

Aligning Curriculum with the Kindergarten Standards

PA Pre-K Counts and Keystone STARS require that every program utilize a curriculum that is aligned with Pennsylvania's Learning Standards for Early Childhood. Whether it is locally designed, a published resource, or multiple resources, providers must demonstrate the way in which their materials are linked to the Standards, are comprehensive (focusing on all or most of the key learning areas of development) and age appropriate, using the Standards document that best matches the age of the children. This document provides a clear method to show the alignment of curriculum and the Kindergarten Standards.

An outline of the standards and indicators for each section of the Kindergarten Standards, to be used as a quick-reference guide, is below. After this guide, there is a grid in which curriculum and other resources may be listed to provide a picture of where in the program each standard is addressed. If you need additional assistance with this format, please contact your Regional Key.

Kindergarten Standards and Indicators by Key Learning Area

Approaches to Learning

AL 1: Demonstrate Initiative and Curiosity

- AL 1.1 Participate in various experiences
- AL 1.2 Express choices/preferences during concrete, immediate and familiar activities
- AL 1.3 Demonstrate growing eagerness and satisfaction to discover and discuss a growing range of topics, ideas, and tasks
- AL 1.4 Use multiple strategies and all available senses to explore and learn from the environment
- AL 1.5 Comment on events or aspects of the environment
- AL 1.6 Ask questions and seek meaningful information
- AL 1.7 Initiate social greetings

AL 2: Demonstrate Engagement and Persistence

- AL 2.1 Show persistence in ability to complete a variety of tasks, activities, projects and experiences
- AL 2.2 Demonstrate increasing ability to set goals and develop and follow through on plans
- AL 2.3 Demonstrate ability to maintain focus on a task, question, set of directions or interactions, despite distractions and interruptions
- AL 2.4 Accept environmental conditions and maintain task orientation in a noisy/active environment
- AL 2.5 Acquire the skills necessary for participating in a group or independently

AL 3: Demonstrate Reasoning and Problem Solving

- AL 3.1 Demonstrate a growth pattern in predicting possible outcomes related to cause and effect
- AL 3.2 Discover more than one solution to a question, task or problem
- AL 3.3 Seek and /or accept assistance from others when encountering a problem
- AL 3.4 Recognize and solve problems through observation, active exploration, trial and error, interactions and discussions with peers and adults
- AL 3.5 Demonstrate awareness of participants' needs during group activities
- AL 3.6 Respect others' personal property and space
- AL 3.7 Accept assistance and/or cooperate to accomplish a joint task
- AL 3.8 Classify, compare and contrast objects, events and experiences

AL 4: Demonstrate Flexibility, Risk-Taking and Responsibility

- AL 4.1 Grow in the ability to differentiate between appropriate and inappropriate risk-taking
- AL 4.2 Demonstrate a willingness to choose a variety of familiar and new experiences
- AL 4.3 Accept responsibility for learning through active participation verbally or nonverbally
- AL 4.4 Begin to accept responsibility for one's behavior

AL 5: Demonstrate Initiative, Creativity and Invention

- AL 5.1 Approach tasks and experiences with increased flexibility, imagination and ingenuity
- AL 5.2 Use and connect materials/strategies in uncommon ways to investigate and solve problems

Arts and Humanities

9.1 Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts

- A. Develop using the elements of high and low space in dance
- B. Develop using the elements of high and low in space in dance
- C. Practice using the elements of timbre (quality of sound; intensity and pitch) and rhythm (a regular recurrence of strong and weak beats) and volume (loud/soft)
- D. Develop an understanding of melody as an important musical element
- E. Develop using the elements of character, setting, and action in theater arts
- F. Use the elements of line, shape, texture, and color
- G. Create and perform music
- H. Create and perform a place
- I. Create self-expressive images
- J. Recognize and use fundamental vocabulary in dance

- K. Recognize and use fundamental vocabulary in music
- L. Recognize and use fundamental vocabulary in theatre arts
- M. Recognize and use fundamental vocabulary in visual arts
- N. Identify patterns in dance
- O. Identify and perform safety issues in dance and theatre arts
- P. Identify and perform safety issues in music and visual
- Q. Identify school and community performances, and exhibitions for dance, music and theatre
- R. Identify school and community visual arts exhibitions
- S. Identify how technologies in the arts help create performances and exhibitions

