SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

KINDERGARTEN

READING / WRITING

- Talk about the characters and the setting in a story that they heard or read
- Retell a story in order that they heard or read
- Use the pictures and the words to understand a story
- Read at least 50 words that are found in many stories such as ran, with, us, the, etc.
- Draw a picture and write labels for the parts of the picture
- Correctly spell some of the words that they say and read often such as: are, with, play, you
- Copy everyday words that they see in the neighborhood or around the house
- Write short sentences and make lists of things such as: foods they like, names of animals, etc.



MATHEMATICS

- Understand and use words such as over, under, above, below, next to and between
- Compare numbers (larger, smaller, more than, less than, same)
- Use objects or make pictures for numbers 0-20
- Read and write numbers to 20
- Use objects to count, order, and group by size, color, or category
- Recognize and name coins (pennies, nickels, dimes, quarters)
- Divide equal shares between two people
- Talk about the weather in terms of temperature and seasons
- Make measurements using objects, such as blocks, paperclips, or plastic chips
- Use objects and pictures to tell about self and environment
- Recognize basic shapes such as triangle, square, rectangle, and circle
- Count aloud from 1-50

SCIENCE

- Describe seasonal weather changes, such as warm weather in summer and cold weather in winter
- Use their senses (sight, smell, taste, touch, and hearing) to find out about themselves and their surroundings
- Group and describe objects according to their properties (shape, texture, size, weight, color, content and motion)
- Develop an attitude of respect and understanding for life, both plant and animal
- Conduct Science investigations working individually and with others



SOCIAL STUDIES

- Tell how individuals, families, and groups are alike and different
- Give facts about African American History
- Understand that people and places change over time
- Understand and discuss that all families have basic needs
- Focus on developing a positive attitude about self, family, and others



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your Kindergartener should be able to:

- Talk about personal health and practice good health habits. Recognize healthy food choices and the importance of breakfast
- Identify common emergencies; burns, falls, and cuts
- · Recognize activities that promote physical fitness
- Recognize benefits of sharing and cooperating

ART AND MUSIC

By the end of the school year, your Kindergartener should be able to:

Art

- Use different art materials to make drawings, paintings and sculptures
- Find the central image in a work of art such as a person, house or flower
- Give their opinion about a work of art

Music

- Walk, run, jump, hop and march to music
- Sing nursery rhymes and folk songs

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

1ST GRADE

READING / WRITING

- Retell a story in order that they heard or read that includes many important details
- Talk and write about what happened in the beginning, the middle and the end of a story that they heard or read
- Read at least 100 words that are found in many stories such as read, girl, sure, etc.
- Make predictions about what might happen next in a story
- Read aloud with good speed and expression
- Spell most frequently used words correctly
- Write sentences with correct capitalization and punctuation



MATHEMATICS

- Understand how to divide equally into 1/2 and 1/4 parts
- Compare numbers (larger, smaller, more than, less than, same)
- Represent the same number in different ways; example 8+2, 5+5, ten
- Solve single and double-digit addition and subtraction problems
- Identify the value of and exchange coins (pennies, nickels, dimes, quarters)
- Measure the length of various objects
- Tell time on digital and traditional clocks and determine how much time has gone by (elapsed time)
- Collect and record data such as daily weather
- Show an understanding of patterns by telling what comes next using numbers, shapes, or objects
- Use +, -, and = to create a number story
- Name, draw, describe and label two dimensional shapes, such as triangles, squares, and rectangles
- Count by 2's, 5's and 10's
- Understand that ten ones is one ten and ten-tens equal 100

SCIENCE

- Explain their discoveries by writing and drawing about their findings
- Group objects according to their different physical properties: texture, size, color etc.
- Describe the properties of the three states of matter: solid, liquid, and gas
- Explore how matter can change from one form to another, such as watching an ice cube change from a solid to a liquid
- Observe, describe, and sort earth materials, such as soil, based on different properties
- Describe and compare some characteristics of plants and animals
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Explain how individuals, families, and groups are similar and different
- Understand and discuss facts about African American History
- Recognize and understand the concept of change in many different settings
- Explain different holidays and special days that are celebrated in their community and others
- Apply basic economic concepts to home, school, and the community
- Recognize how technology is used at home, school, and in the community



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your first grader should be able to:

- Understand the components of good character: trustworthiness, fairness, respect, citizenship
- Understand the difference between medicinal and non-medicinal drugs
- Know what to do for a safe and unsafe touch
- Complete a 30-minute Physical Education class without undo fatigue
- Participate in games involving throwing and catching

ART AND MUSIC

By the end of the school year, your first grader should be able to:

Art

- Use different art materials to make drawings, paintings and sculptures
- Find the central image in a work of art such as a person, house or flower
- Give their opinion about a work of art

