that nourishes the body.
Opportunity cost:	The highest valued alternative given up when a decision is made.

- Practical reasoning:** A decision making process unique because of its emphasis on relationships and involving six steps:
 1. Identify situation to be solved
 2. Identify reliable information
 3. List choices and examine consequences
 4. Develop plan of action
 5. Draw conclusions
 6. Reflect on decisions.
- Redress:** To set right or remedy.
- Toxic chemical:** Contaminants found in natural, environmental and pesticide residue forms that are poisonous to the body.
- Scarcity:** The lack of provisions for the support of life.
- Team work skills:** The ability to:
 - Collaborate
 - Cooperate
 - Set community goals
 - Reach consensus.
- Trade-off:** Exchange of goods, services or moneys.
- USDA:** United States Department of Agriculture

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[22 PA. CODE CH. 4]

Academic Standards and Assessment for Civics and Government; Economics; Geography and History

The State Board of Education proposes to amend Chapter 4 (relating to academic standards and assessment) by adding academic standards in civics and government, economics, geography and history, to read as set forth in Annex A, under authority of the Public School Code of 1949 (24 P. S. §§ 1-101—27-2702).

Purpose

Proposed amendments to Chapter 4 will add academic standards in civics and government, economics, geography and history. The purpose of adding these requirements is to specify academic standards to be achieved by students enrolled in the public schools (including public charter schools) of this Commonwealth.

Requirements of the Proposed Rulemaking

Proposed amendments to Chapter 4 define the standards in civics and government, economics, geography and history to be achieved by students in the public schools. Standards for civics and government are organized in four areas: (1) principles and documents of government; (2) rights and responsibilities of citizenship; (3) how government works; and (4) how international relationships function. Standards for economics are organized in five areas: (1) economic systems; (2) markets and the functions of governments; (3) scarcity and choice; (4) economic interdependence; and (5) work and earnings. Standards for geography are organized in four areas: (1) basic geographic literacy; (2) physical characteristics of places and regions; (3) human characteristics of places and regions; and (4) the interactions between people and places. Standards for history are organized in four areas: (1) historical analysis and skill development; (2) Pennsylvania history; (3) United States history; and (4) world history. Specific standards describe what students should know and be able to do by the end of third, sixth, ninth and twelfth grade.

Affected Parties

The proposed amendments to Chapter 4 affect the students and professional employees of the public schools of this Commonwealth (including intermediate units, area vocational-technical schools, public charter and alternative schools).

Cost and Paperwork Estimates

Costs to implement this proposed rulemaking may include curriculum development and the professional development of teachers. These costs vary by school district. Curriculum development is an ongoing activity for schools and is typically part of their normal budgeting. Costs associated with aligning curricula with these standards at the local level will be minimized by the following efforts: technical assistance in curriculum development provided by Department staff; detailed implementation materials developed by the Department, intermediate units and professional associations and provided to school districts; and the Standards Implementation Project which funds intermediate unit services throughout this Commonwealth supporting the implementation of these and other standards. Current year funds available to the Department to support curriculum alignment are \$365,000.

Professional development of teachers is an ongoing activity for schools and is addressed in the normal budgeting of school districts. Specific programs designed to support the implementation of these standards will minimize any financial impact on school districts. These programs include professional development provided through the Standards Implementation Project and the Governor's Institutes for Teachers (currently provided in the Social Studies). Current year funds available to the Department to support professional development are \$120,000. In addition, the act of November 23, 1999 (P. L. 529, No. 48) (Act 48) establishing a requirement for all educators to engage in continuing professional education, further requires the Department to provide 40 hours of professional development annually at no cost to teachers. It is expected that online, professional development activities will be developed in social studies.

Effective Date

These amendments to Chapter 4 will become effective upon final-form publication in the *Pennsylvania Bulletin*.

Sunset Date

The effectiveness of Chapter 4 will be reviewed by the Board every 4 years, in accordance with the Board's policy and practice respecting all regulations promulgated by the Board. Thus, no sunset date is necessary.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on January 31, 2002, the Board submitted a copy of this proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Committees on Education. In addition to submitting the proposed rulemaking, the Board has provided IRRC and the Committees with a copy of a detailed Regulatory Analysis Form prepared by the Board in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, if the Committees have any objections to any portion of the proposed rulemaking, they will notify the Board within 20 days of the close of the public comment period. If IRRC has objections to any portion of the proposed rulemaking, it will notify the Board within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria which have not been met by that portion. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the regulations, by the Board, the General Assembly and the Governor of objections raised.

Public Comments and Contact Person

Interested persons are invited to submit written comments, suggestions or objections regarding this proposal to Peter H. Garland, Executive Director of the State Board of Education, 333 Market Street, Harrisburg, PA 17126-0333 within 30 days following publication in the *Pennsylvania Bulletin*.

Persons with disabilities needing an alternative means of providing public comment may make arrangements by calling Dr. Peter Garland at (717) 787-3787 or TDD (717) 787-7367.

PETER H. GARLAND,
Executive Director

Fiscal Note: 6-275.(1) General Fund; (2) Implementing Year 2001-02 is \$485,000; (3) 1st Succeeding Year 2002-03 is \$485,000; 2nd Succeeding Year 2003-04 is \$120,000; 3rd Succeeding Year 2004-05 is \$120,000; 4th Succeeding Year 2005-06 is \$120,000; 5th Succeeding Year 2006-07 is \$120,000; (4) 2001-01 Program—\$120,000; 1999-00 Program—\$120,000; 1998-97 Program—\$ -0-; (7) For teacher professional development associated with new academic standards, and the like. (8) recommends adoptions.

Annex A

TITLE 22. EDUCATION

PART I. STATE BOARD OF EDUCATION

CHAPTER 4. ACADEMIC STANDARDS AND ASSESSMENT

APPENDIX C

Academic Standards for Civics and Government and Economics and Geography and History

Proposed Academic Standards for Civics and Government

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XIV. INTRODUCTION

This document includes Proposed Academic Standards for Civics and Government that describe what students should know and be able to do in four areas:

- 5.1. Principles and Documents of Government
- 5.2. Rights and Responsibilities of Citizenship
- 5.3. How Government Works
- 5.4. How International Relationships Function

The Proposed Civics and Government Academic Standards describe what students should know and be able to do at four grade levels (third, sixth, ninth and twelfth). Throughout the standard statements, concepts found in lower grades must be developed more fully throughout higher grade levels.

The Pennsylvania Constitution of 1790 was the basis for the Free Public School Act of 1834 that is the underpinning of today's system of schools operating throughout the Commonwealth. These schools were created to educate children to be useful citizens, loyal to the principles upon which our Republic was founded, and aware of their duties as citizens to maintain those ideals.

The Proposed Academic Standards for Civics and Government are based on the Public School Code of 1949 which directs "... teaching and presentation of the principles and ideals of the American republican representative form of government as portrayed and experienced by the acts and policies of the framers of the Declaration of Independence and framers of the Constitution of the United States and Bill of Rights...". The intent of the Code is that such instruction "shall have for its purpose

also instilling into every boy and girl who comes out of public, private and parochial schools their solemn duty and obligation to exercise intelligently their voting privilege and to understand the advantages of the American republican form of government as compared with various other forms of governments."

A glossary is included to assist the reader in clarifying terminology contained in the standards.

5.1. Principles and Documents of Government			
5.1.3. GRADE 3	5.1.6. GRADE 6	5.1.9. GRADE 9	5.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Describe what government is.</p> <p>B. Explain the purposes of rules and laws and why they are important in the classroom, school, community, state and nation.</p> <p>C. Define the principles and ideals shaping government.</p> <ul style="list-style-type: none"> • Justice • Truth • Diversity of people and ideas • Patriotism • Common good • Liberty • Rule of law • Leadership • Citizenship <p>D. Identify the document which created Pennsylvania.</p> <p>E. Identify documents of United States government.</p> <ul style="list-style-type: none"> • Declaration of Independence • Constitution of the United States • Bill of Rights 	<p>A. Explain the purpose of government.</p> <p>B. Explain the importance of the rule of law for the protection of individual rights and the common good in the community, state, nation and world.</p> <p>C. Describe the principles and ideals shaping government.</p> <ul style="list-style-type: none"> • Equality • Majority rule/Minority rights • Popular sovereignty • Privacy • Checks and balances • Separation of powers <p>D. Explain the basic principles and ideals within documents of Pennsylvania government.</p> <ul style="list-style-type: none"> • Charter of 1681 • Charter of Privileges • Pennsylvania Constitution • Pennsylvania Declaration of Rights <p>E. Explain the basic principles and ideals within documents of United States government.</p>	<p>A. Identify and explain the major arguments advanced for the necessity of government.</p> <p>B. Describe historical examples of the importance of the rule of law.</p> <ul style="list-style-type: none"> • Sources • Purposes • Functions <p>C. Analyze the principles and ideals that shape government.</p> <ul style="list-style-type: none"> • Constitutional government • Liberal democracy • Classical republicanism • Federalism <p>D. Interpret significant changes in the basic documents shaping the government of Pennsylvania.</p> <ul style="list-style-type: none"> • The Great Law of 1682 • Constitution of 1776 • Constitution of 1790 • Constitution of 1838 • Constitution of 1874 • Constitution of 1968 <p>E. Analyze the basic documents shaping the government of the United States.</p> <ul style="list-style-type: none"> • Magna Carta • English Bill of Rights • Mayflower Compact • Articles of Confederation • Declaration of Independence • Federalist papers • Anti-federalist writings • United States Constitution 	<p>A. Evaluate the major arguments advanced for the necessity of government.</p> <p>B. Analyze the sources, purposes and functions of law.</p> <p>C. Evaluate the importance of the principles and ideals of civic life.</p> <p>D. Analyze the principles and ideals that shape the government of Pennsylvania and apply them to the government.</p> <ul style="list-style-type: none"> • The Charter of 1681 • Charter of Privileges • PA Constitution, its revisions and Amendments <p>E. Evaluate the principles and ideals that shape the United States and compare them to documents of government.</p>

5.1. Principles and Documents of Government			
5.1.3. GRADE 3	5.1.6. GRADE 6	5.1.9. GRADE 9	5.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>F. Explain the meaning of a preamble.</p> <ul style="list-style-type: none"> • Constitution of the United States • Pennsylvania Constitution <p>G. Describe the purpose of the United States Flag, The Pledge of Allegiance and The National Anthem.</p> <p>H. Identify framers of documents of governments.</p> <ul style="list-style-type: none"> • Pennsylvania • United States <p>I. Explain why government is necessary in the classroom, school, community, state and nation and the basic purposes of government in Pennsylvania and the United States.</p> <p>J. Explain the importance of respect for the property and the opinions of others.</p> <p>K. Identify symbols and political holidays.</p> <ul style="list-style-type: none"> • Pennsylvania (e.g., Charter Day, Liberty Bell, Keystone State) • United States (e.g., Presidents' Day, Statue of Liberty, White House) <p>L. Identify ways courts resolve conflicts involving principles and ideals of government.</p>	<p>F. Explain the meaning of the Preamble to the Constitution of the Commonwealth of Pennsylvania and compare it to the Preamble of the Constitution of the United States.</p> <p>G. Describe the proper use, display and respect for the United States Flag and explain the significance of patriotic activities.</p> <ul style="list-style-type: none"> • Reciting The Pledge of Alliance • Standing for The National Anthem <p>H. Describe the roles played by the framers of the basic documents of governments of Pennsylvania and the United States.</p> <p>I. Describe and compare the making of rules by direct democracy and by representative democracy.</p> <p>J. Describe how the government protects individual rights and promotes the common good.</p> <p>K. Describe the purpose of symbols and holidays.</p> <p>L. Explain the role of courts in resolving conflicts involving the principles and ideals of government.</p> <ul style="list-style-type: none"> • Local • State • Federal 	<p>F. Contrast the individual rights created by the Pennsylvania Constitution and those created by the Constitution of the United States.</p> <p>G. Describe the procedures for proper uses, display and respect for the United States Flag as per the National Flag Code.</p> <p>H. Explain and interpret the roles of framers of basic documents of government from a national and Pennsylvania perspective.</p> <p>I. Explain the essential characteristics of limited and unlimited governments and explain the advantages and disadvantages of systems of government.</p> <ul style="list-style-type: none"> • Confederal • Federal • Unitary <p>J. Explain how law protects individual rights and the common good.</p> <p>K. Explain why symbols and holidays were created and the ideals they commemorate.</p> <p>L. Interpret Pennsylvania and United States court decisions that have impacted the principles and ideals of government.</p>	<p>F. Analyze and assess the rights of the people as listed in the Pennsylvania Constitution and the Constitution of the United States.</p> <p>G. Analyze and interpret the role of the United States Flag in civil disobedience and in patriotic activities.</p> <p>H. Analyze the competing positions held by the framers of the basic documents of government of Pennsylvania and United States.</p> <p>I. Analyze historical examples of the importance of the rule of law explaining the sources, purposes and functions of law.</p> <p>J. Analyze how the law promotes the common good and protects individual rights.</p> <p>K. Analyze the roles of symbols and holidays in society.</p> <p>L. Analyze Pennsylvania and United States court decisions that have affected principles and ideals of government in civic life.</p> <ul style="list-style-type: none"> • Civil rights • Commerce • Judicial review • Federal supremacy

5.1. Principles and Documents of Government			
5.1.3. GRADE 3	5.1.6. GRADE 6	5.1.9. GRADE 9	5.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
M. Identify portions of famous speeches and writings that reflect the basic principles and ideals of government (e.g., "I have a dream," Reverend Martin Luther King; "One small step for mankind," Neil Armstrong).	M. Explain the basic principles and ideals found in famous speeches and writings (e.g., "Governments, like clocks, go from the motion people give them," William Penn; "A date that will live in infamy," Franklin D. Roosevelt).	M. Interpret the impact of famous speeches and writings on civic life (e.g., <i>The Gospel of Wealth</i> , <i>Declaration of Sentiments</i>).	M. Evaluate and analyze the importance of significant political speeches and writings in civic life (e.g., <i>Diary of Anne Frank</i> , <i>Silent Spring</i>).
Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.			

5.2. Rights and Responsibilities of Citizenship			
5.2.3. GRADE 3	5.2.6. GRADE 6	5.2.9. GRADE 9	5.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Identify examples of the rights and responsibilities of citizenship. <ul style="list-style-type: none"> • Personal rights • Political rights • Economic rights • Personal responsibilities • Civic responsibilities 	A. Compare rights and responsibilities of citizenship. <ul style="list-style-type: none"> • Political rights • Economic rights • Personal responsibilities of the individual and to society • Civic responsibilities of the individual and to society • Traits of character of individuals and to constitutional democracy 	A. Contrast the essential rights and responsibilities of citizens in systems of government. <ul style="list-style-type: none"> • Autocracy • Democracy • Oligarchy 	A. Evaluate an individual's civic rights, responsibilities and duties in various governments.
B. Identify personal rights and responsibilities.	B. Explain the relationship between rights and responsibilities.	B. Analyze citizens' rights and responsibilities in local, state and national government.	B. Evaluate citizen's participation in government and civic life.
C. Identify sources of conflict and disagreement and different ways conflicts can be resolved.	C. Explain ways citizens resolve conflicts in society and government.	C. Analyze skills used to resolve conflicts in society and government.	C. Interpret the causes of conflict in society and analyze techniques to resolve those conflicts.
D. Identify the importance of political leadership and public service in the school, community, state and nation.	D. Describe the importance of political leadership and public service.	D. Analyze political leadership and public service in a constitutional democracy.	D. Evaluate political leadership and public service in a constitutional democracy.
E. Describe ways citizens can influence the decisions and actions of government.	E. Identify examples of the rights and responsibilities of citizenship.	E. Explain the importance of political process to competent and responsible participation in civic life.	E. Analyze how participation in civic and political life leads to the attainment of individual and public goals.
F. Explain the benefits of following rules and laws and the consequences of violating them.	F. Describe the impact of the consequences of violating rules and laws in a civil society.	F. Analyze the consequences of violating laws of Pennsylvania compared to those of the United States.	F. Evaluate how individual rights may conflict with or support the common good.
G. Identify ways to participate in government and civic life.	G. Explain the importance of participating in government and civic life.	G. Analyze political and civic participation in government and society.	G. Evaluate what makes a competent and responsible citizen.
Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.			