9.2 Historical and Cultural Context of Works in the Arts

- A. Analyze a work of art from its historical and cultural perspective
- B. Identify common themes and patterns in works in the arts

9.3 Critical Response to Works in the Arts

- A. Create a critical statement about works of art
- B. Identify the elements, principles, and concepts used to describe works in the arts
- C. Make categories or classifications about works in the arts

9.4 Aesthetic Response to Works in the Arts

- A. Make a statement about works in the arts based on prior knowledge and how the art affects emotion
- B. Communicate an individual opinion about the meaning of works in the arts
- C. Begin to understand that artists make choices in all areas of arts

Family-School-Community Partnerships

1. Parenting - Quality kindergarten programs will support families with parenting and child rearing skills.

- A. Assist families with parenting and child rearing skills (housing, health, nutrition, clothing, and safety)
- B. Hold parenting classes and informational meetings
- C. Assist families in understanding child development. Distribute brochures on child development
- D. Assist families in setting home conditions that support children as kindergarten students
- E. Provide information and activities to help schools understand children and families
- F. Demonstrate an understanding of the diversity

2. Communication - Quality kindergarten programs will effectively communicate with families about school programs and student progress through school to home and home to school communications.

- A. Communicate with families about school programs, assessments, children's progress, courses, activities, programs, etc.
- B. Promote two-way communication through conferences, memos, notices, report cards, newsletters, phone calls, and computerized messages
- C. Provide print and non-print communications that are clear and understandable to all families
- D. Obtain ideas from families to improve the design and content of communications
- E. Provide two-way channels of communication for questions and interactions
- F. Create an inviting environment for families to engage in open dialogue

3. Volunteering - Quality kindergarten programs will improve recruitment, training, work, and schedules to involve families as volunteers and audiences at the school or in other locations to support students and school programs.

- A. Expand recruitment, training, work, and schedules to involve families as volunteers and audiences at the school or in other locations (community, school, home) to support students and school programs.
- B. Invite parents frequently to assist in classroom special projects and events

4. Learning at Home - Quality kindergarten programs will involve families with their children in at home interactive learning activities that support kindergarten skills and concepts.

- A. Involve families with their children in learning activities at home, including interactive learning activities and other curricular related activities and decisions
- B. Provide information concerning kindergarten skills and concepts
- C. Stress that help at home is to support, encourage, and guide children's acquisition of skills and concepts
- D. Design and implement interactive learning activities for which students take responsibility
- E. to discuss important class work and ideas with their families.
- F. Create interactive activities that students share and discuss with others at home
- G. Provide information concerning other skills and talents.

5. Decision Making - Quality kindergarten programs will include families as participants in school decisions, governance, and advocacy through PTA/PTO, school councils, committees, action teams, and other parent organizations.

- A. Encourage involvement through PTA/PTO membership, participation, leadership, representation, advisory councils, school improvement teams, Title I councils, school-site management teams, and other independent school advisory groups.
- B. Include parent leaders from all ethnic, racial, socio-economic, and other groups in the schools to serve as decision makers.
- C. Offer training for parent leaders to develop leadership skills.
- D. Understand decision making is a shared process of taking action for the successful achievement of common goals for school improvement and student success.

6. Collaborating with the Community - Quality kindergarten programs will coordinate community resources and services for students, families, and the school with businesses, agencies, and other groups, and provide services to the community. Special attention will be given to facilitate successful transitions from one setting to another.