Music

- Play simple rhythms to accompany a variety of chants, poems, and songs
- Sing nursery rhymes and folk songs

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

2ND GRADE

READING / WRITING

- Describe the characters, setting and main events or problems in a story or text that they read or heard
- Independently read longer stories and books including chapter books
- Talk about the big ideas in the stories and books that they read
- Make connections between new information from a story or book and what the child already knows about the subject or another book, movie or television program
- Write about a specific topic, such as a favorite pet, in a complete paragraph
- Write descriptions, reports, letters and instructions on how to do something



MATHEMATICS

- Identify whole numbers and fractions
- Represent the same number in different ways, example 18 + 12, 20 + 10, XXX
- Know how addition and subtraction are connected
- Add and subtract single and double-digit numbers
- Solve money problems using cents and dollars
- Identify when to use inches, feet, and yards
- Tell time on digital and traditional clocks, as well as determine how much time has gone by (elapsed time)
- Make predictions then, gather, sort, organize, display, and interpret data on charts, graphs, and tables
- Recognize and extend patterns with shapes and numbers
- Solve number sentences and determine missing parts
- Use +, -, and = to create a number story
- Name, draw, describe and label two and three-dimensional shapes, such as squares, triangles, and rectangles
- Explain how they solved a math problem in their own words
- Connect repeated addition to multiplication, such as 4 + 4 + 4 = 12 and $3 \times 4 = 12$

SCIENCE

- Use measuring instruments, such as a scale, to gather information about objects
- Understand the concept that weather changes from day to day, but that things such as average temperature or rainfall follows a monthly pattern
- Identify instruments used by meteorologists to monitor air and weather conditions
- Explain that changes in living things occur over time and have life cycles that include being born, developing into adults, reproducing and eventually dying



SOCIAL STUDIES

- Understand and explain the geography of their community
- Analyze how individuals, families, and communities are alike and different
- Study, investigate, and exhibit an understanding of African American History
- Show an understanding of how communities change over time
- Discuss how people depend on the physical environment and use natural resources to meet basic needs



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your second grader should be able to:

- Understand feelings and appropriate ways to express them
- Identify the community helpers in the neighborhood
- Identify ways to avoid a conflict
- Participate in activities that involve skipping, leaping, turning, going over, under, beside, next to, up and down
- Demonstrate safety rules when walking, crossing the street and riding a bike

ART AND MUSIC

By the end of the school year, your second-grader should be able to:

Art

- Show control and confidence in using crayons, paint and clay to create art
- Know that artists make different kinds of art from a variety of ideas
- Name different art forms such as portrait, landscape and sculpture

Music

- Play simple rhythms to accompany a variety of chants, poems, and songs
- Sing and play songs using characteristics of loud/soft, fast/ slow

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

3RD GRADE

READING / WRITING

- Read a wide variety of stories, books and magazine articles
- Read silently most of the time and then talk about what they read
- Identify the main idea and important events and details in a story or book
- Use a variety of reading strategies to understand what they read
- Write stories, poems and plays
- Work on research projects and reports for social studies and science



MATHEMATICS

- Understand whole numbers and fractions
- Count, order and group objects
- Estimate, approximate, round or use exact numbers
- Estimate, draw conclusions and explain an answer
- Use a ruler/yard/meter stick to measure standard and metric units
- Tell time using digital and traditional clocks and determine how much time has gone by (elapsed time)
- Use objects to measure area (amount covered inside, for example, "How many blocks fit on the bottom of a shoe box?") and perimeter (the distance around, for example, "How many blocks fit around a shoebox?")
- Find and show data in a variety of graphs
- Determine most likely outcomes using spinners and number cubes (probability)
- Describe data using words like largest, smallest, most often and least often
- Identify and continue patterns
- Add, subtract, multiply and divide using numbers, objects and number stories
- Recognize and compare two (triangle, square, rectangles) and three-dimensional geometric shapes (cubes, prisms, and cylinders)
- Explain how they solved a math problem in their own words

SCIENCE

- Develop skills that will emphasize the five senses while doing science
- Build an understanding of the basic concepts in earth science such as identifying the layers of the Earth and their characteristics and explaining the rock cycle
- Know that sound is a form of energy and sound begins when an object vibrates. Sound travels through gas, liquid and solids
- Develop an understanding that plants have different structures that serve different functions in growth and survival and how the different parts of living things work together (such as the roots, stems, and leaves of a plant)
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Explain qualities of good citizenship by identifying people in their community who make a difference
- Discuss the multiple roles that individuals perform in families, workplaces and communities
- Examine how individuals can initiate change in neighborhoods and communities
- Discuss the role of real and fictional heroes in shaping the culture of communities
- Discuss how problems and conflicts are resolved by leaders and communities
- Study, investigate and exhibit an understanding of African American History



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your third-grader should be able to:

- Recognize the importance of fruit, vegetables, calcium and water
- Recognize harmful situations and how to call 9-1-1
- Understand how good health habits help to avoid disease
- Perform push-ups, curl-ups and toe touches
- Dribble a soccer ball with the feet and dribble a basketball with the hands
- Understand rules around water

ART AND MUSIC

By the end of the school year, your third grader should be able to:

Art

- Show control and confidence in using crayons, paint and clay to create art
- Know that artists make different kinds of art from a variety of ideas
- Name different art forms such as portrait, landscape and sculpture

Music

- Sing a variety of songs representing different styles and cultures
- Sing and play songs using characteristics of loud/soft, fast/ slow
- Read and write simple melodies

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

4TH GRADE

READING / WRITING

- Read silently most of the time and then talk about what they read
- Read and understand all types of books and stories including biographies, science information, folktales, and poems
- Make connections between the stories and texts they read
- Return to the story or text to support their opinions
- Talk and write about the characters, setting, problems and solutions after reading
- Write a variety of pieces such as poems, plays, stories, reports, and instructions about how to do or make something



MATHEMATICS

- · Add, subtract, multiply and divide
- Recognize the relationship between fractions and decimals
- Order, add, and subtract simple fractions and decimals
- Identify proper (2/8) and improper fractions (8/2)
- Solve problems using part to whole relationships (ratios and proportions)
- Determine perimeter (distance around) and area (amount covered inside) with unit squares
- Use coins and bills to purchase items and make change
- Discuss and interpret data (largest, smallest, most frequent, and middle)
- Use tables and bar graphs, line plots, and stem and leaf graphs to show data
- Predict and determine all possible combinations and outcomes
- Skip count by 10's, 25's, 50's, 100's, and 1000's
- Identify, compare, and classify shapes based on properties of angles (acute is less than 90°, right = 90°, and obtuse is more than 90°)
- Explain how they solved a math problem in their own words

SCIENCE

- Develop skills that will emphasis the five senses while doing science
- Ask questions based on observations
- Compare results from data collected
- Create graphs and charts and make predictions and conclusions
- Build an understanding of how waves, wind, water, and ice shape and reshape the earth's land surface
- Understand basic concepts of magnetism and electricity.
 Magnets display forces of attraction and repulsion that decreases with distance
- Explain the life cycles of various plants and animals
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Apply the five themes of geography: location, movement, place, region, and interaction to Pennsylvania and its people
- Examine the importance of the role of ethnic groups and the multiple roles they have played in the development of Pennsylvania
- Trace the history of colonization in Pennsylvania
- Understand the state's social, economic, and political institutions and how they respond to the needs of Pennsylvanians
- Study, investigate and exhibit an understanding of African American History



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your fourth grader should be able to:

- Recognize that as one grows, the body changes
- Identify the major organs and where they are located
- Recognize conflict resolution skills
- Participate in team games, follow rules, play safely and show good sportsmanship
- Create an exercise routine to music

ART AND MUSIC

By the end of the school year, your fourth grader should be able to:

Art

- Show confidence in expressing their ideas and experiences in drawings and paintings
- Use basic art vocabulary to describe a work of art
- Know the difference between realistic and abstract art
- Create a plan before making a work of art

Music

- Sing and play a variety of songs using musical notation
- Improvise or compose short songs using a variety of sound sources, such as body, vocal, and instrumental sounds

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

5TH GRADE

READING / WRITING

- Continue to build a reading, writing and speaking vocabulary
- Read to learn new information
- Read a wide range of stories, books and magazines for enjoyment
- Understand a problem or conflict in stories or books and talk or write about an appropriate solution
- Make connections between stories and texts that they have read and the world around them
- Tell and/or write a summary that gives the main idea of what they read and the most important details or events
- Complete a research project including a written report
- Write stories with several paragraphs
- Write poems, plays, and reports



MATHEMATICS

- Compute and find the relationships using whole numbers, fractions, and decimals
- Locate positive and negative numbers on a number line (integers)
- Explain to you what prime numbers, factors, multiples and composite numbers mean
- Compare numbers (equal to, greater than, and less than)
- Collect, organize, display, and analyze data in a variety of ways
- Find mean (average), median (middle number), mode (most frequent) and range (difference from largest and smallest) of data
- Predict or determine all possible combinations and outcomes, such as, 'How many outfits can be created with six shirts and eight pants?"
- Calculate the chance of a simple event happening
- Use a variety of methods to solve for unknown quantities in simple one-step algebra equations (solve for x)
- Sort polygons according to their properties and angles, such as triangles, rhombi, and parallelograms
- Define and compare perimeter (distance around) and area (amount covered inside) of shapes
- Understand properties of a circle
- Explain how they solved a math problem in their own words