5.3. How Government Works			
5.3.3. GRADE 3	5.3.6. GRADE 6	5.3.9. GRADE 9	5.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Identify the elected representative bodies responsible for making local, Pennsylvania and United States laws.</p> <p>B. Identify the role of the three branches of government.</p> <ul style="list-style-type: none"> • Executive • Legislative • Judicial <p>C. Identify reasons for rules and laws in the school and community.</p> <p>D. Identify services performed by the local, state and national governments.</p> <p>E. Identify positions of authority at school and in local, state and national governments.</p> <p>F. Explain what an election is.</p> <p>G. Explain why being treated fairly is important.</p> <p>H. Identify individual interests and explain ways to influence others.</p>	<p>A. Compare the structure, organization and operation of local, state and national governments.</p> <p>B. Describe the responsibilities and powers of the three branches of government.</p> <p>C. Explain how government actions affect citizens' daily lives.</p> <p>D. Describe how local, state and national governments implement their services.</p> <p>E. Identify major leaders of local, state and national governments, their primary duties and their political party affiliation.</p> <p>F. Describe the voting process.</p> <ul style="list-style-type: none"> • Pennsylvania • United States <p>G. Describe how the government protects individual rights.</p> <ul style="list-style-type: none"> • Presumption of Innocence • Right to Counsel • Trial by Jury • Bill of Rights <p>H. Identify individual interests and how they impact government.</p>	<p>A. Explain the structure, organization and operation of the local, state and national governments including domestic and national policy-making.</p> <p>B. Compare the responsibilities and powers of the three branches within the national government.</p> <p>C. Explain how a bill becomes a law on a federal, state, and local level.</p> <p>D. Explain how independent government agencies create, amend and enforce regulatory policies.</p> <ul style="list-style-type: none"> • Local (e.g., Zoning Board) • State (e.g., Pennsylvania Utilities Commission) • National (e.g., Federal Communications Commission) <p>E. Explain how citizens participate in choosing their leaders through political parties, campaigns and elections.</p> <p>F. Explain the election process.</p> <ul style="list-style-type: none"> • Voter registration • Primary Elections • Caucuses • National Conventions • General Elections • Electoral College <p>G. Explain how the government protects individual rights.</p> <ul style="list-style-type: none"> • Equal protection • Habeas Corpus • Right Against Self Incrimination • Double Jeopardy • Right of Appeal • Due Process <p>H. Analyze how interest groups provide opportunities for citizens to participate in the political process.</p>	<p>A. Analyze and evaluate the structure, organization and operation of the local, state and national governments including domestic and national policy-making.</p> <p>B. Analyze the responsibilities and powers of the national government.</p> <p>C. Evaluate the process of how a bill becomes the law on a federal, state, and local levels.</p> <p>D. Evaluate how independent government agencies create, amend and enforce regulations.</p> <p>E. Evaluate the roles of political parties in election campaigns.</p> <p>F. Evaluate the elements of the election process.</p> <p>G. Evaluate how the government protects or curtails individual rights and analyze the impact of supporting or opposing those rights.</p> <p>H. Evaluate the impact of interest groups on the political process.</p>

5.3. How Government Works			
5.3.3. GRADE 3	5.3.6. GRADE 6	5.3.9. GRADE 9	5.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>I. Explain why taxes are necessary and identify who pays them.</p> <p>J. Identify the role of the media in society.</p> <p>K. Identify different ways people govern themselves.</p>	<p>I. Describe why and how government raises money to pay for its operations and services.</p> <p>J. Describe the influence of media in reporting issues.</p> <p>K. Describe forms of government. <ul style="list-style-type: none"> • Limited • Unlimited </p>	<p>I. Analyze how and why government raises money to pay for its operation and services.</p> <p>J. Analyze the importance of freedom of the press.</p> <p>K. Identify and explain systems of government. <ul style="list-style-type: none"> • Autocracy • Democracy • Oligarchy </p>	<p>I. Evaluate how and why government raises money to pay for its operations and services.</p> <p>J. Evaluate the role of media in political life in the United States and explain the role of the media in setting the public agenda.</p> <p>K. Evaluate the strengths and weaknesses of various systems of government. <ul style="list-style-type: none"> • Autocracy • Democracy • Oligarchy </p>
Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.			

5.4. How International Relationships Function			
5.4.3. GRADE 3	5.4.6. GRADE 6	5.4.9. GRADE 9	5.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Identify how customs and traditions influence governments.</p> <p>B. Recognize that the world is divided into various political units.</p> <p>C. Identify ways in which countries interact with the United States.</p> <p>D. Identify treaties and other agreements between or among nations.</p> <p>E. Identify how nations work together to solve problems.</p>	<p>A. Explain the concept of nation-states.</p> <p>B. Describe how nation-states coexist in the world community.</p> <p>C. Describe the governments of the countries bordering the United States and their relationships with the United States.</p> <p>D. Describe the processes that resulted in a treaty or agreement between the United States and another nation state.</p> <p>E. Explain how nations work together on common environmental problems, natural disasters and trade.</p>	<p>A. Explain how the United States is affected by policies of nation-states, governmental and non-governmental organizations.</p> <p>B. Explain the role of the United States in world affairs.</p> <p>C. Explain the effects United States political ideas have had on other nations.</p> <p>D. Contrast how the three branches of federal government function in foreign policy.</p> <p>E. Explain the development and the role of the United Nations and other international organizations, both governmental and non-governmental.</p>	<p>A. Analyze the impact of international economic, technological and cultural developments on the government of the United States.</p> <p>B. Analyze the United States' interaction with other nations and governmental groups in world events.</p> <p>C. Compare how past and present United States' policy interests have changed over time and analyze the impact on future international relationships.</p> <p>D. Explain how foreign policy is developed and implemented.</p> <p>E. Compare the purposes and functions of international organizations. <ul style="list-style-type: none"> • Governmental (e.g., NATO, World Court, OAS) • Non-governmental (e.g., International Red Cross, Amnesty International, World Council of Churches) </p>

XV. GLOSSARY

Amendment (Constitutional):	Changes in, or additions to, a constitution. Proposed by a two-thirds vote of both houses of Congress or by a convention called by Congress at the request of two-thirds of the state legislatures. Ratified by approval of three-fourths of the state.
Articles of Confederation:	First framework of government of the United States, 1781. Created a weak national government, replaced in 1789 by the Constitution of the United States.
Authority:	Right to control or direct the actions of others, legitimized by law, morality, custom or consent.
Autocracy:	A government in which one person possesses unlimited power.
Bill of Rights:	First Ten Amendments to the Constitution. Ratified in 1791, these amendments limit government power and protect basic rights and liberties of individuals.
Checks and balances:	Constitutional mechanisms that authorize each branch of government to share powers with the other branches and thereby check their activities. For example, the president may veto legislation passed by Congress, the Senate must confirm major executive appointments and the courts may declare acts of Congress unconstitutional.
Citizen:	Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government.
Citizenship:	Status of being a member of a state; one who owes allegiance to the government and is entitled to protection by and from the government.
Civic responsibilities:	Obligation of citizens to take part in the governance of the school, community, tribe, state or nation.
Civil Law:	Body of law, distinguishable from criminal law, which governs private rights of individuals.
Civil liberties:	Areas of personal freedom with which governments are constrained from interfering. Usually spelled out in a bill of rights or constitution that guarantee the protection of persons, expression and property from the arbitrary influence of government officials.
Civil rights:	Protections and privileges given to all United States citizens by the Constitution and Bill of Rights.
Civil society:	The spheres of voluntary individual, social and economic relationships and organizations that although limited by law are not part of governmental institutions.
Classical republicanism:	Refers to government that seeks the public or common good rather than the good of a particular group or class of society.
Common law:	Judge made law that originated in England from decisions shaped according to prevailing custom. Decisions were reapplied to similar situations and thus became common to the nation.
Common or public good:	Benefit or interest of a politically organized society as a whole.
Compromise:	An agreement to settle differences; mutual concessions.
Concurrent powers:	Authority that may be exercised by both the federal government and the state governments (e.g., levying taxes, borrowing money, spending for the general welfare).
Confederal:	Relating to a league of independent states.
Confederation:	A loose union of individual states connected by a weak or non-existent central government.
Consent of the governed:	Agreement by the people to set up and live under a government. According to the natural rights philosophy, all legitimate governments must rest on the consent of the governed.
Constitutionalism:	Idea that the powers of government should be distributed according to a written or unwritten constitution and that those powers should be effectively restrained by the constitution's provisions.
Delegated powers:	Powers granted to the national government under the Constitution as enumerated in Articles I, II and III.
Democracy:	Form of government in which political control is exercised by the people, either directly or through their elected representatives.
Diplomacy:	The art and practice of conducting negotiations between nations.
Diplomat:	One employed or skilled in conducting negotiations between nations.
Diversity:	State of being different; variety.
Documents of government:	Papers necessary for the organization and powers of government.
Due Process of Law:	Right of every citizen to be protected against arbitrary action by government.
Enumerated powers:	Powers that are specifically granted to Congress by Article I, Section 8 of the Constitution.

Equality:	The condition of possessing substantially the same rights, privileges and immunities, and being substantially responsible for the same duties as other members of society.
Federal Supremacy Clause:	Article VI of the Constitution provides that the Constitution and all federal laws and treaties shall be the "Supreme Law of the Land." Therefore, all federal laws take precedence over state and local laws.
Federal system (or Federalism):	Form of political organization in which governmental power is divided between a central government and territorial subdivisions (e.g., in the United States—the national, state and local governments).
Federalism:	The distribution of power in a government between a central authority and states and the distribution of power among states with most powers retained by central government.
Foreign Policy:	Actions of the federal government directed to matters beyond United States' borders, especially relations with other countries.
Government:	Institutions and procedures through which a territory and its people are ruled.
Habeas Corpus:	Court order demanding that the individual in custody be brought into court and shown the cause for detention. Habeas corpus is guaranteed by the Constitution and can be suspended only in the case of rebellion or invasion.
Individual responsibility:	Fulfilling the moral and legal obligations of membership in society.
Individual rights:	Just claims due a person by law, morality or tradition as opposed to those due to groups.
Interest group:	Organized body of individuals who share same goals and try to influence public policy to meet those goals.
International organizations:	Groups formed by nation-states to achieve common political, social or economic goals.
Judicial power:	Authority to manage conflicts about the interpretation and application of the law.
Judicial Review:	Doctrine that permits the federal courts to declare unconstitutional, and thus null and void, acts of the Congress, the executive branch and the states. The precedent for judicial review was established in the 1803 case of <i>Marbury v. Madison</i> .
Justice:	That which may be obtained through fair distribution of benefits and burdens, fair correction of wrongs and injuries, or use of fair procedures in gathering information and making decisions.
Leadership:	State or condition of one who guides or governs.
Liberal Democracy:	Government that recognizes that the individual has rights that exist independently of government and which ought to be protected by and against government.
Liberty:	Freedom from restraint under conditions essential to the equal enjoyment of the same right by others.
Majority rule:	Decision by more than half of those participating in the decision-making process.
Minority rights:	Opportunities that a member is entitled to have, or to receive from others within the limits of the law, even though he/she may not be part of the controlling group.
Nation-State:	Divisions of the world in which each state claims sovereignty over defined territory and jurisdiction over everyone within it. These states interact using diplomacy, formal agreements and sanctions that may be peaceful or may involve the use of force.
NATO:	North Atlantic Treaty Organization, an international transatlantic partnership consisting of various European states, the United States and Canada, which was designed through cooperation, consultation and collective defense to maintain peace and promote stability throughout Europe.
Non-governmental organization:	A group in a free society that is not a part of any government institution and does not derive its power from government.
OAS:	Organization of American States, an international governmental organization formed by the states of North and South America for security and the protection of mutual interests.
Oligarchy:	A government in which a small group exercises control. These systems are usually based on wealth, military power or social position.
Patriotism:	A feeling of pride in and respect for one's country.
Political efficacy:	Belief that one can be effective and have an impact on public affairs.
Political party:	Any group, however loosely organized, that seeks to elect government officials under a given label.
Political rights:	Entitlement to participate in the political process.

Popular sovereignty:	The concept that ultimate political authority rests with the people to create, alter or abolish governments.
Presumption of innocence:	The legal concept that a criminal defendant is not guilty until the prosecution proves every element of the crime, beyond a reasonable doubt.
Privacy:	The right to be left alone; the right of an individual to withhold one's self and one's property from public scrutiny if one so chooses.
Public service:	Action of benefit to local, state or national communities through appointed or elected office.
Representative Democracy:	Form of government in which power is held by the voters and is exercised indirectly through elected representatives who make decisions.
Republic:	Form of government in which political control is exercised through elected representatives.
Republican government:	System of government in which power is held by the voters and is exercised by elected representatives responsible for promoting the common welfare.
Right against self-incrimination:	Individual right found in the Fifth Amendment to the United States Constitution that prevents an individual from being forced to testify against himself or herself.
Right of appeal:	The right to seek review by a superior court of an injustice done or error committed by an inferior court, whose judgment or decision the court above is called upon to correct or reverse.
Right to counsel:	Individual right found in the Sixth Amendment to the Constitution that requires criminal defendants to have access to legal representation.
Rule of Law:	Principle that every member of a society, even a ruler, must follow the law.
Separation of powers:	Distribution among the branches of government to ensure that the same person or group will not make the law, enforce the law and interpret the law.
State:	A commonwealth; a nation; a civil power.
Treaty:	Formal agreement between or among sovereign nations to create or restrict rights and responsibilities. In the United States all treaties must be approved by a two-thirds vote in the Senate.
Trial by jury:	Individual right found in the Sixth and Seventh Amendment of the Constitution that guarantees a person an impartial jury.
Truth:	Agreement of thought and reality that can eventually be verified.
Unitary government:	An authoritative system in which all regulatory power is vested in a central government from which regional and local governments derive their powers (e.g., Great Britain and France as well as the American states within their spheres of authority).

Proposed Academic Standards for Economics

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XVII. INTRODUCTION

This document includes Proposed Academic Standards for Economics that describe what students should know and be able to do in five areas:

- 6.1. Economic Systems
- 6.2. Markets and the Functions of Governments
- 6.3. Scarcity and Choice
- 6.4. Economic Interdependence
- 6.5. Work and Earnings

The Proposed Economic Standards describe what students should know and be able to do at four grade levels (third, sixth, ninth and twelfth). They reflect the increasing complexity and sophistication that students are expected to achieve as they progress through school. This document attempts to avoid repetition and makes obvious progression across grade levels. Topics and concepts in Economics directly relate to Environment and Ecology Standard 4.2 and Geography Standard 7.3. As a social science, Economics standards should be cross walked and related to the Civics and Government, Geography and History Standards to create an interdisciplinary view of the world.

Economics is concerned with the behavior of individuals and institutions engaged in the production, exchange and consumption of goods and services. As technology helps to reshape the economy, knowledge of how the world works

is critical. People entering the workforce cannot function effectively without a basic knowledge of the characteristics of economic systems, how markets establish prices, how scarcity and choice affect the allocation of resources, the global nature of economic interdependence and how work and earnings impact productivity.

A Pennsylvania governor remarked, "Among the freedoms we enjoy in America in our pursuit of happiness is the freedom to be independent, creative, visionary and

entrepreneurial. We are free to pursue dreams..." To succeed, however, every student must know how to manage resources, prepare for the workforce, make wise investments and be informed about public policy. These standards are intended to provide direction in learning how economic activity impacts the forces of everyday life.

A glossary is included to assist the reader in clarifying terminology contained in the standards.