- A. Contribute to the community through service learning and special projects aimed at sharing talents and solving local problems
- B. Work to solve problems of turf, responsibilities, goals, and funds
- C. Inform all families and learners about community programs and services, and ensure equal opportunities for services and participation
- D. Use community resources for improving curriculum and instruction
- E. Employ strategies that enable students to learn about and contribute to the community
- F. Facilitate transitions between preschool and kindergarten and between kindergarten and grade one

Health, Safety and Physical Education

10.1 Concepts of Health

- A. Identify and describe ways individuals grow physically, mentally, socially, and emotionally
- B. Identify and describe unique ways individuals grow physically, mentally, socially, and emotionally
- C. Identify and locate basic body parts and body organs
- D. Begin to develop an understanding of the basic function of body parts and body organs
- E. Describe why the body needs food
- F. Recognize that there are a variety of foods that can be grouped
- G. Develop an understanding of the importance of eating healthy and the role of food in keeping the body healthy
- H. Develop an understanding of the importance of drinking water to keep the body healthy
- I. Begin to know how to properly use medicine (e.g., who takes medicine, who gives medicine)
- J. Identify childhood illnesses

10.2 Healthful Living

- A. Know the relationship between personal health practices and being healthy
- B. Identify ways to prevent illness
- C. Know and use personal health practices
- D. Identify people that help to keep us healthy and safe
- E. Identify common health related signs, symbols, and products that help keep the body healthy
- F. Know that what we hear and what we see affects our health and safety
- G. Know, demonstrate, and identify the steps of a decision-making process
- H. Identify things in the environment that can be harmful

10.3 Safety and Injury Prevention

- A. Know and demonstrate the importance of rules to ensure safety
- B. Recognize an emergency situation
- C. Recognize conflict situations and identify strategies to resolve them
- D. Identify and demonstrate safe practices in physical activity

10.4 Physical Activity

- A. Recognize and demonstrate appropriate physical activities that promote fitness and health
- B. Recognize the physiological effects of moderate to vigorous physical activity on the body (e.g., fast heart rate, heavy or increased breathing, sweating)
- C. Identify physical activities that are liked and disliked
- D. Know that appropriate practice and regular participation positively impacts motor skills
- E. Recognize positive and negative interactions of small group activities

10.5 Concepts, Principles & Strategies of Movement

- A. Recognize and use fundamental motor skills and movement concepts
- B. Know that relationships refer to the ways the individual, while moving, relates with other people and the environment
- C. Know, recognize and use demonstrate relationship movement concepts (e.g., narrow, wide, over, under, leading, following)
- D. Understand that people may differ even though they are the same age
- E. Know that practice and experience make you better at motor skills
- F. Know that when you first begin to learn a motor skill, you will not be good at it
- G. Know, recognize, and demonstrate that some skills are used in many different activities
- H. Understand that critical elements are cues that help students to learn a skill or to perform better
- I. Understand that feedback lets us know how we are doing on a task and is helpful in improving a skill
- J. Know and demonstrate that appropriate practice helps to improve skills
- K. Know that the amount of time a person practices affects the ability to perform the skill
- L. Know that how often we exercise affects how we improve
- M. Know and demonstrate that frequency, intensity, and duration of exercise affects how we improve
- N. Know that how hard we exercise affects how we improve
- O. Know that how long we exercise affects how we improve
- P. Know that what kind of exercise is used affects how we improve
- Q. Know and demonstrate that gravity affects movement and skills
- R. Know and demonstrate that force affects movement and skills
- S. Know and demonstrate how to absorb force
- T. Know and demonstrate that balance affects movement and skills
- U. Know how to maintain balance
- V. Know and demonstrate what it means to move to an open space
- W. Model and understand the purpose of rules

Mathematics

2.1 Numbers, Number Systems and Number Relationships

- A. Count using whole numbers (to 100) by ones and tens (rote counting)
- B. Use concrete objects to represent quantities up to and including 20
- C. Represent equivalent forms of the same number through the use of concrete objects and drawings up to and including 20
- D. Use concrete objects to separate a set into two equal parts using the terms half and whole
- E. Use concrete objects to group into sets of ten
- F. Use concrete objects to demonstrate understanding of one-to-one correspondence up to and including 20
- G. Count, read, and write whole numbers 0 to 20
- H. Identify numbers before, after, and between 0 –20
- I. Estimate using concrete objects up to 100
- J. Identify pennies, nickels, dimes, and quarters by name and value
- K. Count pennies and dimes