SCIENCE

- Develop skills that will emphasize the five senses while doing science
- Use prior knowledge when making observations
- Make predictions and hypotheses based on observations
- Design investigations with a control and one or two variables
- Gather, organize and display data independently
- Build an understanding of how solar energy is transferred
- Recognize that the sun is the main source of energy for people and they use it in various ways
- Design and conduct experiments with variables. Students should be able to explain cause and effect
- Study the relationship in an ecosystem that shows the relationship of an organism to its environment
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Demonstrate an understanding of the geographic regions of the United States
- Explain the impact of exploration and colonization in the Americas
- Discuss the ideas, values, beliefs and decisions that contributed to the creation of our government
- Analyze the issues that led to the Revolutionary War and Civil War
- Explain the political, economic and social reforms that shaped America
- Demonstrate an understanding of African American History
- Examine the roles various ethnic groups have played in the development of United States History

HEALTH/PHYSICAL EDUCATION

By the end of the school year, your fifth-grader should be able to:

- Identify qualities of healthy relationships
- Recognize use and abuse of drugs
- Recognize bullying in all its forms, including cyber bullying
- Know the purpose of health check-ups
- Understand offense and defense in game situations

ART AND MUSIC

By the end of the school year, your fifth grader should be able to:

Art

- Use art materials in a safe and responsible way
- Describe the subject, idea or symbol in a work of art using art vocabulary
- Know what an art historian does

Music

- Sing and play melodies with accuracy and appropriate expression
- Recognize and analyze music from its historical and cultural perspective

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

6TH GRADE

READING / WRITING

- Explain some of the strategies they use for comprehension before, during and after reading such as Talk Across the Fingers, The 5 Ws, and TAG It a 3
- Read and understand a variety of texts including historical fiction, novels, poetry, fairy tales, tall tales, myths, legends and plays
- Read and discuss informational texts, such as magazines, newspaper articles, science and social studies texts
- Use writing skills to plan, draft, revise, and publish writing for a specific purpose
- Write a variety of pieces such as stories, plays, poems, and reports



MATHEMATICS

- Solve problems applying the order of operations and number relationships with fractions, decimals, integers and percents
- Use calculators to explore complex number situations
- Make, check, and verify predictions and explain reasoning
- Convert customary and metric units within the same system of measurement, such as, inches in a yard
- Solve problems involving perimeter (distance around), area (amount covered inside) and volume (capacity within)
- Identify the types of angles (acute = less than 90°, right = 90°, obtuse= more than 90°)
- Make scale drawings
- Determine the best way to display and interpret data in a set
- Describe data sets using mean (average), median (middle number), mode (most often), and range (difference from the largest to smallest)
- Determine the chance of a simple event happening, for example, "What is the chance of flipping a coin and getting it three times in a row?"
- Look at a pattern and determine how to find out what comes next, for example, 7, 12, 17, 22, (The rule is add 5 and the next number is 27)
- Plot and locate points on a coordinate plane
- Explain mathematics vocabulary (lines of symmetry, tessellations, reflections, rotations, translations, parallel, perpendicular, similar and congruent) for shapes
- Identify and measure parts of a circle (center, radius, circumference, central angles, and diameter)

SCIENCE

- Develop skills that will emphasize the five senses while doing science
- Create questions based on observations
- Make generalizations about experimental results
- Apply mathematics in the context of science
- Build an understanding of concepts in Earth science by using models and maps
- Observe the effect of water on shaping the land
- Interpret scientific theories about the structure of the universe
- Summarize the history and future of human spaceflight
- Explain the need to develop an attitude of respect and understanding for life. Describe changes in environmental conditions, both natural and man-made, that can affect the survival of individual organisms and entire species
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Discuss the ideas and strategies of financial literacy such as money management and apply them to daily situations
- Use the five themes of geography: location, movement, place, region, and interaction to answer geographic questions and analyze geographic concepts
- Identify important patterns in the movement of people, goods and ideas over time and place
- Analyze the interactions between humans and their physical environments
- Discuss how the land, history and cultures of Latin America influenced the development of the western Hemisphere
- Explain how the geography of North America played an important role in the development and spread of the Native American culture
- Compare and contrast the political systems of Canada and the United States
- Explain the development of the Cambodian community in Philadelphia
- Discuss the rules that govern the Juvenile Justice System in Pennsylvania
- Exhibit an understanding of African American History

HEALTH/PHYSICAL EDUCATION

By the end of the school year, your sixth grader should be able to:

- Understand the impact of the media on teen behavior
- Demonstrate empathy for ill persons
- Understand why abstinence is the safest behavior for teens
- Know the effects of stress on health and behavior
- Expand knowledge of sport skills
- Design a personal fitness plan

ART AND MUSIC

By the end of the school year, your sixth grader should be able to:

Art

- Understand how to use color, line and shapes to create a work of art
- Describe the subject, symbol or idea in a work of art using art vocabulary
- Write a paragraph describing their opinion of a work of art

Music

- Sing and play in two and three part harmony using music notation with accuracy and appropriate expression
- Know and demonstrate different styles and genres of music by singing and playing instruments

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

7TH GRADE

READING / WRITING

- Explain some of the strategies they use for comprehension before, during and after reading such as Talk Across the Fingers, The 5 Ws, and TAG It a 3
- Read and understand a variety of texts including historical fiction, novels, poetry, fairy tales, tall tales, myths, legends and plays
- Read and discuss informational texts, such as magazines, newspaper articles, science and social studies texts
- Use writing skills to plan, draft, revise, and publish writing for a specific purpose
- Write a variety of pieces such as stories, plays, poems, and reports



MATHEMATICS

- Identify and solve problems with whole numbers, fractions, decimals, positive/negative numbers, percents, exponents, roots, and scientific notation
- Select and utilize appropriate units and measure length, area, and volume of geometric figures
- Calculate distance, rate, capacity, area, weight, mass, and angles
- Find perimeter (distance around), circumference (distance around) and area (amount of space covered) of triangles, quadrilaterals, circles, and other polygons
- Understand how two angles equal 90° or 180°
- Collect, construct, organize, display, and analyze real life data
- Create surveys and graph results
- Understand the percent chance of an event happening
- Predict and determine all possible combinations and outcomes, for example, "How many double scoop cones can be made with 40 flavors of ice cream, without two repeated flavors on a cone?"
- Explore and represent continuing patterns
- Solve equal and unequal number sentences
- Create models of three-dimensional objects using straws and toothpicks
- Explain how they solved a math problem in their own words

SCIENCE

- Explain the similarities and differences found among living things and how living things are organized
- Detail the role of the cell as the building block of life
- Explain the relationship between genetic traits and heredity
- Describe the basic elements of meteorology, including the composition of Earth's atmosphere
- Explain the differences between weather and climate
- Understand the nature of sound and the nature of light and how waves transfer energy
- Explain how radio waves and microwaves are used in communication technology
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Use the five themes of geography: location, movement, place, region, and interaction to answer geographic questions and analyze geographic concepts about the Eastern Hemisphere
- Discuss the ideas and strategies of financial literacy and apply them to daily situations
- Discuss how modern day Africa has been affected by its land, history and cultures
- Understand how European nationalism led to empire building and conflicts among European nations
- Identify the factors that brought about the expansion of Russia during the communist era
- Identify the types of governments and economies that exist in some Asian countries
- Describe China's current status in the world
- Explain how historical events and geography have shaped the governments, economies and cultures in Australia, New Zealand and Oceania
- Describe the different ways people view the origins of the universe
- Describe the different reasons why the immigrants from Europe migrated to Philadelphia
- Discuss the rules that govern the Juvenile Justice System in Pennsylvania

HEALTH/PHYSICAL EDUCATION

By the end of the school year, your seventh grader should be able to:

- Recognize symptoms of depression and what to do
- Identify safe dating practices
- Know different health care specialists
- Understand that diet and exercise impact quality of life
- Understand the steps of peer mediation
- Participate in aerobic activities that strengthen the heart and lungs
- Understand skills, rules and strategies to participate in team and individual sports

ART AND MUSIC

By the end of the school year, your seventh grader should be able to:

Art

- Demonstrate ability in the use of different art media and techniques
- Understand and use line, shape, color, form, balance, rhythm unity and emphasis to create works of art
- Identify the cultural origin of a work of art such as a Native American weaving, Asian painting or Greek vase

Music

- Sing and play more complicated melodies representing various music genres, styles and historical periods
- Compose music using notation for writing rhythm patterns, melodies, and harmonies
- Analyze through listening and reflection the historical and cultural impact on musical selections

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

8TH GRADE

READING / WRITING

- Explain some of the strategies they use for comprehension before, during and after reading such as Talk Across the Fingers, The 5 Ws, and TAG It a 3
- Read and understand a variety of texts including historical fiction, novels, poetry, fairy tales, tall tales, myths, legends and plays
- Read and discuss informational texts, such as magazines, newspaper articles, science and social studies texts
- Use writing skills to plan, draft, revise, and publish writing for a specific purpose
- Write a variety of pieces such as stories, plays, poems, and reports



MATHEMATICS

- Solve problems containing integers (positive and negative numbers), rational numbers, percents, exponents, roots, and scientific notation
- Calculate distance, rate, capacity, area, weight, mass, and angles
- Understand how two added angles equal 90° or 180°
- Collect, construct, organize, display, and analyze real life algebra and data
- Understand the percent chance of an event happening (probability)
- Explore and continue algebraic patterns
- Solve two step equations and inequalities, as well as, graph them
- Explore and apply the Pythagorean Theorem to find the missing side of a triangle
- Explain how they solved a math problem in their own words