6.1. Economic Systems			
6.1.3. GRADE 3	6.1.6. GRADE 6	6.1.9. GRADE 9	6.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Describe how individuals, families and communities with limited resources make choices.</p> <p>B. Describe alternative methods of allocating goods and services and advantages and disadvantages of them.</p> <p>C. Identify local economic activities.</p> <ul style="list-style-type: none"> • Employment • Output <p>D. Identify examples of local businesses opening, closing, expanding or contracting.</p>	<p>A. Describe and identify the characteristics of traditional, command and market economic systems.</p> <p>B. Explain the three basic questions that all economic systems attempt to answer.</p> <ul style="list-style-type: none"> • What goods and services should be produced? • How will goods and services be produced? • Who will consume goods and services? <p>C. Define measures of economic activity and relate them to the health of the economy.</p> <ul style="list-style-type: none"> • Prices • Employment • Output <p>D. Explain the importance of expansion and contraction on individual businesses (e.g., gourmet food shops, auto repair shops, ski resorts).</p>	<p>A. Analyze the similarities and differences in economic systems.</p> <p>B. Explain how traditional, command and market economies answer the basic economic questions.</p> <p>C. Explain how economic indicators reflect changes in the economy.</p> <ul style="list-style-type: none"> • Consumer Price Index (CPI) • Gross Domestic Product (GDP) • Unemployment rate <p>D. Describe the historical examples of expansion, recession and depression in the United States.</p>	<p>A. Evaluate the strengths and weaknesses of traditional, command and market economics.</p> <p>B. Analyze the impact of traditional, command and market economies on the United States economy.</p> <p>C. Assess the strength of the regional, national and/or international economy and compare it to other years based upon economic indicators.</p> <p>D. Describe historical examples of expansion, recession, and depression internationally.</p>

6.2. Markets and the Functions of Governments			
6.2.3. GRADE 3	6.2.6. GRADE 6	6.2.9. GRADE 9	6.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Define and identify goods, services, consumers and producers.</p> <p>B. Identify ways local businesses compete to get customers.</p> <p>C. Identify and compare means of payment.</p> <ul style="list-style-type: none"> • Barter • Money 	<p>A. Describe market transactions in terms of goods, services, consumers and producers.</p> <p>B. Describe the cost and benefits of competition to customers in markets.</p> <p>C. Explain the function of money and its use in society.</p>	<p>A. Explain the flow of goods, services and resources in a mixed economy.</p> <p>B. Analyze how the number of consumers and producers affects the level of competition within a market.</p> <p>C. Explain the structure and purpose of the Federal Reserve System.</p>	<p>A. Analyze the flows of products, resources and money in a mixed economy.</p> <p>B. Evaluate the operation of noncompetitive markets.</p> <p>C. Analyze policies designed to raise or lower interest rates and how the Federal Reserve Board influences interest rates.</p>

6.2. Markets and the Functions of Governments			
6.2.3. GRADE 3	6.2.6. GRADE 6	6.2.9. GRADE 9	6.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
D. Identify groups of competing producers in the local area.	D. Define economic institutions (e.g., banks, labor unions).	D. Analyze the functions of economic institutions (e.g., corporations, not-for-profit institutions).	D. Evaluate changes in economic institutions over time (e.g. stock markets, non-government organizations).
E. Identify who supplies a product and who demands a product.	E. Explain how the interaction of buyers and sellers determines prices and quantities exchanged.	E. Explain the laws of supply and demand.	E. Predict how changes in supply and demand affect equilibrium price and quantity sold.
F. Define price and identify the prices of different items.	F. Describe how prices influence both buyers and sellers and explain why prices may vary for similar products.	F. Analyze how competition among producers and consumers affects price, costs, product quality, service, product design and variety and advertising.	F. Identify and analyze forces that can change price. <ul style="list-style-type: none"> • Government actions • Weather conditions • International events
G. Define what a tax is and identify a tax paid by most families.	G. Explain how taxes affect the price of goods and services.	G. Contrast the largest sources of tax revenue with where most tax revenue is spent in Pennsylvania.	G. Evaluate types of tax systems. <ul style="list-style-type: none"> • Progressive • Proportional • Regressive
H. Identify government involvement in local economic activities.	H. Describe the Pennsylvania and United States governments' roles in monitoring economic activities.	H. Analyze the economic roles of governments in market economies. <ul style="list-style-type: none"> • Economic growth and stability • Legal frameworks • Other economic goals (e.g., environmental protection, competition) 	H. Evaluate the economic roles of governments. <ul style="list-style-type: none"> • Macroeconomics (e.g., tariffs and quotas, exchange rates, trade balance) • Microeconomics (e.g., price controls, monopolies, cartels)
I. Identify goods and services produced by the government (e.g., postal service, food inspection).	I. Identify and describe public goods.	I. Explain how government provides public goods.	I. Evaluate government decisions to provide public goods.
J. Explain the relationship between taxation and government services.	J. Explain the cost and benefits of taxation.	J. Contrast the taxation policies of the local, state and national governments in the economy.	J. Evaluate the social, political and economic changes in tax policy using cost/benefit analysis.
K. Identify forms of advertising designed to influence personal choice.	K. Explain how advertisements influence perceptions of the costs and benefits of economic decisions.	K. Interpret how media reports can influence perceptions of the costs and benefits of decisions.	K. Analyze the impact of media on decision-making of consumers, producers and policymakers.
L. Explain why most countries create their own form of money.	L. Explain what an exchange rate is.	L. Explain how the price of one currency is related to the price of another currency (e.g., Japanese yen in American dollar, Canadian dollar in Mexican Nuevo peso).	L. Analyze how policies and international events may change exchange rates.

6.3. Scarcity and Choice			
6.3.3. GRADE 3	6.3.6. GRADE 6	6.3.9. GRADE 9	6.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Define scarcity and identify limited resources scarcity.	A. Explain how scarcity influences choices and behaviors. <ul style="list-style-type: none"> • Personal decision-making • Family decision-making • Community decision-making 	A. Describe ways to deal with scarcity. <ul style="list-style-type: none"> • Community • Pennsylvania • United States 	A. Analyze actions taken as a result of scarcity issues in the regional, national and international economies.
B. Define and identify wants of different people.	B. Explain how limited resources and unlimited wants cause scarcity in society.	B. Analyze how unlimited wants and limited resources affect decision-making.	B. Evaluate the economic reasoning behind a choice.
C. Identify and define natural, human and capital resources.	C. Describe the human, natural and capital resources used to produce a specific good or service.	C. Explain how resources can be used in different ways to produce different goods and services.	C. Evaluate the allocation of resources used to produce goods and services.
D. Identify costs and benefits associated with an economic decision.	D. Explain the costs and benefits of an economic decision.	D. Explain marginal analysis and decision-making.	D. Evaluate regional, national or international economic decisions using marginal analysis.
E. Explain what is given up when making a choice.	E. Define opportunity cost and describe the opportunity cost of a personal choice.	E. Explain the opportunity cost of a public choice from different perspectives.	E. Analyze the opportunity cost of decisions by individuals, businesses, communities and nations.
F. Explain how self interest influences choice.	F. Explain how negative and positive incentives affect choices people make.	F. Explain how incentives affect the behaviors of workers, savers, consumers and producers.	F. Evaluate in terms of marginal analysis how incentives influence decisions of consumers, producers and policy makers.

6.4. Economic Interdependence			
6.4.3. GRADE 3	6.4.6. GRADE 6	6.4.9. GRADE 9	6.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Define specialization and the concept of division of labor.	A. Explain the advantages and disadvantages of specialization and division of labor.	A. Explain why specialization may lead to increased production and consumption.	A. Analyze how specialization may increase the standard of living.
B. Explain why people trade.	B. Explain how specialization leads to more trade between people and nations.	B. Explain how trade may improve a society's standard of living.	B. Analyze the relationships between trade, competition, productivity.
C. Explain why goods, services and resources come from all over the nation and the world.	C. Identify and define imports, exports, inter-regional trade and international trade.	C. Explain why governments sometimes restrict or subsidize trade.	C. Evaluate how a nation might benefit by lowering or removing trade barriers.

6.4. Economic Interdependence			
6.4.3. GRADE 3	6.4.6. GRADE 6	6.4.9. GRADE 9	6.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>D. Identify local resources.</p> <ul style="list-style-type: none"> • Natural (renewable, nonrenewable and flow resources) • Human • Capital <p>E. Define specialization and identify examples of interdependence.</p> <p>F. Explain why some products are produced locally while others are not.</p> <p>G. Identify local geographic patterns of economic activities.</p> <ul style="list-style-type: none"> • Agriculture • Travel and tourism • Mining and mineral extraction • Manufacturing • Wholesale and retail • Health services 	<p>D. Explain how the locations of resources, transportation and communication networks and technology have affected Pennsylvania economic patterns.</p> <ul style="list-style-type: none"> • Agriculture (e.g., farms) • Forestry (e.g., logging) • Mining and mineral extraction (e.g., coal fields) • Manufacturing (e.g., steel mills) • Wholesale and retail (e.g., super stores, internet) <p>E. Explain how specialization and trade lead to interdependence.</p> <p>F. Explain how opportunity costs influence where goods and services are produced locally and regionally.</p> <p>G. Describe geographic patterns of economic activities in Pennsylvania.</p> <ul style="list-style-type: none"> • Agriculture • Travel and tourism • Mining and mineral extraction • Manufacturing • Wholesale and retail • Health services 	<p>D. Explain how the locations of resources, transportation and communication networks and technology have affected United States economic patterns.</p> <ul style="list-style-type: none"> • Labor markets (e.g., migrant workers) • Interstate highway system and sea and inland ports (e.g., movement of goods) • Communication technologies (e.g., facsimile transmission, satellite-based communications) <p>E. Analyze how Pennsylvania consumers and producers participate in the global production and consumption of goods or services.</p> <p>F. Explain how opportunity cost can be used to determine the product for which a nation has a comparative advantage.</p> <p>G. Describe geographic patterns of economic activities in the United States.</p> <ul style="list-style-type: none"> • Primary—extractive industries (i.e., farming, fishing, forestry and mining) • Secondary—materials processing industries (i.e., manufacturing) • Tertiary—service industries (e.g., retailing, wholesaling, finance, real estate, travel and tourism, transportation) 	<p>D. Explain how the locations of resources, transportation and communication networks and technology have affected international economic patterns.</p> <p>E. Analyze how United States consumers and producers participate in the global production and consumption of goods or services.</p> <p>F. Evaluate how trade is influenced by comparative advantage and opportunity costs.</p> <p>G. Evaluate characteristics and distribution of international economic activities.</p> <ul style="list-style-type: none"> • Primary—extractive industries (i.e., farming, fishing, forestry and mining) • Secondary—materials processing industries (i.e., manufacturing) • Tertiary—service industries (e.g., retailing, wholesaling, finance, real estate, travel and tourism, transportation)

6.5. Work and Earnings			
6.5.3. GRADE 3	6.5.6. GRADE 6	6.5.9. GRADE 9	6.5.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Explain why people work to get goods and services.</p>	<p>A. Recognize that the availability of goods and services is the result of work by members of the society.</p>	<p>A. Define wages and explain how wages are determined by the supply of and demand of workers.</p>	<p>A. Analyze the factors influencing wages.</p> <ul style="list-style-type: none"> • Demand for goods and services produced • Labor unions • Productivity • Education/skills

6.5. Work and Earnings			
6.5.3. GRADE 3	6.5.6. GRADE 6	6.5.9. GRADE 9	6.5.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
B. Identify different occupations.	B. Explain the concept of labor productivity.	B. Describe how productivity is measured and identify ways in which a person can improve his or her productivity.	B. Evaluate how changes in education, incentives, technology and capital investment alter productivity.
C. Describe businesses that provide goods and businesses that provide services.	C. Compare the number of employees at different businesses.	C. Identify and explain the characteristics of the three types of businesses. <ul style="list-style-type: none"> • Sole Proprietorship • Partnership • Corporation 	C. Analyze the costs and benefits of organizing a business as a sole proprietorship, partnership or corporation.
D. Define profit and loss.	D. Explain how profits and losses serve as incentives.	D. Analyze how risks influence business decision-making	D. Analyze the role of profits and losses in the allocation of resources in a market economy.
E. Identify examples of assets. <ul style="list-style-type: none"> • Tangible (e.g., houses, cars, jewelry) • Financial assets (e.g., stocks, bonds, savings accounts) 	E. Describe how people accumulate tangible and financial assets through income, saving, and financial investment.	E. Define wealth and describe its distribution within and among the political divisions of the United States.	E. Compare distribution of wealth across nations.
F. Define entrepreneurship and identify entrepreneurs in the local community.	F. Identify entrepreneurs in Pennsylvania. <ul style="list-style-type: none"> • Historical • Contemporary 	F. Identify leading entrepreneurs in Pennsylvania and the United States and describe the risks they took and the rewards they received.	F. Assess the impact of entrepreneurs on the economy.
G. Define saving and explain why people save.	G. Identify the costs and benefits of saving. <ul style="list-style-type: none"> • Piggy banks • Savings accounts • U.S. savings bonds 	G. Explain the differences among stocks, bonds and mutual funds.	G. Analyze the risks and returns of various investments. <ul style="list-style-type: none"> • Stocks • Bonds • Mutual funds • Savings bonds • Retirement savings (e.g., Individual Retirement Account (IRA), Keogh, 401K) • Savings accounts (e.g., passbook, certificate of deposit)
H. Explain how banks bring savers and borrowers together.	H. Describe why there is a difference between interest rates for saving and borrowing.	H. Explain the impact of higher or lower interest rates for savers, borrowers, consumers and producers.	H. Evaluate benefits and costs of changes in interest rates to individuals and society.

XVIII. GLOSSARY

- Barter:** The direct exchange of goods or services between people.
- Circular flow:** The movement of resources, goods, and services through an economy. As a diagram, it can show how households and business firms interact with each other in the product and resource markets.
- Command economy:** A system in which decisions are made largely by an authority such as a feudal lord or government planning agency.
- Comparative advantage:** Economic theory that a country/individual should sell goods and services which it can produce at relatively lower costs and buy goods and services which it can produce at relatively higher costs.

Competition:	The rivalry among people and/or business firms for resources and/or consumers.
Consumer:	One who buys or rents goods or services and uses them.
Consumer Price Index:	The price index most commonly used to measure the impact of changes in prices on households; this index is based on a standard market basket of goods and services purchased by a typical urban family.
Corporation:	A business firm that is owned by stockholders and is a legal entity with rights to buy, sell and make contracts. Its chief advantage is that each owner's liability is limited to the amount of money he or she has invested in the company.
Cost:	What is given up when a choice is made; monetary and/or non monetary.
Cost/benefit analysis:	The process of weighing all predicted costs against the predicted benefits of an economic choice.
Deflation:	A general decline in the price level.
Demand:	The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various possible prices during a specific time period.
Division of labor:	A method of organizing production whereby each worker specializes in part of the productive process.
Economic growth:	An increase in a society's output.
Economic system:	The ways societies organize to determine what goods and services should be produced, how goods and services should be produced and who will consume goods and services. Examples include traditional, command and market.
Economics:	The study of the behavior of individuals and institutions engaged in the production, distribution and consumption of goods and services.
Entrepreneur:	Individual who begins, manages and bears the risks of a business (e.g., Milton Hershey, F.W. Woolworth).
Equilibrium price:	The outlay at which quantity demanded equals quantity supplied; market clearing price.
Exchange rate:	The price of one country's currency measured in another country's currency (e.g., United States dollar in German Mark, Japanese Yen in Canadian dollar).
Federal Reserve System:	The "Central Bank" of the United States (consisting of the Board of Governors and 12 district banks) which controls monetary policy; sometimes referred to as "The Fed" or Federal Reserve.
Fiscal policy:	Government decisions on taxation and spending to achieve economic goals.
Gross Domestic Product:	The market value of the total output of final goods and services produced by an economy in a given time period, usually 1 year.
Goods:	Objects that can satisfy people's wants.
Household:	The group of people living together under one roof; a group of individuals whose economic decision making is interrelated.
Human resources:	People's mental and physical abilities.
Incentives:	Factors that motivate or influence human behavior.
Income:	Payments earned by people in exchange for providing resources used to produce goods and services.
Inflation:	A general rise in the price level.
Interdependence:	Ideas, goods and services in one area affect decisions and events in other areas reducing self-sufficiency.
Interest:	Payment made for the use of borrowed money.
Interest rate:	The price of borrowed money.
Labor force:	That part of the population which is employed or actively seeking employment.
Labor union:	An organization of workers who seek to improve their common interests.
Labor productivity:	The total output divided by the quantity of labor employed to produce it.
Law of demand:	The lower the price of a good or service, the greater the quantity that people will buy, all else held constant (e.g., incomes, tastes).
Law of supply:	The higher the price of a good or service, the greater the quantity that business will sell, all else held constant (e.g., resource costs, technology).
Loss:	The difference that arises when a firm's total revenues are less than its total costs.
Macroeconomics:	Study of aggregate economic activity including how the economy works as a whole and seeks to identify levels of National income, output, employment and prices.