2.2 Computation and Estimation

- A. Make estimates of objects in a set up to and including 20
- B. Make an estimation and verify by counting
- C. Represent addition and subtraction in everyday situations using up to ten concrete objects
- D. Use concrete objects to explain the results of joining and separating sets of objects in quantities up to and including ten
- E. Separate concrete objects into equal groups
- F. Determine the sum of the same two one-digit numbers using concrete objects and/or pictures ($3+3=6$)

2.3 Measurement and Estimation

- A. Understand the spatial concepts of over, under, beside, in, out, around, on and between, above, top, bottom
- B. Compare two objects using direct comparison
- C. Estimate and measure objects using nonstandard units
- D. Determine the length and height of objects with nonstandard units (e.g. hands, shoe lengths, jelly beans, paper clips)
- E. Describe the instruments used for measuring time, length, weight, volume, and temperature

2.4 Mathematical Reasoning and Connections

- A. Use math vocabulary comparison terms when making predictions regarding the quantity, size, and shape of objects
- B. Identify the use of measurement in everyday situations

2.5 Mathematical Problem Solving and Communication

- A. Identify a problem and analyze possible solutions to determine which is most appropriate
- B. Identify what information is needed to solve a problem
- C. Demonstrate various strategies to solve a problem

2.6 Statistics and Data Analysis

- A. Gather, organize and display data on a bar graph and/or pictograph
- B. Analyze a chart or graph that displays data and make a prediction
- C. Answer questions based on data shown on graphs or charts
- D. Use data from graphs to answer questions and form opinions

2.7 Probability and Predictions

- A. State and explain the likelihood of an event using the terms: likely, unlikely, or certain
- B. Compare sets of data using the concepts of largest, smallest, most, and least. Explain if an event is fair or unfair

2.8 Algebra and Functions

- A. Identify, describe, and extend patterns based on shape, size, color, sound, or number
- B. Use concrete objects to show equal or not equal
- C. Recreate a simple story problem using concrete objects or pictures
- D. Use concrete objects and trial and error to represent a number story
- E. Use concrete objects or pictures to represent a number story that involves a missing addend
- F. Explain how solutions are determined
- G. Identify the purposes for different mathematical symbols (+, -, and =)

2.9 Geometry

- A. Identify common two and three-dimensional geometric shapes
- B. Create and reproduce geometric designs using concrete objects
- C. Draw and/or construct two-dimensional geometric shapes
- D. Name and describe two-dimensional geometric shapes in real life
- E. Explore symmetry in nature (leaves, butterflies)
- F. Identify a reflection
- G. Create a reflection
- H. Identify geometric shapes that are turned in different ways

2.10 Trigonometry

- A. Identify triangles in the environment and discuss how they are alike and different

2.11 Calculus

- B. Order whole numbers (0-20) from least to greatest value
- C. Identify situations that occur in real life that are slow or fast in happening

Personal Social

PS1: Develop Self-Concept

- A. Is aware of self and one's own preferences
- B. Show independence in a wide range of activities
- C. Know and state independent thoughts and feelings
- D. Attempt new experiences with confidence and independence
- E. Show pride in accomplishments

PS 2: Develop Self Care and Reliance

- A. Recognize and label feelings
- B. Express feelings, needs, opinions, and wants that are appropriate to the situations
- C. Understand consequences of own behavior
- D. Follow rules and routines in classrooms and other settings
- E. Use materials with purpose, safety, and respect
- F. Pay attention as required by the task
- G. Make transitions between activities
- H. Follow adult directions
- I. Able to delay personal gratification until appropriate time

3.3 Develop Social Interactions

- A. Is aware of self and one's own preferences
- B. Know and state independent thoughts and feelings
- C. Trust familiar adults and close peers
- D. Enter into and initiate play with peers
- E. Enjoy playing or working with a variety of children in a number of activities
- F. Respond with empathy to children who are upset or in need
- G. Seek help from peers and adults when needed
- H. Respect the feelings, rights, and belongings of others
- I. Cooperate in small and large groups activities.
- J. Work or play cooperatively with peers for a sustained time
- K. Take turns in games and tasks