SCIENCE

- Explain what happens during a physical or chemical change such as the reaction between baking soda and vinegar
- Compare and contrast the different models of the atom
- Explain earth features and the process that shaped them, including the rock cycle, continental drift, earthquakes and volcanoes
- Explain the role of paleontology in the study of Earth's history
- Understand basic physics concepts such as force, motion and energy
- Analyze the relationship between velocity and acceleration
- Describe Newton's laws of motion
- Explain the law of universal gravitation
- Conduct hands-on investigations to discover and understand their world
- Record observations in science notebooks



SOCIAL STUDIES

- Explain how the relationship between early settlers and Native Americans changed
- Locate the political kingdoms, trade routes, and learning centers of West Africa
- Identify and understand the ways Africans resisted enslavement
- Analyze the economic factors that contributed to the Revolutionary War
- Discuss the principles and functions that shaped the U.S. government
- Explain how the Louisiana Purchase and the Lewis/Clark Expedition expanded American territory
- Analyze the social, political and economic ideas of "Manifest Destiny"
- Discuss and interpret the effects of the Civil War
- Describe how America became a world power
- Explain the important aspects of the civil rights movement
- Identify and explain the important events that led to the Great Depression
- Discuss the ideas and strategies of financial literacy and apply them to daily situations
- Discuss the rules that govern the Juvenile Justice System in Pennsylvania
- Explain and interpret how industry contributed to the American economy

HEALTH/PHYSICAL EDUCATION

By the end of the school year, your eighth grader should be able to:

- Demonstrate healthy ways to express needs, wants, emotions, opinions and information
- Understand growth and development, including pregnancy
- Explain how substance abuse can lead to unsafe situations
- Identify and perform steps for CPR and aid to someone who is choking
- Participate in additional physical activity beyond Physical Education class

ART AND MUSIC

By the end of the school year, your eighth grader should be able to:

Art

- Demonstrate ability in the use of different art media techniques and processes
- Identify a work of art belonging to a particular time, place and or culture
- Research and write a biography about a favorite artist

Music

- Sing and play more complicated melodies representing various music genres, styles, and historical periods
- Compose music using notation for writing rhythm patterns, melodies, and harmonies
- Analyze through listening and reflection the historical and cultural impact on musical selections

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

9TH GRADE

ENGLISH

By the end of the school year, your ninth grader should be able to:

- Closely focus on the elements of fiction
- Sharpen and polish literacy skills from 1-8 Grade
- Develop their grammar skills and build a robust vocabulary
- Use the steps of the writing process when developing essays
- Grow academically, socially and emotionally

MATHEMATICS

By the end of the school year, your ninth grader should be able to:

Algebra 1

- Investigate relationships in real world problems
- Use symbols, diagrams, graphs, tables, and rules to represent situations
- Use mathematical tools, including graphing calculators

Geometry

- Explore the properties of geometric shapes
- Use geometric language to communicate
- Build reasoning and justification skills
- Use technology tools

SCIENCE

By the end of the school year, your ninth grader should be able to:

Physical Science

- Demonstrate an understanding of the basic concepts in physical science
- Describe the chemical and physical properties of matter so that they can describe what things are made of and what keeps compounds together
- Explore motion comparing speed, velocity, and acceleration using mathematics
- Explore the principles of energy conservation and conversion

Biology

- Demonstrate an understanding of the basic concepts in biology to describe living things and their impact on the environment
- Identify the foundation of the chemical basis of life
- Observe and describe the structure of cells and cell processes
- Examine the basis of inheritance, including the structure and function of DNA

1 1 1

SOCIAL STUDIES

- Analyze the development of early civilizations in Africa, Asia, Europe, and the Americas
- Investigate significant events, people, and conditions in the growth of monarchical and imperial systems of government
- Understand the causes and effects of movements seeking change, and evaluate the sources and consequences of nationalism
- Analyze the causes and results of twentieth century conflicts among nations
- Investigate social and economic organization in various societies throughout time in order to understand the shifts in power and status that have occurred



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your ninth grade student should be able to:

- Apply decision-making and goal setting skills
- Understand health related social issues such as organ donation, immunizations and HIV/STD testing
- Explain the difference between genetic, chronic and communicable disease
- Identify how sports have had a role in the politics, economics and cultures of various countries
- Work cooperatively with peers in sport and game situations.
- Demonstrate communication skills
- Analyze roles and responsibilities of parenting
- Evaluate sources of food and nutrition information and safe handling of food
- Maintain healthy levels of physical activity

ART AND MUSIC

By the end of the school year, your ninth grader should be able to:

Art

- Demonstrate advanced ability in the use of different art media, techniques and processes
- Know the names of recognized artists from different historical periods and cultures
- Know the characteristics of major art movements such as Classicism, Realism and Impressionism

Music:

- Sing and play repertoire in tune with good quality, phrasing, and musicality
- Improvise original melodies in the appropriate genres and styles of the music
- Demonstrate the ability to read and compose music for voices and various instruments
- Classify music by genre, style, and historical period
- Write reviews of musical performances based on musical styles and production quality

WORLD LANGUAGES

The following World Languages are offered in our high schools: Arabic, Mandarin Chinese, French, German, Italian, Latin, Russian and Spanish. Students will learn to communicate in the target language and understand the culture which includes: history, traditions, customs, celebrations, music, art and everyday life.

