

SCHOOL DISTRICT OF PHILADELPHIA

GRADE-LEVEL EDUCATIONAL GOALS
PARENT REFERENCE GUIDE

8TH GRADE

READING / WRITING

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

- 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

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

- 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

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

- 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

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

- 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