- L. Share materials when appropriate
- M. Show increasing abilities to resolve conflicts with peers
- N. Shows nurturing behaviors through helpfulness to others

3.4 Develop Self Regulation

- A. Choose materials and activities independently

Reading, Writing, Speaking and Listening

1.1 Learning to Read Independently

- A. Develop book/print knowledge and conventions (e.g., turn pages from left to right when reading, read words and sentences from left to right, read from top to bottom, return sweep, parts of a book [cover, title, author, illustrator, title page], print represents language)
- B. Develop sentence awareness/word awareness
- C. Discriminate words and sounds
- D. Discriminate, identify, and produce rhyming words and alliteration
- E. Segment phonemes to form words.
- F. Blend sounds to make a spoken word.
- G. Develop knowledge of letters and their sounds (Alphabetic Principle)
- H. Decode words (phonics)
- I. Encode words (phonics)
- J. Read emergently with adequate fluency
- K. Name and describe new concepts
- L. Acquire a reading vocabulary consisting of common words (environmental print, sight words, word families)
- M. Listen to new vocabulary in multiple contexts in order to understand new words and concepts
- N. Discuss unknown words and word meanings
- O. Use an increasingly complex and varied spoken vocabulary
- P. Demonstrate an increasing understanding of new vocabulary introduced in conversations, activities, stories or books
- Q. Demonstrate the understanding that communication occurs in different ways including the use of various languages, devices, and gestures

1.2 Reading Critically in all Content Areas

- A. Determine important ideas and messages in informational texts
- B. Recognize the characteristics of various types of texts
- C. Identify features of informational texts and use them to make meaning

1.3 Reading, Analyzing, and Interpreting Literature

- A. Understand and respond to a variety of literary selections that are read, listened to or viewed
- B. Monitor comprehension while viewing, listening to and reading literary selections

1.4 Types of Writing

- A. Describe the role of people, places, and things in a story
- B. Include simple plot when sharing information
- C. Identify illustrations that depict story content
- D. Draw or write informational sentences (letters, descriptions, definitions, collections of facts, simple instructions) using illustrations when relevant
- E. Differentiate between fact and opinion

1.5 Quality of Writing

- A. Conventional Penmanship-Trace, copy and generate letters of alphabet-both uppercase and lower case
- B. Create a focus for the 'piece' of writing.
- C. Retell about specific experiences, people, objects, events, or stories with a focused topic
- D. Use appropriate content for the topic
- E. Organize words into a complete thought
- F. Use a variety of pictures or words to express a thought
- G. Revise writing or illustrations to sequence events and add detail
- H. Publish or present writing

Science

SC 1: Demonstrate understanding of the process of scientific inquiry

- 1.1 Show curiosity by asking questions and seeking information
- 1.2 Collect, describe and record information
- 1.3 Use tools and equipment to explore objects
- 1.4 Make and verify predictions
- 1.5 Compare, contract and classify objects and data
- 1.6 Use language that shows understanding of scientific principles
- 1.7 Participate in scientific investigations

SC 2: Acquire knowledge about the characteristics of living things

- 2.1 Recognize the difference between living and nonliving things
- 2.2 Notice changes in living things over time
- 2.3 Understand that plants and animals have life cycles
- 2.4 Notice similarities and differences and categories of plant and animals

SC 3: Acquire knowledge about the physical properties of objects

- 3.1 Describe, compare and categorize objects, based on their properties
- 3.2 Explore simple machines
- 3.3 Explore, identify and describe changes that occur over time
- 3.4 Use five senses to explore the world
- 3.5 Experiment with the effect of their own actions on objects
- 3.6 Understand that tools perform specific functions

SC 4: Acquire knowledge about the earth and space

- 4.1 Understand changes in the environment, including weather and seasonal changes
- 4.2 Investigate properties of rocks, soil and water
- 4.3 Explore the characteristics of the sun, moon, stars and clouds
- 4.4 Understand the importance of natural resources; that the environment provides for the needs of the people
- 4.5 Show beginning understanding of how human activities may change the environment
- 4.6 Participate in a variety of activities that preserve the environment