- Topics for Level 1 are: Greetings, Introductions and Farewells; Numbers and Practical Uses; Identification and Description; School; Family; Places in which we live; Food; Shopping and Clothing
- Topics for Level 2 are: Fundamentals; City Life; Keeping
 Fit: Body & Mind; I know what you did last...;
 Remembering my childhood; My world, my future; Global
 travel and vacations
- Students receive a variety of assessments including benchmarks
- Students are encouraged to practice speaking the target language at home and attend cultural events in the community

High School Graduation Requirement – Students must earn 23.5 credits, which include:

• 4 English credits: English 1, 2, 3 and 4

• 3 Math credits: Algebra 1, Geometry and Algebra 2

• 3 Science credits: Physical Science, Biology and Chemistry

 4 Social Studies credits: World History, African American History, American History and Social Science

- 2 World Language credits: Levels 1 and 2 of the same language
- 1 Physical Education credit
- .5 Health Education credit
- 2 Arts and Humanities credits
- 4 Elective credits: One must be a 4th credit in Science, Math or an Advanced Placement (AP) or International Baccalaureate (IB) course

Note: A Multidisciplinary Project/ Service Learning Project is a graduation requirement

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

10TH GRADE

ENGLISH

By the end of the school year, your tenth grader should be able to:

- Apply the skills and strategies learned in grade 9 to more extended and sophisticated texts and writing assignments
- Read stories from different parts of the world
- Prepare for standardized tests
- Discover their own individual interests

MATHEMATICS

By the end of the school year, your tenth grader should be able to:

Geometry

- Explore the properties of geometric shapes
- Use geometric language to communicate
- Build reasoning and justification skills
- Use technology tools

Algebra 2

- Explore connections between patterns, relations, and functions
- Extend topics learned in Algebra 1 and Geometry
- Strengthen problem-solving skills

SCIENCE

By the end of the school year, your tenth grader should be able to:

Biology

- Build an understanding of the basic concepts in biology to describe living things and their impact on the environment
- Identify the foundation of the chemical basis of life
- Observe and describe the structure of cells and cell processes
- Examine the basis of inheritance, including the structure and function of DNA

Chemistry

- Build an understanding of the basic concepts in chemistry
- Explore the composition of compounds in the form of atoms
- Analyze patterns of the periodic table
- Examine the properties of elements

SOCIAL STUDIES

- Demonstrate an understanding of the physical and human geography of Africa
- Investigate the Nile Valley Civilizations
- Demonstrate an understanding of African American life and cultural contributions through 1860.
- Analyze the roles of African Americans during the Civil War and Reconstruction
- Examine the rise of Jim Crow and its effects on the life experiences of African Americans in the late nineteenth and early twentieth centuries
- Acquire an understanding of the issues confronting contemporary African Americans in the continuing struggle for equality
- Examine the chronology and genealogy of African civilizations



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your tenth grader should be able to:

- Demonstrate communication skills in building and maintaining healthy relationships
- Analyze roles and responsibilities of parenting
- Evaluate sources of food and nutrition information and safe handling of food
- Explain the relationship between health habits, quality of life and disease
- · Maintain healthy levels of physical activity

ART AND MUSIC

By the end of the school year, your tenth grader should be able to:

Art:

- Demonstrate advanced ability in the use of art media, techniques and processes
- Describe, analyze and interpret a work of art orally and in writing using art vocabulary
- Write a critique of a particular work of art seen in a museum or gallery

Music:

- Sing and play repertoire in tune with good quality, phrasing, and musicality
- Demonstrate the ability to read and compose music for voices and various instruments
- Classify music by genre, style, and historical period
- Write reviews of musical performances based on musical styles and production quality

WORLD LANGUAGES

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 Fit: Body & Mind; I know what you did last...;
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 travel and vacations
- Students receive a variety of assessments including benchmarks
- Students are encouraged to practice speaking the target language at home and attend cultural events in the community

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SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

11TH GRADE

ENGLISH

By the end of the school year, your eleventh grader should be able to:

- Make informed decisions about their learning
- Grow in their understanding of the evolution of the American identity through analysis of American literature
- Write in a variety of modes, with emphasis on the persuasive essay