Marginal analysis:	A decision making tool that weights additional costs and benefits.
Market:	A place or process through which goods and services are exchanged.
Market economy:	An economic system in which decisions are made largely by the interactions of buyers and sellers.
Microeconomics:	Study of the behavior of consumers and firms and determination of the market prices and quantities transacted of factor inputs and goods and services.
Mixed economy:	An economic system in which decisions are made by markets, government and tradition.
Monetary policy:	Government decisions on money supply and interest rates to achieve economic goals.
Money:	A medium of exchange.
Money supply:	The amount of liquid assets which exists in the economy at a given time (e.g., currency, checkable deposits, travelers' checks).
Natural resources:	Anything found in nature that can be used to produce a product (e.g., land, water, coal).
Opportunity cost:	The highest valued alternative given up when a decision is made.
Partnership:	A business in which ownership is shared by two or more people who receive all the profits and rewards and bear all the losses and risks.
Price:	The amount people pay in exchange for unit of a particular good or service.
Price index:	A measure of the current average level of costs compared to the average level of costs of a base year.
Producer:	One who makes goods or services.
Productivity:	Amount of output per unit of input over a period of time. It is used to measure the efficiency with which inputs can be used.
Profit:	Total revenue minus total costs.
Progressive tax:	A levy for which the percentage of income used to pay the levy increases as the taxpayer's income increases.
Proportional tax:	A levy for which the percentage of income used to pay the levy remains the same as the taxpayer's income increases.
Public goods:	Goods and services provided by the government rather than by the private sector. Goods that more than one person can use without necessarily preventing others from using the same goods or services.
Public policy:	A government's course of action that guides present and future decisions.
Quantity demanded:	The amount of a good or service people are willing and able to purchase at a given price during a specific time period.
Quantity supplied:	The amount of a good or service people are willing and able to sell at a given price during a specific time period.
Regressive tax:	A levy for which the percentage of income used to pay the levy decreases as the taxpayer's income increases.
Resources:	Inputs used to produce goods and services; categories include natural, human and capital.
Scarcity:	An economic condition that exists when demand is greater than supply.
Services:	Actions that are valued by others.
Sole proprietorship:	A business owned by an individual who receives all the profits and rewards and bears all the losses and risks.
Specialization:	A form of division of labor in which each individual or firm concentrates its productive efforts on a single or limited number of activities.
Standard of living:	A measurement of an individual's quality of life. A larger consumption of goods, services, and leisure is often assumed to indicate a higher standard of living.
Supply:	The different quantities of a resource, good or service that potential sellers are willing and able to sell at various possible prices during a specific time period.
Trade:	Voluntary exchange between two parties in which both parties benefit.
Traditional economy:	An economic system in which decisions are made largely by repeating the actions from an earlier time or generation.
Unemployment rate:	The percentage of the labor force that is actively seeking employment.
Wants:	Desires that can be satisfied by consuming goods, services or leisure activities.

Proposed Academic Standards for Geography

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XX. INTRODUCTION

This document includes Proposed Academic Standards for Geography that describe what students should know and be able to do in four areas:

- 7.1. Basic Geographic Literacy
- 7.2. The Physical Characteristics of Places and Regions
- 7.3. The Human Characteristics of Places and Regions
- 7.4. The Interactions Between People and Places

The Proposed Geography Standards describe what students should know and be able to do at four grade levels (third, sixth, ninth and twelfth). They reflect the increasingly complex and sophisticated understanding of geography that students are expected to achieve as they progress through school. Throughout the standards, all grade levels must address the local-to-global progression (scales). Basic concepts found in lower grade levels must be developed more fully at higher grade levels.

Geography is the science of space and place on Earth’s surface. Its subject matter is the physical and human phenomena that make up the world’s environments and places. These proposed standards build on using geographic tools as a means for asking and answering geographic questions; setting information into a range of spatial contexts; recognizing places and regions as human concepts; understanding the physical processes that have shaped Earth’s surface and the patterns resulting from those processes; identifying the relationships between people and environments; recognizing the characteristics

and distribution of people and cultures on Earth’s surface; focusing on the spatial patterns of settlements and their resulting political structures; and exploring the networks of economic interdependence and the importance of resources.

At each grade level, instructional content should be selected to support the development of geographic understanding. In the primary grade levels (1-3), the emphasis should be on identifying the basic characteristics of the world (answering the what question); at the intermediate grade levels (4-6), the emphasis should be on describing spatial patterns of phenomena (answering the where and when questions); at the middle grade levels (7-9), the emphasis should be on explaining spatial patterns of phenomena (answering the how question); and at high school grade levels (10-12), the emphasis should be on analyzing spatial patterns of phenomena (answering the why question). Although the emphasis may focus on specific questions, these questions may be encountered at any grade level.

Geography is an integrative discipline that enables students to apply geography skills and knowledge to life situations at home, at work and in the community. Therefore, these standards should be cross-walked with those in Civics and Government, Economics and History to create an interdisciplinary view of the world. Topics and concepts in geography directly relate to standard statements in Environment and Ecology, Economics, Mathematics, Science and Technology, Civics and Government.

Teachers should employ the “Five Fundamental Themes of Geography” while proceeding through the Academic Standards for Geography. The relationship between the themes and the standards is clear. The standards describe what students should know and be able to do while the themes provide a clear conceptual basis for teachers and students to use in organizing their knowledge.

These are the “Five Fundamental Themes of Geography”:

<i>Theme</i>	<i>Description</i>
Location	The absolute and relative position of a place on Earth’s surface
Place	How physical and human characteristics define and distinguish a place
Human-Environment Interactions	How humans modify and adapt to natural settings
Movement	How people, ideas and materials move between and among locations
Regions	How an area displays unity in terms of physical and human characteristics

A glossary is included to assist the reader in clarifying terminology contained in the standards.

7.1. Basic Geographic Literacy			
7.1.3. GRADE 3	7.1.6. GRADE 6	7.1.9. GRADE 9	7.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Identify geographic tools and their uses.</p> <ul style="list-style-type: none"> • Characteristics and purposes of different geographic representations • Maps and basic map elements • Globes • Graphs • Diagrams • Photographs • Geographic representations to display spatial information • Sketch maps • Thematic maps • Mental maps to describe the human and physical features of the local area 	<p>A. Describe geographic tools and their uses.</p> <ul style="list-style-type: none"> • Basis on which maps, graphs and diagrams are created • Aerial and other photographs • Reference works • Field observations • Surveys • Geographic representations to display spatial information • Absolute location • Relative location • Flows (e.g., goods, people, traffic) • Topography • Historic events • Mental maps to organize an understanding of the human and physical features of Pennsylvania and the home county • Basic spatial elements for depicting the patterns of physical and human features • Point, line, area, location, distance, scale • Map grids • Alpha-numeric system • Cardinal and intermediate directions 	<p>A. Explain geographic tools and their uses.</p> <ul style="list-style-type: none"> • Development and use of geographic tools • Geographic information systems [GIS] • Population pyramids • Cartograms • Satellite-produced images • Climate graphs • Access to computer-based geographic data (e.g., Internet, CD-ROMs) • Construction of maps • Projections • Scale • Symbol systems • Level of generalization • Types and sources of data • Geographic representations to track spatial patterns • Weather • Migration • Environmental change (e.g., tropical forest reduction, sea-level changes) • Mental maps to organize and understand the human and physical features of the United States 	<p>A. Analyze data and issues from a spatial perspective using the appropriate geographic tools.</p> <ul style="list-style-type: none"> • Spatial patterns of human features that change over time (e.g., intervening opportunity, distance decay, central place theory, locational preference) • Physical patterns of physical features that change over time (e.g., climate change, erosion, ecological invasion and succession) • Human and physical features of the world through mental maps

7.1. Basic Geographic Literacy			
7.1.3. GRADE 3	7.1.6. GRADE 6	7.1.9. GRADE 9	7.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>B. Identify and locate places and regions.</p> <ul style="list-style-type: none"> • Physical features <ul style="list-style-type: none"> • Continents and oceans • Major landforms, rivers and lakes in North America • Local community • Human features <ul style="list-style-type: none"> • Countries (i.e., United States, Mexico, Canada) • States (i.e., Pennsylvania, Delaware, Maryland, New Jersey, New York, Ohio, West Virginia) • Cities (i.e., Philadelphia, Erie, Altoona, Pittsburgh, Scranton, Harrisburg, Johnstown, Allentown, Washington D.C., Baltimore, New York, Toronto, Cleveland) • Local community • Regions as areas with unifying geographic characteristics <ul style="list-style-type: none"> • Physical regions (e.g., landform regions, climate regions, river basins) • Human regions (e.g., neighborhoods, cities, states, countries) 	<p>B. Describe and locate places and regions.</p> <ul style="list-style-type: none"> • Coordinate systems (e.g., latitude and longitude, time zones) • Physical features <ul style="list-style-type: none"> • In Pennsylvania (e.g., Coastal Plain, Piedmont, Appalachians) • In the United States (e.g., Great Lakes, Rocky Mountains, Great Plains) • Human features <ul style="list-style-type: none"> • Countries (e.g., United Kingdom, Argentina, Egypt) • States (e.g., California, Massachusetts, Florida) • Provinces (e.g., Ontario, Quebec, Nova Scotia) • Major human regions (e.g., Mid Atlantic, New England, Southwest) • Counties (e.g., Lancaster, Lackawanna, Jefferson) • Townships (e.g., Dickinson, Lower Mifflin, Southampton) • Major cities (e.g., London, Los Angeles, Tokyo) • Ways in which different people view places and regions (e.g., as places to visit or to avoid) • Community connections to other places <ul style="list-style-type: none"> • Dependence and interdependence • Access and movement 	<p>B. Explain and locate places and regions.</p> <ul style="list-style-type: none"> • How regions are created to interpret Earth's complexity (i.e., the differences among formal regions, functional regions, perceptual regions) • How characteristics contribute to regional changes (e.g., economic development, accessibility, demographic change) • How culture and experience influence perceptions of places and regions • How structures and alliances impact regions <ul style="list-style-type: none"> • Development (e.g., First vs. Third World, North vs. South) • Trade (e.g., NAFTA, the European Union) • International treaties (e.g., NATO, OAS) • How regions are connected (e.g., watersheds and river systems, patterns of world trade, cultural ties, migration) 	<p>B. Analyze the location of places and regions.</p> <ul style="list-style-type: none"> • Changing regional characteristics (e.g., short- and long-term climate shifts; population growth or decline; political instability) • Criteria to define a region (e.g., the reshaping of south Florida resulting from changing migration patterns; the US-Mexico border changes as a function of NAFTA; metropolitan growth in the Philadelphia region) • Cultural change (e.g., influences people's perceptions of places and regions)
<p>Basic Geography Literacy must include local-to-global progression (scales) for all students at all grade levels for the standard statements and their descriptors. Basic concepts introduced in lower grade levels must be developed more fully throughout higher grade levels. Portions of Basic Geography Literacy relate directly to the Mathematics Standards.</p>			

7.2 The Physical Characteristics of Places and Regions			
7.2.3. GRADE 3	7.2.6. GRADE 6	7.2.9. GRADE 9	7.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Identify the physical characteristics of places and regions.</p> <ul style="list-style-type: none"> • Physical properties <ul style="list-style-type: none"> • Landforms (e.g., plains, hills, plateaus and mountains) • Bodies of water (e.g., rivers, lakes, seas and oceans) • Weather and climate • Vegetation and animals • Earth's basic physical systems <ul style="list-style-type: none"> • Lithosphere • Hydrosphere • Atmosphere • Biosphere <p>B. Identify the basic physical processes that affect the physical characteristics of places and regions.</p> <ul style="list-style-type: none"> • Earth-sun relationships (i.e., seasons and length of day, weather and climate) • Extreme physical events (e.g., earthquakes, floods, hurricanes, tornadoes) 	<p>A. Describe the physical characteristics of places and regions.</p> <ul style="list-style-type: none"> • Components of Earth's physical systems (e.g., clouds, storms, relief and elevation [topography], tides, biomes, tectonic plates) • Comparison of the physical characteristics of different places and regions (e.g., soil, vegetation, climate, topography) <p>B. Describe the physical processes that shape patterns on Earth's surface.</p> <ul style="list-style-type: none"> • Earth-sun relationships (i.e., differences between equinoxes and solstices, reasons they occur and their relationship to latitude) • Climate types (e.g., marine west coast, humid continental, tropical wet and dry) • Climate change, (e.g., global warming/cooling, desertification, glaciations) • Plate tectonics • Hydrologic cycle 	<p>A. Explain the physical characteristics of places and regions including spatial patterns of Earth's physical systems.</p> <ul style="list-style-type: none"> • Climate regions • Landform regions <p>B. Explain the dynamics of the fundamental processes that underlie the operation of Earth's physical systems.</p> <ul style="list-style-type: none"> • Wind systems • Water cycle • Erosion cycle • Plate tectonics • Ocean currents • Natural hazards 	<p>A. Analyze the physical characteristics of places and regions including the interrelationships among the components of Earth's physical systems.</p> <ul style="list-style-type: none"> • Biomes and ecosystem regions • Watersheds and river basins • World patterns of biodiversity <p>B. Analyze the significance of physical processes in shaping the character of places and regions.</p> <ul style="list-style-type: none"> • Circulation of the oceans • Ecosystem processes • Atmospheric systems • Extreme natural events
<p>The Physical Characteristics of Places and Regions must include local-to-global progression (scales) for all students at all grade levels for the standard statements and their descriptors. Basic concepts must be developed more fully throughout higher grade levels. Portions of Physical Characteristics of Places and Regions relate directly to Science and Technology and Environment and Ecology standards.</p>			

7.3 The Human Characteristics of Places and Regions			
7.3.3. GRADE 3	7.3.6. GRADE 6	7.3.9. GRADE 9	7.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to .</i>			
<p>A. Identify the human characteristics of places and regions by their population characteristics.</p> <ul style="list-style-type: none"> • The number and distribution of people in the local community • Human movement in the local community (e.g., mobility in daily life, migration) <p>B. Identify the human characteristics of places and regions by their cultural characteristics.</p> <ul style="list-style-type: none"> • Components of culture (e.g., language, belief systems and customs, social organizations, foods, ethnicity) • Ethnicity of people in the local community (e.g., customs, celebrations, languages, religions) 	<p>A. Describe the human characteristics of places and regions by their population characteristics.</p> <ul style="list-style-type: none"> • Spatial distribution, size, density and demographic characteristics of population at the county and state level. • Causes of human movement <ul style="list-style-type: none"> • Mobility (e.g., shopping, commuting, recreation) • Migration models (e.g., push/pull factors, barriers to migration) <p>B. Describe the human characteristics of places and regions by their cultural characteristics.</p> <ul style="list-style-type: none"> • Ethnicity of people at the county and state levels (e.g., customs, celebrations, languages, religions) • Spatial arrangement of cultures creates distinctive landscapes (e.g., cultural regions based on languages, customs, religion, building styles as in the Pennsylvania German region) 	<p>A. Explain the human characteristics of places and regions by their population characteristics.</p> <ul style="list-style-type: none"> • Spatial distribution, size, density and demographic characteristics of population at the state and National level • Demographic structure of a population (e.g., life expectancy, fertility rate, mortality rate, infant mortality rate, population growth rate, the demographic transition model) • Effects of different types and patterns of human movement <ul style="list-style-type: none"> • Mobility (e.g., travel for business) • Migration (e.g., rural to urban, short term vs. long term, critical distance) <p>B. Explain the human characteristics of places and regions by their cultural characteristics.</p> <ul style="list-style-type: none"> • Ethnicity of people at national levels (e.g., customs, celebrations, languages, religions) • Culture distribution (e.g., ethnic enclaves and neighborhoods) • Cultural diffusion (e.g., acculturation and assimilation, cultural revivals of language) 	<p>A. Analyze the significance of human activity in shaping places and regions by their population characteristics:</p> <ul style="list-style-type: none"> • Spatial distribution, size, density and demographic characteristics of population at the international level • Demographic trends and their impacts on patterns of population distribution (e.g., carrying capacity, changes in fertility, changes in immigration policy, the mobility transition model) • Impact of movement on human systems (e.g., refugees, guest workers, illegal aliens) <p>B. Analyze the significance of human activity in shaping places and regions by their cultural characteristics.</p> <ul style="list-style-type: none"> • Cultural conflicts (e.g., over language (Canada), over political power (Spain), over economic opportunities (Mexico)) • Forces for cultural convergence (e.g., the diffusion of foods, fashions, religions, language)