Social Studies

SS 1: Develop an understanding of self within a community

- 1.1 Identify similarities and differences of personal characteristics
- 1.2 Demonstrate an appreciation of one's own characteristics and those of others and others' cultures
- 1.3 Display an awareness of his/her role as a member of a group, such as the family or the class
- 1.4 Show understanding of how individuals work together to achieve group goals
- 1.5 Recognize how things are spatially related to one another
- 1.6 Describe the characteristics of where s/he lives and visits
- 1.7 Identify location and direction
- 1.8 Develop a beginning understanding of maps as representations of actual places

SS 2: Develop understanding of past, present and future

- 2.1 Demonstrate understanding of the sequence of event
- 2.2 Understand how things, people and places change over time
- 2.3 Demonstrate an ability to connect new ideas to past experiences

SS 3: Develop an understanding of the role of consumers

- 3.1 Demonstrate knowledge about community workers and their roles
- 3.2 Demonstrate an awareness of the uses of money
- 3.3 Develop an understanding of how goods and services are produced and distributed

Alignment Grid Kindergarten Standards

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
Approaches to Learning		
AL 1: Initiative and Curiosity		
AL 2: Engagement and Persistence		
AL 3: Reasoning and Problem Solving		
AL 4: Flexibility, Risk-Taking and Responsibility		
AL 5: Imagination, Creativity and Invention		
Arts and Humanities		
9.1 Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts		
9.2 Historical and Cultural context of Works in the Arts		
9.3 Critical Response to Works in the Arts		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
9.4 Aesthetic Response to Works in the Arts		
Family/School/Community Partnerships		
1. Parenting		
2. Communication		
3. Volunteering		
4. Learning at Home		
5. Decision Making		
6. Collaborating with the Community		
Health, Safety, and Physical Education		
10.1 Concepts of Health		
10.2 Healthful Living		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
10.3 Safety and Injury Protection		
10.4 Physical Activity		
10.5 Concepts, Strategies, and Principles of Movement		
Mathematics		
2.1 Numbers, Number Systems and Relationships		
2.2 Computation and Estimation		
2.3 Measurement and Estimation		
2.4 Mathematical Reasoning and Connections		
2.5 Mathematical Reasoning and Connections		
2.6 Statistics and Data Analysis		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
2.7 Probability and Predictions		
2.8 Algebra and Functions		
2.9 Geometry		
2.10 Trigonometry		
2.11 Calculus		
Personal/Social		
3.1 Develop Self Concept		
3.2 Develop Self Regulation		
3.3 Develop Social Interactions		
3.4 Develop Self Care and Reliance		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
Reading, Writing, Speaking and Listening		
1.1 Learning to Read Independently		
1.2 Reading Critically in All Content Areas		
1.3 Reading, Analyzing, and Interpreting Literature		
1.4 Types of Writing		
1.5 Quality of Writing		
1.6 Speaking and Listening		
1.7 Research		
Science		
3.1 Unifying Themes		
3.2 Inquiry and Design		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
3.3 Biological Sciences		
3.4 Physical Sciences		
3.5 Earth Sciences		
3.6 Technology Education		
3.7 Technological Devices		
4.1 Watersheds and Wetlands		
4.2 Renewable and Nonrenewable Resources		
4.3 Environmental Health		
4.4 Agriculture and Society		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
4.6 Ecosystems and Their Interactions		
4.7 Threatened, Endangered, and Extinct Species		
4.8 Humans and Their Environment		
4.9 Environmental Laws and Regulations		
Social Studies		
5.1 Principles of Government		
5.2 Rights and Responsibilities of Citizenship		
5.3 How Government Works		
6.1 Economic Systems		
6.2 Scarcity and Choice		

Learning Standard	Where Standard Is Addressed in Curriculum	Where Standard Is Addressed in Other Resources
6.5 Work and Earnings		
7.1 Basic Geography Literacy		
7.2 The Physical Characteristics of Places and Regions		
7.3 The Interactions Between People and Places		
8.1 Historical Analysis and Skills Development		
8.2 United States History		