MATHEMATICS

By the end of the school year, your eleventh grader should be able to:

Algebra 2:

- Explore connections between patterns, relations, and functions
- Extend topics learned in Algebra 1 and Geometry topics
- Strengthen problem-solving skills

Precalculus:

- Explore classes of functions
- Communicate using clear math language, diagrams, and symbols
- Prepare for higher level mathematics

SCIENCE

By the end of the school year, your eleventh grader should be able to:

Chemistry

- Build an understanding of the basic concepts in chemistry
- Explore the composition of compounds in the form of atoms
- Analyze patterns of the periodic table
- Examine the properties of elements

Physics

- Build an understanding of the basic concepts in physics
- Describe the concepts of displacement, speed, velocity, and acceleration and apply the mathematics to support these concepts
- Examine force and Newton's Laws of Motion, including mass and acceleration

SOCIAL STUDIES

- Identify, investigate, and assess the effectiveness of the institutions of the emerging republic
- Analyze the issues that led to the Civil War, the effects of the war, and the impact of Reconstruction on the nation
- Demonstrate an understanding of African American life and cultural contributions through 1860
- Analyze the roles of African Americans played in the development of this nation
- Acquire an understanding of the issues confronting contemporary African Americans in the continuing struggle for equality
- Analyze United States involvement in World War II and the war's influence on international affairs in following decades
- Identify and analyze trends in domestic and foreign affairs of the United States from 1973 to the present
- Describe and trace economic, political, and social developments and assess their significance for the lives of Americans from 1945 -1980



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your eleventh grader should be able to:

- Understand the relationship between physical, mental, emotional and social health throughout adulthood
- Explain fetal development and the importance of pre-natal care
- Know how to access consumer information and help
- Know strategies for dealing with individuals who are exhibiting dangerous behaviors
- Demonstrate proficiency in at least two physical activities

ART AND MUSIC

By the end of the school year, your eleventh grader should be able to:

Art

- Demonstrate advanced ability in the use of art media, techniques and processes
- Present a portfolio of work that shows their art skills and personal understanding of their work
- Know about the wide variety of careers in the visual arts
- Write a critique of a particular work of art seen in a museum or gallery

Music

- Sing and play varied repertoire demonstrating good intonation, tone quality, breath control, and articulation
- Improvise vocally and instrumentally harmonizing parts and original melodies over given chord progressions
- Compose and arrange music in several distinct styles for voices and various instrumental ensembles
- Write reviews of musical performances based on musical styles and production quality, and compare similar performances

WORLD LANGUAGES

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SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS PARENT REFERENCE GUIDE

12TH GRADE

ENGLISH

By the end of the school year, your twelfth grader should be able to:

- Analyze and share their perceptions about literature and morality, power, heroism, gender, politics, and philosophy.
- Identify ideas that reflect the central themes of the course: the role of the individual in society, and the role of the individual in determining his or her own fate.
- Respond to and examine the voices of both classical and contemporary literature that speak to the universal nature and timelessness of the issues they confront in their world today.
- Produce effective writing that ranges from reflective pieces to a variety of academic essays (multidisciplinary research, literary criticism, informational writing, etc.).

MATHEMATICS

By the end of the school year, your twelfth grader should be able to:

Precalculus:

- Explore classes of functions
- Communicate using clear math language, diagrams, and symbols
- Prepare for higher level mathematics

SCIENCE

By the end of the school year, your twelfth grader should be able to:

Physics

- Build an understanding of the basic concepts in physics
- Describe the concepts of displacement, speed, velocity, and acceleration and apply the mathematics to support these concepts
- Examine force and Newton's Laws of Motion, including mass and acceleration
- Students should be encouraged to take science elective in (Environmental Science, Earth Science, AP Biology, AP Chemistry).

SOCIAL STUDIES

- Investigate the foundations of the American political system and explore basic values and principles of American democracy
- Analyze how the government established by the United States Constitution embodies the purposes, values, and principles of American democracy
- Explain how the political and legal systems provide a means to balance competing interests and resolve conflicts
- Analyze features of the economic system of the United States
- Explain why laws are needed and how they are enacted, implemented, and enforced at the national, state and local level



HEALTH/PHYSICAL EDUCATION

By the end of the school year, your twelfth grader should be able to:

- Know positive ways to influence others to make healthful choices
- Understand the challenges and responsibilities of parenting
- Discuss the importance of early detection and warning signs that prompt people to seek medical care
- Participate regularly in physical activity
- Encourage friends and family to maintain health and fitness plans

ART AND MUSIC

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Art

- Demonstrate advanced ability in the use of art media, techniques and processes
- Present a portfolio of work that shows their art skills and personal understanding of their work
- Know about the wide variety of careers in the visual arts
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