#### 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

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- 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

## SOCIAL STUDIES

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

- 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:
  - Algebra1, Geometry and Algebra 2 Physical Science, Biology and Chemistry 3 Science credits:
  - World History, African American 4 Social Studies credits: • 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