7.3 The Human Characteristics of Places and Regions			
7.3.3. GRADE 3	7.3.6. GRADE 6	7.3.9. GRADE 9	7.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to .</i>			
<p>C. Identify the human characteristics of places and regions by their settlement characteristics.</p> <ul style="list-style-type: none"> Types of settlements (e.g., villages, towns, suburbs, cities, metropolitan areas) Factors that affect where people settle (e.g., water, resources, transportation) <p>D. Identify the human characteristics of places and regions by their economic activities.</p> <ul style="list-style-type: none"> Location factors in the spatial distribution of economic activities (e.g., market, transportation, workers, materials) Producers of consumer products and services (e.g., bread, pizza, television, shopping malls) Products of farms and factories at the local and regional level (e.g., mushrooms, milk, snack foods, furniture) Spatial distribution of resources <ul style="list-style-type: none"> Non-renewable resources Renewable resources Flow resources (e.g., water power, wind power) 	<p>C. Describe the human characteristics of places and regions by their settlement characteristics.</p> <ul style="list-style-type: none"> Current and past settlement patterns in the local area Factors that affect the growth and decline of settlements (e.g., immigration, transportation development, depletion of natural resources, site and situation) <p>D. Describe the human characteristics of places and regions by their economic activities.</p> <ul style="list-style-type: none"> Spatial distribution of economic activities in the local area (e.g., patterns of agriculture, forestry, mining, retailing, manufacturing, services) Factors that influence the location and spatial distribution of economic activities (e.g., market size for different types of business, accessibility, modes of transportation used to move people, goods and materials) Spatial distribution of resources and their relationship to population distribution <ul style="list-style-type: none"> Historical settlement patterns and natural resource use (e.g., waterpower sites along the Fall Line) Natural resource-based industries (e.g., agriculture, mining, fishing, forestry) 	<p>C. Explain the human characteristics of places and regions by their settlement characteristics.</p> <ul style="list-style-type: none"> Current and past settlement patterns in Pennsylvania and the United States Forces that have reshaped modern settlement patterns (e.g., central city decline, suburbanization, the development of transport systems) Internal structure of cities (e.g., manufacturing zones, inner and outer suburbs, the location of infrastructure) <p>D. Explain the human characteristics of places and regions by their economic activities.</p> <ul style="list-style-type: none"> Spatial distribution of economic activities in Pennsylvania and the United States (e.g., patterns of agriculture, forestry, mining, retailing, manufacturing, services) Factors that shape spatial patterns of economic activity both Nationally and internationally (e.g., comparative advantage in location of economic activities; changes in resource trade; disruption of trade flows) Technological changes that affect the definitions of, access to, and use of natural resources (e.g., the role of exploration, extraction, use and depletion of resources) 	<p>C. Analyze the significance of human activity in shaping places and regions by their settlement characteristics.</p> <ul style="list-style-type: none"> Description of current and past settlement patterns at the international scale (e.g., global cities) Use of models of the internal structure of cities (e.g., concentric zone model, sector theory, multiple nuclei theory) Forces that have reshaped settlement patterns (e.g., commuter railroads, urban freeways, the development of megalopoli and edge cities) <p>D. Analyze the significance of human activity in shaping places and regions by their economic characteristics.</p> <ul style="list-style-type: none"> Changes in spatial distribution of economic activities at the global scale (e.g., patterns of agriculture, forestry, mining, retailing, manufacturing, services) Forces that are reshaping business (e.g., the information economy, business globalization, the development of off-shore activities) Effects of changes and movements in factors of production (e.g., resources, labor, capital)

7.3 The Human Characteristics of Places and Regions			
7.3.3. GRADE 3	7.3.6. GRADE 6	7.3.9. GRADE 9	7.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to .</i>			
<p>E. Identify the human characteristics of places and regions by their political activities.</p> <ul style="list-style-type: none"> Type of political units (e.g., townships, boroughs, counties, states, country (nation state)) Political units in the local area 	<p>E. Describe the human characteristics of places and regions by their political activities.</p> <ul style="list-style-type: none"> Spatial pattern of political units in Pennsylvania Functions of political units (e.g., counties, municipalities and townships, school districts, PA General Assembly districts (House and Senate), U.S. Congressional districts, states) 	<p>E. Explain the human characteristics of places and regions by their political activities.</p> <ul style="list-style-type: none"> Spatial pattern of political units in the United States Geographic factors that affect decisions made in the United States (e.g., territorial expansion, boundary delineation, allocation of natural resources) Political and public policies that affect geography (e.g., open space, urban development) 	<p>E. Analyze the significance of human activity in shaping places and regions by their political characteristics:</p> <ul style="list-style-type: none"> Spatial pattern of political units in the global system Role of new political alliances on the international level (e.g., multinational organizations, worker's unions, United Nations' organizations) Impact of political conflicts (e.g., secession, fragmentation, insurgencies, invasions)
The Human Characteristics of Places and Regions must include local-to-global progression (scales) for all students at all grade levels for the standard statements and their descriptors. Basic concepts found in lower grade levels must be developed more fully throughout higher grade levels. Portions of Human Characteristics of Places and Regions relate directly to the Civics and Government and Economics Standards.			

7.4 The Interactions Between People and Places			
7.4.3. GRADE 3	7.4.6. GRADE 6	7.4.9. GRADE 9	7.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to...</i>			
<p>A. Identify the impacts of physical systems on people.</p> <ul style="list-style-type: none"> How people depend on, adjust to and modify physical systems on a local scale (e.g., soil quality and agriculture, snowfall and daily activities, drought and water use) Ways in which natural hazards affect human activities (e.g., storms, lightning, flooding) 	<p>A. Describe the impacts of physical systems on people.</p> <ul style="list-style-type: none"> How people depend on, adjust to and modify physical systems on regional scale (e.g., coastal industries, development of coastal communities, flood control) Ways in which people adjust to live in hazard-prone areas (e.g., California and earthquakes, Florida and hurricanes, Oklahoma and tornadoes) 	<p>A. Explain the impacts of physical systems on people.</p> <ul style="list-style-type: none"> How people depend on, adjust to and modify physical systems on National scale (e.g., soil conservation programs, projects of The Corps of Engineers) Ways in which people in hazard-prone areas adjust their ways of life (e.g., building design in earthquake areas, dry-farming techniques in drought-prone areas) 	<p>A. Analyze the impacts of physical systems on people.</p> <ul style="list-style-type: none"> How people depend on, adjust to and modify physical systems on international scales (e.g., resource development of oil, coal, timber) Ways in which people modify ways of life to accommodate different environmental contexts (e.g., building in permafrost areas; the role of air-conditioning in the United States South and Southwest; the development of enclosed spaces for movement in cold climates)

7.4 The Interactions Between People and Places			
7.4.3. GRADE 3	7.4.6. GRADE 6	7.4.9. GRADE 9	7.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to...</i>			
<p>B. Identify the impacts of people on physical systems.</p> <ul style="list-style-type: none"> • Effects of energy use (e.g., water quality, air quality, change in natural vegetation) • Ways humans change local ecosystems (e.g., land use, dams and canals on waterways, reduction and extinction of species) 	<p>B. Describe the impacts of people on physical systems.</p> <ul style="list-style-type: none"> • Changing spatial patterns on Earth's surface that result from human activities (e.g., lake desiccation as in the Aral Sea, construction of dikes, dams and storm surge barriers in the Netherlands, creation of state parks and forests throughout Pennsylvania) • Ways humans adjust their impact on the habitat (e.g., endangered species act, replacement of wetlands, logging and replanting trees) 	<p>B. Explain the impacts of people on physical systems.</p> <ul style="list-style-type: none"> • Forces by which people modify the physical environment (e.g., increasing population; new agricultural techniques; industrial processes and pollution) • Spatial effects of activities in one region on another region (e.g., scrubbers on power plants to clean air, transportation systems such as Trans-Siberian Railroad, potential effects of fallout from nuclear power plant accidents) 	<p>B. Analyze the impacts of people on physical systems.</p> <ul style="list-style-type: none"> • How people develop international agreements to manage environmental issues (e.g., Rio de Janeiro Agreement, the Law of the Sea, the Antarctica Treaty) • How local and regional processes can have global effects (e.g., wind and hydroelectric power transmitted across regions, water use and irrigation for crop production) • Sustainability of resources (e.g., reforestation, conservation) • World patterns of resource distribution and utilization (e.g., oil trade, regional electrical grids)
The Interactions Between People and Places must include local to global scales for all students at all grade levels for the standard statements and their descriptors. Basic concepts found in lower grade levels must be developed more fully throughout higher grade levels.			

XXI. GLOSSARY

Absolute location:	The position of a point on Earth's surface that can usually be described by latitude and longitude but also including nine digit zip code and street address.
Acculturation:	The process of adopting the traits of a cultural group.
Assimilation:	The acceptance, by one culture group or community, of cultural traits associated with another.
Atmosphere:	The body of gases, aerosols and other materials that surrounds Earth and is held close by gravity. It extends about twelve miles from Earth's surface.
Barriers to migration:	Factors that keep people from moving (e.g., lack of information about potential destination, lack of funds to cover the costs of moving, regulations that control migration).
Basic map elements:	Materials included on geographic representations. These include title, directions, date of map, mapmaker's name, a legend and scale. Often a geographic grid, the source of information and sometimes an index of places on the map are also included.
Biosphere:	The domain of Earth that includes all plant and animal life forms.
Boundary:	The limit or extent within which a system exists or functions, including a social group, a state or physical features.
Capital:	One of the factors of production of goods and services. Capital can be goods (e.g., factories and equipment, highways, information, communications systems) and/or funds (investment and working capital) used to increase production and wealth. Other factors are land, water and labor.
Cardinal directions:	The four main points of the compass; north, east, south and west.
Carrying capacity:	Maximum population that an area can support over time depending upon environmental conditions, human interventions and interdependence.
Central Place Theory:	The conceptual framework that explains the size, spacing and distribution of settlements and their economic relationships with their market areas.

Choropleth map:	Shows differences between areas by using colors or shading to represent distinct categories of qualities (e.g., vegetation type) or quantities (e.g. population density).
Climate:	Long-term patterns and trends in weather elements and atmospheric conditions.
Climate graph (climagraph):	A diagram that combines average monthly temperature and precipitation data for a particular place.
Climatic processes:	Earth-sun relationships, seasonal changes, heat redistribution by winds, air masses and ocean currents, redistribution of heat and moisture by storm systems, and the impact of land and water distribution altitude and landform orientation.
Comparative advantage:	The specialization by a given area in the production of one or a few commodities for which it has a particular edge (e.g., labor quality, resources availability, production costs).
Concentric Zone Model:	A framework that proposes that urban functions and the associated land uses are arranged in contiguous circles. One of three models developed to explain how cities and metropolitan areas are arranged internally. The other models are the Sector and the Multiple Nuclei.
Contour map:	A representation of some part of Earth's surface using lines along which all points are of equal elevation above or below a fixed datum, usually sea level.
Country:	Unit of political space often referred to as a state or nation-state.
Cultural hearths:	The core areas that produce the ideas, organizations and artifacts associated with a particular culture.
Culture:	Learned behavior of people, which includes their belief systems and languages, their social relationships, their institutions and organizations and their material goods-food, clothing, buildings, tools and machines.
Cultural diffusion:	The spread of cultural elements from one culture to another.
Cultural landscape:	The human imprint on the physical environment; the humanized image as created or modified by people.
Demographic change:	Variation in population size, composition, rates of growth, density, fertility and mortality rates and patterns of migration.
Demography:	The study of population statistics, changes and trends based on various measures of fertility (adding to a population), mortality (subtracting from a population) and migration (redistribution of a population).
Density:	The population or number of objects per unit area (e.g., per square kilometer or mile).
Desertification:	The spread of desert conditions in arid and semiarid regions resulting from a combination of climatic changes and increasing human pressures (e.g., overgrazing, removal of vegetation, cultivation of marginal land).
Developed country:	An area of the world that is technologically advanced, highly urbanized and wealthy and has generally evolved through both economic and demographic transitions.
Diffusion:	The spread of people, ideas, technology and products among places.
Distance decay:	The tendency for the acceptance of new ideas and technologies to decrease with distance from their source.
Distribution:	The arrangement of any items over a specified area.
Earthquake:	Vibrations and shock waves caused by the sudden movement of tectonic plates along fracture zones, called faults, in Earth's crust.
Ecosystem (ecological system):	A network formed by the interaction of all living organisms (plants, animals, humans) with each other and with the physical and chemical factors of the environment in which they live.
Elevation:	Height of a point or place above sea level (e.g., Mount Everest has an elevation of 29,028 feet above sea level).
Enclaves:	A country, territorial or culturally distinct unit enclosed within a larger country or community.
Environment:	Everything in and on Earth's surface and its atmosphere within which organisms, communities or objects exist.
Equilibrium:	The point in the operation of a system when driving forces and resisting forces are in balance.
Equinox:	The 2 days during the calendar year (usually September 23 and March 21) when all latitudes have twelve hours of both daylight and darkness and the sun is directly overhead at the Equator.
Erosional processes:	The removal and transportation of weathered (loose) rock material by water, wind, waves and glaciers. Deposition is the end result of erosion and occurs when transported material is dropped.

Fall line:	A linear connection joining the waterfalls on numerous rivers and streams that marks the point where each river and stream descends from the upland and the limit of the navigability of each river (e.g., the narrow boundary zone between the coastal plain and the Piedmont in the Eastern United States where there are falls and rapids on streams and rivers as they drop from the more resistant rocks of the Piedmont onto the softer rocks of the coastal plain).
Fertility rate:	A measure of the number of children a woman will have during her child-bearing years (15 to 49 years of age) in comparison to the adult female population in a particular place.
Formal region:	An area defined by the uniformity or homogeneity of certain characteristics (e.g., precipitation, landforms, subculture).
Functional region:	An area united by a strong core (node) or center of human population and activity (e.g., banking linkages between large cities and smaller cities and towns).
Geographic Information System:	A geographic database that contains information about the distribution of physical and human characteristics of places. In order to test hypotheses, maps of one characteristic or a combination can be produced from the database to analyze the data relationships.
Geographic scale:	The size of Earth's surface being studied. Study areas vary from local to regional to global. Scale also refers to the relationship between the size of space on a map and the size of that space on Earth's surface. Maps are referred to as large scale if they are of smaller (local) areas and small scale if they represent much or all of the Earth's surface. Map scale is expressed as a bar graph or representative fraction.
Global warming:	The theory that Earth's atmosphere is gradually warming due to the buildup of certain gases, including carbon dioxide and methane, which are released by human activities. The increased levels of these gases cause added heat energy from Earth to be absorbed by the atmosphere instead of being lost in space.
Globe:	A scale model of Earth that correctly represents area, relative size and shape of physical features, distance between points and true compass direction.
Grid:	A pattern of lines on a chart or map, such as those representing latitude and longitude, which helps determine absolute location and assists in the analysis of distribution patterns.
Human features:	Tangible and intangible ideas associated with the culture, society and economy of places or areas. These include the spatial arrangement of land uses including transportation, the design of buildings and the nature and timing of activities that people conduct in these spaces.
Hydroelectric power:	Electrical energy generated by the force of falling water which rotates turbines housed in power plants in dams on rivers.
Hydrosphere:	The water realm of Earth which includes water contained in the oceans, lakes, rivers, ground, glaciers and water vapor in the atmosphere.
Industrialization:	The growth of machine production and the factory system. The process of introducing manufacturing into countries or regions where most of the people are engaged in primary economic activities (e.g., farming, fishing, forestry).
Infant mortality rate:	The annual number of deaths among infants under 1 year of age for every 1,000 live births. It usually provides an indication of health care levels. The United States, for example, has a 1994 rate of 8.3 infant deaths per 1,000 live births while Angola has a rate of 137 infant deaths per 1,000 births.
Interdependence:	Ideas, goods and services in one area affect decisions and events in other areas reducing self-sufficiency.
Intermediate directions:	The points of the compass that fall between north and east, north and west, south and east, south and west (e.g., NE, NW, SE, SW).
Intervening opportunities:	An alternate area that is a source of a product or service or a destination in the case of migration.
Lake desiccation:	The reduction in water level (drying out) of an inland water body.
Landform:	The shape, form or nature of a specific physical feature of Earth's surface (e.g., plain, hill, plateau, mountain).
Land degradation:	The physical process that wears down and levels landforms and carries away the loosened debris. This term is also used to define human misuse of the land or the environment (e.g., farming on steep slopes increases erosion).
Land use:	The range of uses of Earth's surface made by humans. Uses are classified as urban, rural, agricultural, forested, etc. with more specific sub-classifications useful for specific purposes (e.g., low-density residential, light industrial, nursery crops).
Life expectancy:	The average number of remaining years a person can expect to live under current mortality levels in a society. Life expectancy at birth is the most common use of this measure.

Lithosphere:	The uppermost portion of the solid Earth including soil, land and geologic formations.
Location:	The position of a point on Earth's surface expressed by means of a grid (absolute) or in relation (relative) to the position of other places.
Map:	A graphic representation of a portion of Earth that is usually drawn to scale on a flat surface.
Map projection:	A mathematical formula by which the lines of a global grid and the shapes of land and water bodies are transferred from a globe to a flat surface.
Materials:	Raw or processed substances that are used in manufacturing (secondary economic activities). Most substances used in factories are already manufactured to some degree and come from other factories rather than from sources of raw materials.
Megalopolis:	The intermingling of two or more large metropolitan areas into a continuous or almost continuous built-up urban complex; sometimes referred to as a conurbation.
Mental map:	A geographic representation which conveys the cognitive image a person has of an area, including knowledge of features and spatial relationships as well as the individual's perceptions and attitudes regarding the place; also known as a cognitive map.
Metropolitan area:	The Federal Office of Management and Budget's designation for the functional area surrounding and including a central city; has a minimum population of 50,000; is contained in the same county as the central city; and includes adjacent counties having at least 15% of their residents working in the central city's county.
Migration:	The act or process of people moving from one place to another with the intent of staying at the destination permanently or for a relatively long period of time.
Multinational organizations:	An association of nations aligned around a common economic or political cause (e.g., the Organization of Petroleum Exporting Countries, the Organization of American States).
Multiple Nuclei Model:	A representation of urban structure based on the idea that the functional areas (land use) of cities develop around various points rather than just one in the Central Business District.
Municipality:	A political unit incorporated for local self-government (e.g., Pennsylvania's boroughs, townships).
Nation:	A cultural concept for a group of people bound together by a strong sense of shared values and cultural characteristics including language, religion and common history.
Natural hazard:	An event in the physical environment, such as a hurricane or earthquake, that is destructive to human life and property.
Natural resource:	An element of the physical environment that people value and use to meet a need for fuel, food, industrial product or something else of value.
Nonrenewable resource:	A finite element that cannot be replaced once it is used (e.g., petroleum, minerals).
Ocean currents:	The regular and consistent horizontal flow of water in the oceans, usually in response to persistent patterns of circulation in the atmosphere.
OPEC:	The Organization of Petroleum Exporting Countries; international cartel of thirteen nations designed to promote collective pricing of petroleum, unified marketing policies and regulation of petroleum extraction.
Perceptual region:	Ideas that people have about the character of areas based on impressions from a variety of sources of information including other individuals and media. Mental maps can be used to access these ideas to find out what people think about particular areas.
Physical feature:	An aspect of a place or area that derives from the physical environment.
Physical process:	A course or method of operation that produces, maintains or alters Earth's physical system (e.g., glacial eroding, depositing landforms).
Place:	An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas.
Plate tectonics:	The theory that Earth's surface is composed of rigid slabs or plates (see tectonic plates). The divergence, convergence and slipping side-by-side of the different plates is responsible for present-day configurations of continents, ocean basins and major mountain ranges and valley systems.
Pollution:	The direct or indirect process resulting from human action by which any part of the environment is made potentially or actually unhealthy, unsafe or hazardous to the welfare of the organisms which live in it.
Population density:	The number of individuals occupying an area derived from dividing the number of people by the area they occupy (e.g., 2,000 people divided by ten square miles = 200 people per square mile).
Population pyramid:	A bar graph showing the distribution by gender and age of a country's population.

Population size:	The number of people in a particular place or area. Also, the number of members of a plant or animal species in an area.
Primary economic activity:	The production of naturally existing or culturally improved resources (i.e., agriculture, ranching, forestry, fishing, extraction of minerals and ores).
Pull factors:	In migration theory, the social, political, economic and environmental attractions of new areas that draw people away from their previous location.
Push factors:	In migration theory, the social, political, economic and environmental forces that drive people from their previous location.
Region:	An area with one or more common characteristics or features that give it a measure of consistency and make it different from surrounding areas.
Regionalization:	The partitioning of areas on Earth using a variety of criteria for the purpose of organizing elements in a complex space.
Relative location:	The site of a place or region in relation to other places or regions (e.g., northwest, downstream).
Renewable resource:	A substance that can be regenerated if used carefully (e.g., fish, timber).
Resource:	An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product or something else of value.
Satellite image:	A representation produced by a variety of sensors (e.g., radar, microwave detectors, scanners) that measure and record electromagnetic radiation. The collected data are turned into digital form for transmission to ground receiving stations. The data can be reconverted into imagery in a form resembling a photograph.
Scale:	On maps the relationship or ratio between a linear measurement on a map and the corresponding distance on Earth's surface. For example, the scale 1:1,000,000 means one unit (inch or centimeter) on the map represents 1,000,000 of the same units on Earth's surface. Also refers to the size of places or regions being studied.
Sector Model:	A theory of urban structure that recognizes the impact of transportation on land prices within the city and the resulting tendency for functional areas to be organized into sectors.
Secondary economic activity:	Processing of raw and manufactured materials into products with added value.
Settlement pattern:	The spatial distribution and arrangement of human habitations (e.g., rural, urban).
Site:	The specific location where something may be found including its physical setting (e.g., on a floodplain).
Situation:	The general location of something in relation to other places or features of a larger region (e.g., in the center of a group of cities).
Soil:	Unconsolidated material found at the surface of Earth, which is divided into layers (or horizons) characterized by the accumulation or loss of organic and inorganic compounds. Loam types and depths vary greatly over Earth's surface and are very much influenced by climate, organisms, rock type, local relief, time and human activity.
Spatial:	Pertains to space on Earth's surface.
Spatial distribution:	The distribution of physical and human elements on Earth's surface.
Spatial organization:	The arrangement on Earth's surface of physical and human elements.
Suburbanization:	The shift in population from living in higher density urban areas to lower density developments on the edge of cities.
System:	A collection of entities that are linked and interrelated (e.g., the hydrologic cycle, cities, transportation modes).
Technology:	Application of knowledge to meet the goals, goods and services needed and desired by people.
Tectonic plates:	Sections of Earth's rigid crust that move as distinct units on a plastic-like ledge (mantle) on which they rest. As many as twenty different plates have been identified, but only seven are considered to be major (e.g., Eurasian Plate, South American Plate).
Thematic map:	A geographic representation of a specific spatial distribution, theme or topic (e.g., population density, cattle production, climates of the world).
Time zone:	A division of Earth, usually 15 degrees longitude, within which the time at the central meridian of the division represents the whole division.
Topography:	The shape of Earth's surface.

Urbanization: A process in which there is an increase in the percentage of people living/working in cities as compared to rural areas.

Water cycle: The continuous circulation of water from the oceans, through the air, to the land and back to the sea. Water evaporates from oceans, lakes, rivers and the land surfaces and transpires from vegetation. It condenses into clouds in the atmosphere that may result in precipitation returning water to the land. Water then seeps into the soil or flows out to sea completing the circulation. Also known as Hydrologic Cycle.

Proposed Academic Standards for History

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XXIII. INTRODUCTION

This document includes Academic Standards for History that describe what students should know and be able to do in four areas:

- 8.1. Historical Analysis and Skills Development
- 8.2. Pennsylvania History
- 8.3. United States History
- 8.4. World History

The History Standards describe what students should know and be able to do at four grade levels (third, sixth, ninth and twelfth). They reflect an understanding of chronological events and the application of historical thinking skills in viewing the human record. These academic standards provide an organizing content for schools.

The Academic Standards for History are grounded in the Public School Code of 1949 which directs "... study in the history and government of that portion of America which has become the United States of America, and of the Commonwealth of Pennsylvania . . .". Chapter 4—Academic Standards and Assessment in § 4.21 (relating to elementary education; primary and intermediate levels) reinforces the School Code by indicating that the history of the United States and the history of the Commonwealth must be taught once by the end of elementary school. In addition, § 4.22 (relating to middle level education) indicates that planned instruction in the history and cultures of the United States, the Commonwealth and

world shall be provided. Chapter 4 also states that planned instruction shall be provided in the history and cultures of the United States, the Commonwealth and world in § 4.23 (relating to high school education).

To support the intent of the Public School Code and Chapter 4, this document creates four standard categories. The four standard categories were designed to meld historical thinking (8.1. Historical Analysis and Skills Development) with historical understanding (8.2. Pennsylvania History, 8.3. United States History, and 8.4. World History) to describe what students should know and be able to do.

Standard category 8.1. Historical Analysis and Skill Development provides the basis for learning the content within the other three standard categories. The intent of the history standards is to instill in each student an ability to comprehend chronology, develop historical comprehension, evaluate historical interpretation and to understand historical research. One should not view these standards as a list of facts to recall, rather as stated in the opening phrase to the Pennsylvania, United States and World standard categories, "Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze the interaction of cultural, economic, geographic, political and social relations."

These standards provide a history framework to permit every school and teacher to create planned instruction. The content within this document is general and does not represent a course or even a portion thereof. Every school is encouraged to move beyond these standards. These standards are merely a starting point for the study of history. Planned instruction to meet these standards is required; however, the methodology, resources and time are not recommended nor implied.

History is a discipline that interprets and analyzes the past. It is a narrative—a story. In order to tell the story it is not sufficient to simply recall facts; it is also necessary to understand the context of the time and place and to apply historical thinking skills. It is with this concept established, that the content delineated in Pennsylvania, United States and World histories should be approached. Having established the need to move beyond recall, it is the intent of these standards to give students throughout Pennsylvania a common cultural literacy.

Pennsylvania, United States, and World History standard categories use the same four standard statements to guide teachers in developing planned instruction. The four standard statements are: (A) Political and Cultural Contributions of Individuals and Groups; (B) Primary Documents, Material Artifacts and Historical Places; (C) How Continuity and Change Has Influenced History; (D) Conflict and Cooperation Among Social Groups and Organizations. The chart, Four Standard Statements within the Academic Standards for History: An Overview outlines standard statements and descriptors.

Although the standard statements are similar across grade levels and standard categories, the degree of comprehension, changes in content and shifts in chronology differ. Although different grade levels outline different chronological periods within the standards, it is intended, as any good teacher would do, that the specified chrono-

logical eras be linked to past learnings and that all eras be linked to the present. Linking to past learnings and the present is important, but so is addressing the standard statements in more depth. Therefore the following chronological time periods for the standard categories are established for the standard categories.

Pennsylvania and United States History

Grades 1-3	Beginnings to Present
Grades 4-6	Beginnings to 1824
Grades 7-9	1787 to 1914
Grades 10-12	1890 to Present

World History

Grades 1-3	Beginnings to Present
Grades 4-6	Beginnings to Present
Grades 7-9	Beginnings to 1500
Grades 10-12	1450 to Present

Districts are encouraged to delineate each chronological period into less expansive historical eras within their planned instruction. The content listed in grade levels 1-3, 4-6, 7-9 and 10-12 should be age appropriate for the students in those grade levels and the reader should interpret each standard descriptor in that manner.

The proposed history standards consist of four standard categories (designated as 8.1., 8.2., 8.3., and 8.4.). Each category has four standard statements (designated A, B, C, and D). Most standard statements have bulleted items known as standard descriptors. The standard descriptors are items within the document to illustrate and enhance the standard statement. The categories, statements and descriptors are the proposed regulations. The descriptors many times are followed by an "e.g.," The "e.g.'s" are examples to clarify what type of information could be

taught; however, these are suggestions and the choice of specific content is a local decision as is the method of instruction.

History along with civics and government, economics and geography are identified as social studies in Chapter 4. This identification is consistent with citizenship education in Chapters 49 and 354 (relating to certification of professional personnel; and preparation of professional educators). Based on these regulations, social studies/citizenship programs should include the four sets of standards as an entity in developing a scope and sequence for curriculum and planned instruction.

A glossary is included to assist the reader in understanding terminology contained in the standards.

Four Standard Statements within the Academic Standards for History: An Overview	
<p>Political and Cultural Contributions of Individuals and Groups</p> <ul style="list-style-type: none"> • Inhabitants (cultures, subcultures, groups) • Political Leaders (monarchs, governors, elected officials) • Military Leaders (generals, noted military figures) • Cultural and Commercial Leaders (entrepreneurs, corporate executives, artists, entertainers, writers) • Innovators and Reformers (inventors, philosophers, religious leaders, social change agents, improvers of technology) 	<p>How Continuity and Change Have Influenced History</p> <ul style="list-style-type: none"> • Belief Systems and Religions (ideas, beliefs, values) • Commerce and Industry (jobs, trade, environmental change, labor systems, entertainment) • Innovations (ideas, technology, methods and processes) • Politics (political party systems, administration of government, rules, regulations and laws, political and judicial interpretation) • Transportation (methods of moving people and goods over time, transportation routes, circulation systems) • Settlement Patterns and Expansion (population density and diversity, settlement types, land use, colonization) • Social Organization (social structure, identification of social groups, families, groups and communities, education, school population, suffrage, civil rights) • Women’s Movement (changing roles of women, social and political movements, breaking barriers, role models)
<p>Primary Documents, Material Artifacts and Historical Places</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (government documents, letters and diaries, fiction and non-fiction works, newspapers and other media, folklore) • Artifacts, Architecture and Historic Places (historic sites and places, museums and museum collections, official and popular cultural symbols, material culture) 	<p>Conflict and Cooperation Among Social Groups and Organizations</p> <ul style="list-style-type: none"> • Domestic Instability (political unrest, natural and man-made disasters, genocide) • Ethnic and Racial Relations (racism and xenophobia, ethnic and religious prejudices, collective and individual actions) • Immigration and Migration (causes of population shifts, xenophobia, intercultural activity) • Labor Relations (strikes and collective bargaining, working conditions over time, labor/management identity) • Military Conflicts (causes, conduct and impact of military conflicts, wars and rebellions)
<p>Each standard statement outlines its respective standard descriptors. Each standard descriptor suggests content that may be addressed. These are not all encompassing and local planned instruction is <i>not</i> limited to these examples.</p>	

8.1. Historical Analysis and Skills Development			
8.1.3. GRADE 3	8.1.6. GRADE 6	8.1.9. GRADE 9	8.1.12. GRADE 12
<p><i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i></p>			
<p>A. Understand chronological thinking and distinguish between past, present and future time.</p> <ul style="list-style-type: none"> • Calendar time • Time lines • Continuity and change • Events (time and place) 	<p>A. Understand chronological thinking and distinguish between past, present and future time.</p> <ul style="list-style-type: none"> • Calendar time • Time lines • People and events in time • Patterns of continuity and change • Sequential order • Context for events 	<p>A. Analyze chronological thinking.</p> <ul style="list-style-type: none"> • Difference between past, present and future • Sequential order of historical narrative • Data presented in time lines • Continuity and change • Context for events 	<p>A. Evaluate chronological thinking.</p> <ul style="list-style-type: none"> • Sequential order of historical narrative • Continuity and change • Context for events

8.1. Historical Analysis and Skills Development			
8.1.3. GRADE 3	8.1.6. GRADE 6	8.1.9. GRADE 9	8.1.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>B. Develop an understanding of historical sources.</p> <ul style="list-style-type: none"> • Data in historical maps • Visual data from maps and tables • Mathematical data from graphs and tables • Author or historical source <p>C. Understand fundamentals of historical interpretation.</p> <ul style="list-style-type: none"> • Difference between fact and opinion • The existence of multiple points of view • Illustrations in historical stories • Cause and result <p>D. Understand historical research.</p> <ul style="list-style-type: none"> • Event (time and place) • Facts, folklore and fiction • Formation of historical question • Primary sources • Secondary sources • Conclusions (e.g., storytelling, role playing, diorama) 	<p>B. Explain and analyze historical sources.</p> <ul style="list-style-type: none"> • Literal meaning of a historical passage • Data in historical and contemporary maps, graphs and tables • Author or historical source • Multiple historical perspectives • Visual evidence • Mathematical data from graphs and tables <p>C. Explain the fundamentals of historical interpretation.</p> <ul style="list-style-type: none"> • Difference between fact and opinion • Multiple points of view • Illustrations in historical stories • Cause and result • Author or source of historical narratives <p>D. Describe and explain historical research.</p> <ul style="list-style-type: none"> • Historical events (time and place) • Facts, folklore and fiction • Historical questions • Primary sources • Secondary sources • Conclusions (e.g., simulations, group projects, skits and plays) 	<p>B. Analyze and interpret historical sources.</p> <ul style="list-style-type: none"> • Literal meaning of historical passages • Data in historical and contemporary maps, graphs, and tables • Different historical perspectives • Data from maps, graphs and tables • Visual data presented in historical evidence <p>C. Analyze the fundamentals of historical interpretation.</p> <ul style="list-style-type: none"> • Fact versus opinion • Reasons/causes for multiple points of view • Illustrations in historical documents and stories • Cause and result • Author or source used to develop historical narratives • Central issue <p>D. Analyze and interpret historical research.</p> <ul style="list-style-type: none"> • Historical event (time and place) • Facts, folklore and fiction • Historical questions • Primary sources • Secondary sources • Conclusions (e.g., History Day projects, mock trials, speeches) • Credibility of evidence 	<p>B. Synthesize and evaluate historical sources.</p> <ul style="list-style-type: none"> • Literal meaning of historical passages • Data in historical and contemporary maps, graphs and tables • Different historical perspectives • Data presented in maps, graphs and tables • Visual data presented in historical evidence <p>C. Evaluate historical interpretation of events.</p> <ul style="list-style-type: none"> • Impact of opinions on the perception of facts • Issues and problems in the past • Multiple points of view • Illustrations in historical stories and sources • Connection of cause and result • Author or source of historical narratives' points of view • Central issue <p>D. Synthesize historical research.</p> <ul style="list-style-type: none"> • Historical event (time and place) • Facts, folklore and fiction • Historical questions • Primary sources • Secondary sources • Conclusions (e.g., Senior Projects, research papers, debates) • Credibility of evidence
Historical Analysis and Skill Development are learned through and applied to the standards statements and their descriptors for 8.2. Pennsylvania History, 8.3. United States History and 8.4. World History.			

8.2. Pennsylvania History			
8.2.3. GRADE 3	8.2.6. GRADE 6	8.2.9. GRADE 9	8.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>A. Understand the political and cultural contributions of individuals and groups to Pennsylvania history.</p> <ul style="list-style-type: none"> • William Penn • Benjamin Franklin • Pennsylvanians impacting American Culture (e.g., John Chapman, Richard Allen, Betsy Ross, Mary Ludwig Hayes, Rachel Carson, Elizabeth Jane Cochran, Marian Anderson) • Local historical figures in municipalities and counties. <p>B. Identify and describe primary documents, material artifacts and historic sites important in Pennsylvania history.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Penn's Charter, Pennsylvania "Declaration of Rights") • Artifacts, Architecture and Historic Places (e.g., Local historical sites, museum collections, Independence Hall) • Liberty Bell • Official Commonwealth symbols (e.g., tree, bird, dog, insect) 	<p>A. Identify and explain the political and cultural contributions of individuals and groups to Pennsylvania history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Inhabitants (e.g., Native Americans, Europeans, Africans) • Military Leaders (e.g., Anthony Wayne, Oliver H. Perry, John Muhlenberg) • Political Leaders (e.g., William Penn, Hannah Penn, Benjamin Franklin) • Cultural and Commercial Leaders (e.g., Robert Morris, John Bartram, Albert Gallatin) • Innovators and Reformers (e.g., Society of Friends, Richard Allen, Sybilla Masters) <p>B. Identify and explain primary documents, material artifacts and historic sites important in Pennsylvania history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Charter of Privileges, The Gradual Abolition of Slavery Act of 1780, <i>Letters from a Pennsylvania Farmer</i>) • Artifacts, Architecture and Historic Places (e.g., Conestoga Wagon, Pennsylvania rifle, Brig Niagara) 	<p>A. Analyze the political and cultural contributions of individuals and groups to Pennsylvania history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Political Leaders (e.g., James Buchanan, Thaddeus Stevens, Andrew Curtin) • Military Leaders (e.g., George Meade, George McClellan, John Hartranft) • Cultural and Commercial Leaders (e.g., John J. Audubon, Rebecca Webb Lukens, Stephen Foster) • Innovators and Reformers (e.g., George Westinghouse, Edwin Drake, Lucretia Mott) <p>B. Identify and analyze primary documents, material artifacts and historic sites important in Pennsylvania history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Pennsylvania Constitutions of 1838 and 1874, The "Gettysburg Address," <i>The Pittsburgh Survey</i>) • Artifacts, Architecture and Historic Places (e.g., Gettysburg, Eckley Miners' Village, Drake's Well) 	<p>A. Evaluate the political and cultural contributions of individuals and groups to Pennsylvania history from 1890 to Present.</p> <ul style="list-style-type: none"> • Political Leaders (e.g., Gifford Pinchot, Genevieve Blatt, K. Leroy Irvis) • Military Leaders (e.g., Tasker H. Bliss, Henry "Hap" Arnold, George C. Marshall) • Cultural and Commercial Leaders (e.g., Milton Hershey, Marian Anderson, Fred Rogers) • Innovators and Reformers (e.g., Frank Conrad, Rachel Carson, Joseph Rothrock) <p>B. Identify and evaluate primary documents, material artifacts and historic sites important in Pennsylvania history from 1890 to Present.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Constitution of 1968, <i>Silent Spring</i> by Rachel Carson, Pennsylvania historical markers) • Artifacts, Architecture and Historic Places (e.g., 28th Division Shrine, Fallingwater, Levittown, Allegheny Ridge heritage corridor)

8.2. Pennsylvania History			
8.2.3. GRADE 3	8.2.6. GRADE 6	8.2.9. GRADE 9	8.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>C. Identify and describe how continuity and change have influenced Pennsylvania history.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., Native Americans, early settlers, contemporary religions) • Commerce and Industry (e.g., jobs, trade, environmental change) • Innovations (e.g., technology, ideas, processes) • Politics (e.g., rules, regulations, laws) • Settlement Patterns (e.g., farms, towns, rural communities, cities) • Social Organization (e.g., relationships of individuals, families, groups, communities; ability to be educated) • Transportation (e.g., methods of moving people and goods over time) • Women's Movement (e.g., changes in roles and rights over time) 	<p>C. Identify and explain how continuity and change have influenced Pennsylvania history from the Beginnings to 1824.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., Native Americans, Quakers) • Commerce and Industry (e.g., iron production, sailing, fur trade) • Innovations (e.g., steam boat, Conestoga Wagon) • Politics (e.g., The Mason-Dixon Line, Pennsylvania's acquisition and detachment of the "lower three counties," movements of State capital) • Settlement Patterns (e.g., native settlements, Westward expansion, development of towns) • Social Organization (e.g., trade and development of cash economy, AME Church founded, schools in the colony) • Transportation (e.g., trade routes, turnpikes, post roads) • Women's Movement (e.g., voting qualifications, role models) 	<p>C. Identify and analyze how continuity and change have influenced Pennsylvania history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., Ephrata Cloister, Harmonists, Amish, immigrant influences) • Commerce and Industry (e.g., mining coal, producing iron, harvesting timber) • Innovations (e.g., John Roebling's steel cable, steel-tipped plow, improved techniques for making iron, steel and glass) • Politics (e.g., Fugitive Slave Act reaction, canal system legislation, The Free School Act of 1834) • Settlement Patterns (e.g., farms and growth of urban centers) • Social Organization (e.g., the Philadelphia Centennial Exposition of 1876, prohibition of racial discrimination in schools) • Transportation (e.g., canals, National Road, Thompson's Horseshoe Curve) • Women's Movement (e.g., work of the Equal Rights League of Pennsylvania) 	<p>C. Identify and evaluate how continuity and change have influenced Pennsylvania history from the 1890s to Present.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., Buddhism, Christianity, Hinduism, Islam, Judaism) • Commerce and Industry (e.g., work of defense industries, rise and decline of the steel industry, increase of service industries) • Innovations (e.g., polio vaccine, air pollution examined, nuclear power plants) • Politics (e.g., Great Depression special legislative session, creation of the state income tax) • Settlement Patterns (e.g., growth and decline of cities, coal towns, Pittsburgh Renaissance) • Social Organization (e.g., creation of the State Soil Conservation Commission, First Amendment challenges to education, social services) • Transportation (e.g., Pennsylvania Turnpike, Interstate highways, international airports) • Women's Movement (e.g., League of Women Voters, Commission for Women)

8.2. Pennsylvania History			
8.2.3. GRADE 3	8.2.6. GRADE 6	8.2.9. GRADE 9	8.2.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>D. Identify and describe conflict and cooperation among social groups and organizations in Pennsylvania history.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., political, economic and geographic impact on daily activities) • Ethnic and Racial Relations (e.g., treatment of various ethnic and racial groups in history) • Labor Relations (e.g., working conditions, over time) • Immigration (e.g., diverse groups inhabiting the state) • Military Conflicts (e.g., impact of wars) 	<p>D. Identify and explain conflict and cooperation among social groups and organizations in Pennsylvania history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., religious diversity, toleration and conflicts, incursion of the Iroquois) • Ethnic and Racial Relations (e.g., Penn's Treaties with Indians, the Underground Railroad, the abolition of slavery) • Labor Relations (e.g., indentured servants, working conditions) • Immigration (e.g., Germans, Irish) • Military Conflicts (e.g., Dutch, Swedish and English struggle for control of land, Wyoming Massacre, The Whiskey Rebellion) 	<p>D. Identify and analyze conflict and cooperation among social groups and organizations in Pennsylvania history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., impact of war, 1889 Johnstown Flood) • Ethnic and Racial Relations (e.g., Christiana riots, disenfranchisement and restoration of the suffrage for African-Americans, Carlisle Indian School) • Labor Relations (e.g., National Trade Union, The "Molly Maguires," Homestead steel strike) • Immigration (e.g., Anti-Irish Riot of 1844, new waves of immigrants) • Military Conflicts (e.g., Battle of Lake Erie, the Mexican War, the Civil War) 	<p>D. Identify and evaluate conflict and cooperation among social groups and organizations in Pennsylvania history from 1890 to Present.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., The Great Depression, Three-Mile Island nuclear accident, floods of 1936, 1972 and 1977) • Ethnic and Racial Relations (e.g., segregation, desegregation, racial profiling) • Labor Relations (e.g., strikes, work stoppages, collective bargaining) • Immigration (e.g., increased immigration from Europe, migration of African-Americans from the South, influx of Hispanic and Asian peoples) • Military Conflicts (e.g., World War I, World War II, Persian Gulf War)
<p>Standard Category 8.1. Historical Analysis and Skills Development should be applied to the above standard statements and descriptors. Suggested chronology for grade levels 4-6, 7-9 and 10-12 focus on a particular century; however, instruction is encouraged that draws on prior and later events in history so that students may develop a seamless view of the world.</p>			

8.3. United States History			
8.3.3. GRADE 3	8.3.6. GRADE 6	8.3.9. GRADE 9	8.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>A. Identify contributions of individuals and groups to United States history.</p> <ul style="list-style-type: none"> • George Washington • Thomas Jefferson • Abraham Lincoln • Theodore Roosevelt • Franklin D. Roosevelt • Individuals who are role models (e.g., Abigail Adams, Sacajawea, Frederick Douglass, Clara Barton, Jackie Robinson, Rosa Parks, Archbishop Patrick Flores, Jamie Escalante, Sally Ride, Tiger Woods, Cal Ripken, Jr., Sammy Sosa) <p>B. Identify and describe primary documents, material artifacts and historic sites important in United States history.</p> <ul style="list-style-type: none"> • Documents (e.g., Declaration of Independence, U.S. Constitution, Bill of Rights) • Writings and Communications (e.g., Pledge of Allegiance, famous quotations and sayings) • Historic Places (e.g., The White House, Mount Rushmore, Statue of Liberty) • The Flag of the United States 	<p>A. Identify and explain the political and cultural contributions of individuals and groups to United States history from Beginnings to 1815.</p> <ul style="list-style-type: none"> • Native Americans, Africans and Europeans • Political Leaders (e.g., John Adams, Thomas Jefferson, John Marshall) • Military Leaders (e.g., George Washington, Meriwether Lewis, Henry Knox) • Cultural and Commercial Leaders (e.g., Paul Revere, Phyllis Wheatley, John Rolfe) • Innovators and Reformers (e.g., Ann Hutchinson, Roger Williams, Junipero Serra) <p>B. Identify and explain primary documents, material artifacts and historic sites important in United States history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Documents (e.g., Mayflower Compact, Northwest Ordinance, Washington's Farewell Address) • 18th Century Writings and Communications (e.g., Paine's <i>Common Sense</i>; Franklin's "Join, or DIE," Henry's "Give me liberty or give me death") • Historic Places (e.g., Cahokia Mounds, Spanish Missions, Jamestown) 	<p>A. Identify and analyze the political and cultural contributions of individuals and groups to United States history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Political Leaders (e.g., Daniel Webster, Abraham Lincoln, Andrew Johnson) • Military Leaders (e.g., Andrew Jackson, Robert E. Lee, Ulysses S. Grant) • Cultural and Commercial Leaders (e.g., Jane Addams, Jacob Riis, Booker T. Washington) • Innovators and Reformers (e.g., Alexander G. Bell, Frances E. Willard, Frederick Douglass) <p>B. Identify and analyze primary documents, material artifacts and historic sites important in United States history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Documents (e.g., Fugitive Slave Law, Treaty of Guadalupe Hidalgo, Emancipation Proclamation) • 19th Century Writings and Communications (e.g., Stowe's <i>Uncle Tom's Cabin</i>, Brown's "Washed by Blood," Key's Star Spangled Banner) • Historic Places (e.g., The Alamo, Underground Railroad sites, Erie Canal) 	<p>A. Identify and evaluate the political and cultural contributions of individuals and groups to United States history from 1890 to Present.</p> <ul style="list-style-type: none"> • Political Leaders (e.g., Theodore Roosevelt, Woodrow Wilson, Franklin D. Roosevelt) • Military Leaders (e.g., John Pershing, Douglas MacArthur, Dwight D. Eisenhower) • Cultural and Commercial Leaders (e.g., Abby Aldrich Rockefeller, Langston Hughes, Alan Greenspan) • Innovators and Reformers (e.g., Wilbur and Orville Wright, John L. Lewis, Reverend Dr. Martin Luther King) <p>B. Identify and evaluate primary documents, material artifacts and historic sites important in United States history from 1890 to Present.</p> <ul style="list-style-type: none"> • Documents (e.g., Treaty of Versailles, North Atlantic Treaty, Neutrality Acts) • 20th Century Writings and Communication (e.g., Coolidge's "The Business of America is Business," King's "I Have A Dream," Armstrong's "One Small Step for Man") • Historic Places (e.g., Ellis Island, Pearl Harbor, Los Alamos)

8.3. United States History			
8.3.3. GRADE 3	8.3.6. GRADE 6	8.3.9. GRADE 9	8.3.12. GRADE 12
<p><i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i></p>			
<p>C. Identify important changes in United States history (e.g., Belief Systems and Religions, Commerce and Industry, Innovations, Politics, Settlement Patterns and Expansion, Social Organization, Transportation, Women's Movement)</p>	<p>C. Explain how continuity and change has influenced United States history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., impact on daily life, colonial government established religions, communal sects) • Commerce and Industry (e.g., fur trade, development of cash crops) • Innovations (e.g., cotton gin, Whitney; wooden clock, Bancker; stove, Franklin) • Politics (e.g., Hamilton's defense of John Peter Zenger, The Great Compromise, <i>Marbury v. Madison</i>) • Settlement Patterns (e.g., frontier settlements, slave plantation society, growth of cities) • Social Organization (e.g., community structure on the frontier, cultural and language barriers) • Transportation and Trade (e.g., methods of overland travel, water transportation, National Road) • Women's Movement (e.g., roles and changing status of women, Margaret Brent's vote, soldier Deborah Sampson) 	<p>C. Analyze how continuity and change has influenced United States history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., 19th century trends and movements) • Commerce and Industry (e.g., growth of manufacturing industries, economic nationalism) • Innovations (e.g., Brooklyn Bridge, refrigerated shipping, telephone) • Politics (e.g., election of 1860, impeachment of Andrew Johnson, Jim Crow Laws) • Settlement Patterns and Expansion (e.g., Manifest Destiny, successive waves of immigrants, purchase of Alaska and Hawaii) • Social Organization (e.g., social class differences, women's rights and antislavery movement, education reforms) • Transportation and Trade (e.g., Pony Express, telegraph, Transcontinental Railroad) • Women's Movement (e.g., roles in the Civil War, medical college for women, Seneca Falls Conference) 	<p>C. Evaluate how continuity and change has influenced United States history from 1890 to Present.</p> <ul style="list-style-type: none"> • Belief Systems and Religions (e.g., 20th century movements, religions of recent immigrants) • (Commerce and Industry (e.g., corporations, conglomerates, multinational corporations) • Innovations (e.g., The Tin Lizzie, radio, World Wide Web) • Politics (e.g., New Deal legislation, <i>Brown v. Topeka</i>, isolationist/non-isolationist debate) • Settlement Patterns (e.g., suburbs, large urban centers, decline of city population) • Social Organization (e.g., compulsory school laws, court decisions expanding individual rights, technological impact) • Transportation and Trade (e.g., expansion and decline of railroads, increased mobility, internet) • Women's Movement (e.g., right to vote, women in the war effort, Women's Peace Party)

8.3. United States History			
8.3.3. GRADE 3	8.3.6. GRADE 6	8.3.9. GRADE 9	8.3.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>D. Identify conflict and cooperation among social groups and organizations in United States history.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., impact on daily activities) • Ethnic and Racial Relations (e.g., treatment of minority groups in history) • Labor Relations (e.g., working conditions over time) • Immigration (e.g., diverse groups inhabiting the state) • Military Conflicts (e.g., impact of wars) 	<p>D. Identify and explain conflict and cooperation among social groups and organizations in United States history from Beginnings to 1824.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., Salem Witch Trials, Shays Rebellion, religious persecution) • Ethnic and Racial Relations (e.g., cooperation between and among Native Americans and European settlers, slave uprisings, "Colored" troops in the Revolution) • Labor Relations (e.g., early union efforts, 10-hour day, women's role) • Immigration and Migration (e.g., western settlements, Louisiana Purchase, European immigration) • Military Conflicts (e.g., French and Indian War, American Revolutionary War, War of 1812) 	<p>D. Identify and analyze conflict and cooperation among social groups and organizations in United States history from 1787 to 1914.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., wartime confiscation of private property, abolitionist movement, Reconstruction) • Ethnic and Racial Relations (e.g., Cherokee Trail of Tears, slavery and the Underground Railroad, draft riots) • Labor Relations (e.g., female and child labor, trade unionism, strike breakers) • Immigration and Migration (e.g., Manifest Destiny, eastern and southern European immigration, Chinese Exclusion Act) • Military Conflicts (e.g., Native American opposition to expansion and settlement, Civil War, Spanish-American War) 	<p>D. Identify and evaluate conflict and cooperation among social groups and organizations in United States history from 1890 to the Present.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., Great Depression, assassination of political and social leaders, terrorist threats) • Ethnic and Racial Relations (e.g., internment camps for Japanese Americans, Montgomery Alabama Bus Boycott, land tensions with Native Americans) • Labor Relations (e.g., rise and decline of industrial unions, free trade agreements, imports impact on domestic employment) • Immigration and Migration (e.g., anti-immigrant attitudes, quota laws, westward and southward migration) • Military Conflicts (e.g., World War I, World War II, War on Terrorism)
<p>Standard Category 8.1. Historical Analysis and Skills Development should be applied to the above standard statements and descriptors. Suggested chronology for grade levels 4-6, 7-9 and 10-12 focus on a particular century; however, instruction is encouraged that draws on prior or later events in history so that students may develop a seamless view of the world.</p>			

8.4. World History			
8.4.3. GRADE 3	8.4.6. GRADE 6	8.4.9. GRADE 9	8.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>A. Identify individuals and groups who have made significant political and cultural contributions to world history.</p> <ul style="list-style-type: none"> • Africa (e.g., Nefertiti, Mansa Musa, Nelson Mandela) • Americas (e.g., Montezuma, Simon Bolivar, Fidel Castro) • Asia (e.g., Hammurabi, Mohandas Gandhi, Benazir Bhutto) • Europe (e.g., Julius Ceasar, Joan of Arc, Pope John Paul) <p>B. Identify historic sites and material artifacts important to world history.</p> <ul style="list-style-type: none"> • Africa (e.g., Pyramids, treasures of Tutankhamen, Nefertari's sculpture) • Americas (e.g., Olmec ritualistic centers, Mayan pyramids, arrowheads) • Asia (e.g., Code of Hammurabi, Ziggurat at Ur, canals) • Europe (e.g., ancient megaliths, Arc de Triomphe, Acropolis) 	<p>A. Identify and explain how individuals and groups made significant political and cultural contributions to world history.</p> <ul style="list-style-type: none"> • Africa (e.g., Nelson Mandela, Desmond Tutu, F. W. de Klerk, Pieter Botha, African National Congress) • Americas (e.g., Pizarro, Atahualpa, Aztecs, Incas, Montezuma, Cortez) • Asia (e.g., Tokugawa Ieyasu, Toyotomi clan, shogun Iemitsu, Commodore Perry, daimyo) • Europe (e.g., Pope Leo X, John Calvin, John Wesley, Martin Luther, Ignatius of Loyola) <p>B. Identify and explain important documents, material artifacts and historic sites in world history.</p> <ul style="list-style-type: none"> • Africa (e.g., Prohibition of Marriages Act, prison on Robben Island) • Americas (e.g., Tenochtitlan, Aztec masks) • Asia (e.g., samurai sword, Commodore Perry's Black Ships) • Europe (e.g., Luther's Ninety-Five Theses, Wittenberg Castle Church) 	<p>A. Analyze the significance of individuals and groups who made major political and cultural contributions to world history before 1500 C.E.</p> <ul style="list-style-type: none"> • Political and Military Leaders (e.g., King Ashoka, Montezuma I, Ghenghis Khan, William the Conqueror) • Cultural and Commercial Leaders (e.g., Mansa Musa, Yak Pac, Cheng Ho, Marco Polo) • Innovators and Reformers (e.g., Erastostenes, Tupac Inka Yupenqui, Johannes Gutenberg) <p>B. Analyze historical documents, material artifacts and historic sites important to world history before 1500 C.E.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Rosetta Stone, Aztec glyph writing, Dead Sea Scrolls, Magna Carta) • Artifacts, Architecture and Historic Places (e.g., Ethiopian rock churches, Mayan pyramids, Nok terra cotta figures, megaliths at Stonehenge) • Historic districts (e.g., Memphis and its Necropolis, Sanctuary of Machu Picchu, Old City of Jerusalem and its Walls, Centre of Rome and the Holy See) 	<p>A. Evaluate the significance of individuals and groups who made major political and cultural contributions to world history since 1450 C.E.</p> <ul style="list-style-type: none"> • Political and Military Leaders (e.g., Askia Daud, Simon Bolivar, Napoleon Bonaparte, Mao Zedong) • Cultural and Commercial Leaders (e.g., Achebe Chinua, Gabriel Garcia Marquez, Akira Kurosa, Christopher Columbus) • Innovators and Reformers (e.g., Nelson Mandela, Louis-Joseph Papineau, Mohandas Gandhi, Alexander Fleming) <p>B. Evaluate historical documents, material artifacts and historic sites important to world history since 1450 C.E.</p> <ul style="list-style-type: none"> • Documents, Writings and Oral Traditions (e.g., Declaration of the International Conference on Sanctions Against South Africa; Monroe Doctrine, Communist Manifesto, Luther's Ninety-five Theses) • Artifacts, Architecture and Historic Places (e.g., Robben Island, New York Trade Center, Hiroshima Ground Zero Memorial, Nazi concentration camps) • Historic districts (e.g., Timbuktu, Centre of Mexico City and Xochimilco, Taj Mahal and Gardens, Kremlin and Red Square)

8.4. World History			
8.4.3. GRADE 3	8.4.6. GRADE 6	8.4.9. GRADE 9	8.4.12. GRADE 12
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to analyze cultural, economic, geographic, political and social relations to . . .</i>			
<p>C. Compare similarities and differences between earliest civilizations and life today. (e.g., Africa, Egypt; Asia, Babylonia; Americas, Olmec; Europe, Neolithic settlements).</p> <p>D. Identify how conflict and cooperation among social groups and organizations affected world history.</p> <ul style="list-style-type: none"> • Domestic Instability (e.g., political, economic and geographic impact on normal activities) • Labor Relations (e.g., working conditions over time) • Racial and Ethnic Relations (e.g., treatment of various ethnic and racial groups in history) • Immigration and migration (e.g., diverse groups inhabiting a territory) • Military Conflicts (e.g., impact of wars) 	<p>C. Identify and explain how continuity and change has affected belief systems, commerce and industry, innovations, settlement patterns, transportation and women's roles in world history.</p> <ul style="list-style-type: none"> • Africa (e.g., Apartheid) • Americas (e.g., European conquest) • Asia (e.g., Japanese society prior to the Meiji Restoration) • Europe (e.g., Impact of the Great Schism and Reformation) <p>D. Explain how conflict and cooperation among social groups and organizations affected world history</p> <ul style="list-style-type: none"> • Africa (e.g., imperialism) • Americas (e.g., European diseases) • Asia (e.g., trade routes) • Europe (e.g., Counter reformation) 	<p>C. Analyze how continuity and change throughout history has impacted belief systems and religions, commerce and industry, innovations, settlement patterns, social organization, transportation and roles of women before 1500 C.E.</p> <ul style="list-style-type: none"> • Africa • Americas • Asia • Europe <p>D. Analyze how conflict and cooperation among social groups and organizations impacted world history through 1500 C.E. in Africa, Americas, Asia and Europe</p> <ul style="list-style-type: none"> • Domestic Instability • Ethnic and Racial Relations • Labor Relations • Immigration and Migration • Military Conflicts 	<p>C. Evaluate how continuity and change throughout history has impacted belief systems and religions, commerce and industry, innovations, settlement patterns, social organization, transportation and roles of women since 1450 C.E.</p> <ul style="list-style-type: none"> • Africa • Americas • Asia • Europe <p>D. Evaluate how conflict and cooperation among social groups and organizations impacted world history from 1450 C.E. to Present in Africa, Americas, Asia and Europe.</p> <ul style="list-style-type: none"> • Domestic Instability • Ethnic and Racial Relations • Labor Relations • Immigration and Migration • Military Conflicts
<p>Standard Category 8.1. Historical Analysis and Skills Development should be applied to the above standard statements and descriptors. Suggested chronology in organizing the content for grade levels 7-9 and 10-12 use the 15th century as the dividing point; however, instruction is encouraged that draws on prior and later events in history so that students may develop a seamless view of the world.</p>			

XXIV. GLOSSARY

- Archive:** A place where public records are kept.
- Artifact:** Any object made by human work or skill.
- Beginnings:** A demarcation of time designating studies to commence with the written historical record.
- Central issue:** The primary concern from which other problems or matters are derived. An example is today's world migration flows are a central issue from which other concerns such as terrorist threats may arise.
- Chronology:** The science of measuring time and of dating events. Examples include BCE (before the common era) and CE (common era). Another reference to chronology is CA, around the time, circa.
- Conflict:** The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

Culture:	The skills and arts of a given people in a given period of time or a civilization.
Document:	Anything written or printed used to record or prove something.
Historical evidence:	Something that makes something else noticeable, obvious or evident.
Historical passage:	An article or section of a longer work that has importance to the past.
Innovation:	The introduction of something new; an idea, method or devise.
Interpretation:	Explanation or to reply to a situation in order to make sense of it (e.g., a time period, an individual's actions).
Legends:	A story coming down from the past, one popularly regarded as historical although not verifiable.
Memorial:	An object or ceremony serving as a remembrance for a person, group, day, site or event.
Monument:	A physical or symbolic memorial established to keep alive the memory of a person.
Museum:	A historical display in a building, room, etc. for exhibiting artistic, historical or scientific objects.
Present:	A demarcation of time designating studies to the current year.
Opinion:	A belief based not on certainty but on what seems to be true or probable.
Strike:	A work stoppage by employees organized against the management of a business entity.
Timelines:	A measure of a period during which something exists or happens; usually displayed in chronological order on a graph or linear lines.
War:	A conflict in which two or more nations or two or more entities inside a nation are at odds.
Xenophobia:	An intense fear or dislike of groups unknown or not within one's experience including the group's customs and culture.

[Pa.B. Doc. No. 02-254. Filed for public inspection February 15, 2002, 9:00 a.m.]

STATE BOARD OF PODIATRY

[49 PA. CODE CH. 29] Biennial Renewal Fees

The State Board of Podiatry (Board) proposes to amend § 29.13 (relating to fees) by raising the biennial renewal fee for podiatrists to read as set forth in Annex A.

A. Effective Date

The proposed amendment will be effective upon publication of the final-form regulation. The new fee will take effect January 1, 2003.

B. Statutory Authority

The proposed amendment is authorized under section 14 of the Podiatry Practice Act (act) (63 P. S. § 42.14).

C. Background and Purpose

Section 14(a) of the act requires the Board to increase fees by regulation if the revenues raised by fees, fines and civil penalties are not sufficient to meet expenditures over a 2-year period. In addition, section 14(b) of the act requires the Board to increase fees by regulation in the amount that adequate revenues are raised to meet the

required enforcement efforts, when the fees established by the Board are inadequate to meet the minimum enforcement efforts required by the act.

The Board last increased its biennial renewal fees on December 26, 1992. The Board is required by law to support its operations from revenue it generates from fees, fines and civil penalties. The act mandates that the Board protect the public by adopting rules and regulations that govern the practice of podiatry. In addition, the Board is generally mandated to promote public health, safety and welfare, which is accomplished through Board initiatives and coordination with other agencies and departments in the Commonwealth.

The Board raises virtually all its revenue through fees. The biennial license renewal fee is the most substantial revenue generating fee of the fees charged by the Board. If the Board anticipates that its revenue will not meet its expenditures, the Board must increase its revenue.

At its May 28, 2001, meeting, the Board reviewed a summary of its revenues and expenses. The summary, prepared by the Bureau of Professional and Occupational Affairs Revenue Office and the Bureau of Finance and Operations, presented in the following format, shows that the Board must raise the biennial renewal fee to meet or exceed projected expenditures and thereby comply with section 14(a) and (b) of the act.

<i>Financial Status</i>	<i>Actual FY 99-00</i>	<i>Projected FY 00-01</i>	<i>Projected FY 01-02</i>	<i>Projected FY 02-03</i>	<i>Projected FY 03-04</i>	<i>Projected FY 04-05</i>	<i>Projected FY 05-06</i>
Beginning Balance	265,847.48	119,757.48	180,465.27	(21,534.73)	5,340.27	(208,659.73)	(195,784.73)
Revenue	14,910	248,875	15,000	248,875	15,000	248,875	15,000
Prior Yr. Returned Funds	0	1,832.79*	0	0	0	0	0
Total Revenue	280,757.48	370,465.27	195,465.27	227,340.27	20,340.27	40,215.27	(180,784.73)

<i>Financial Status</i>	<i>Actual FY 99-00</i>	<i>Projected FY 00-01</i>	<i>Projected FY 01-02</i>	<i>Projected FY 02-03</i>	<i>Projected FY 03-04</i>	<i>Projected FY 04-05</i>	<i>Projected FY 05-06</i>
Expenses	161,000	190,000	217,000	222,000	229,000	236,000	243,000
Remaining Balance	119,757.48	180,465.27	(21,534.73)	5,340.27	(208,659.73)	(195,784.73)	(423,784.73)

*Estimated

As the chart indicates, a deficit of approximately \$22,000 is projected at fiscal year ending June 30, 2002. The Board must generate revenues of about \$556,000 to meet its anticipated expenditures through FY 2001-2002 in addition to recovering the anticipated deficit. The Board proposes to recover that deficit during the 2003-2005 biennial period. The Board anticipates that the proposed new fees and the increased user fees which are being promulgated separately would enable it to recapture the current deficit, meet its estimated expenditures for the FY 2003-2005 biennial cycle and generate a surplus of approximately \$83,000 at the end of the 2003-2005 biennial period.

If the biennial fee is not increased, the Department of State anticipates that a significant deficit will occur during FY 2003-2004. This deficit is compounded and more critical since this Board fiscally stands on its own and is not contained within the Professional Licensure Augmentation Account (PLAA). Since this Board is not a part of the PLAA, it cannot utilize any fiscal backing to carry it through budget shortfalls. Therefore, any budget shortfall will stop operations of this Board until a positive balance is maintained.

D. Description of Proposed Amendment

The following table outlines the affected fee and proposed amendment:

<i>Application</i>	<i>Current Fee</i>	<i>Proposed Fee</i>
Biennial renewal fee	\$175	\$395

E. Compliance with Executive Order 1996-1

In compliance with Executive Order 1996-1, "Regulatory Review and Promulgation," in drafting and promulgating the proposed amendment, the Board considered the proposed amendment as both required by law and the least restrictive means of covering the costs of services required to be performed by the Board.

F. Fiscal Impact and Paperwork Requirements

The proposed amendment would increase the biennial renewal fee for podiatrists in this Commonwealth, but, otherwise, should have no fiscal impact on the private sector, the general public or political subdivisions.

The proposed amendment would require the Board to alter some of its forms to reflect the new biennial renewal fees; however, the proposed amendment should create no additional paperwork for the private sector.

G. Sunset Date

The Board continuously monitors the cost effectiveness of its regulations. Therefore, no sunset date has been assigned.

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on January 31, 2002, the Board submit-

ted a copy of this proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the Senate Consumer Protection and Professional Licensure Committee and the House Professional Licensure Committee. In addition to submitting the proposed rulemaking, the Board has provided IRRC and the Committees with a copy of a detailed Regulatory Analysis Form prepared by the Board in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, if IRRC has objections to any portion of the proposed rulemaking, it will notify the Board within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria that have not been met by the portion of the proposed rulemaking to which an objection is made. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Board, the General Assembly and the Governor of objections raised.

I. Public Comment

Interested persons are invited to submit written comments, suggestions or objections regarding this proposed rulemaking to Gina Bittner, Board Administrator, State Board of Podiatry, P. O. Box 2649, Harrisburg, PA 17105-2649, gbittner@state.pa.us within 30 days following publication of this proposed rulemaking in the *Pennsylvania Bulletin*.

JEFFREY S. GERLAND, D.P.M.,
Chairperson

Fiscal Note: 16A-445. No fiscal impact; (8) recommends adoption.

Annex A
TITLE 49. PROFESSIONAL AND VOCATIONAL STANDARDS
PART I. DEPARTMENT OF STATE
Subpart A. PROFESSIONAL AND OCCUPATIONAL AFFAIRS
CHAPTER 29. STATE BOARD OF PODIATRY
LICENSES

§ 29.13. Fees.

(a) The schedule of fees charged by the Board is as follows:

	* * * * *
Biennial renewal of license	\$[175] 395
	* * * * *

[Pa.B. Doc. No. 02-255. Filed for public inspection February 15, 2002, 9:00 a.m.]