

**Grade 8** 

# Assessments

Grade eight students in the Schenectady City School District are screened three times per year for literacy to ensure that they are on track for writing proficiency.

Students take periodic assessments in mathematics, English language arts, science, and social studies to measure their progress toward the standards.

Grade 8 students also take New York
State Assessments in mathematics and
English language arts.

New York State learning standards outline what a student should know and be able to do by the end of the grade

level or band. There are also skills that a well-rounded students should possess. Listed below are examples of the Schenectady City School District Academic Expectations for Eighth Grade Students. These should be viewed holistically and are not meant to determine promotion or retention. A student may demonstrate or be on track for proficiency without having mastered every skill. Teachers intervene as appropriate to support skills development.

# **READING**

- Provide relevant and specific details from texts to support answers and inferences
- Identify and analyze two or more main ideas in a text
- Analyze text structure, point of view, use of dialogue
- Analyze how elements of plot and individual, events, and ideas are developed

# WRITING AND LANGUAGE

- Produce both on-demand and process writing in narrative, informational, argument, and research forms, using transitional words and phrases
- Use appropriate strategies to analyze text, take notes, and outline
- Produce writing with appropriate development, organization, and style

# **VOCABULARY**

- Use context clues and knowledge of common Greek and Latin roots, prefixes, and suffixes to determine meaning of unknown words
- Understand figurative language, word relationships and nuances in meaning
- Acquire and use grade-appropriate general academic and content area words

#### SPEAKING AND LISTENING

 Engage effectively in one-on-one and group discussions with diverse partners, building on others' ideas and expressing their own clearly

## **MATH**

Grade Level Fluencies (Ex: Solve 2 x 2 systems by inspection)

# **The Number System**

• Approximate irrational numbers by rational numbers

# **Expressions and Equations**

- Work with radical and integer exponents
- See connections between proportional relationships, lines, and linear equations
- Analyze and solve linear equations and pairs of simultaneous linear equations

# Geometry

- Understand congruence and similarity
- Understand and apply the Pythagorean Theorem
- Solve real-world problems involving volume of cylinders, cones spheres

## **Statistics and Probability**

## **Functions**

# Define, evaluate and compare functions

• Use functions to model relationships between quantities

## **TIPS FOR PARENTS**

Set aside a designated homework space. Your child should do schoolwork each night even if nothing is due right away. Students can review notes taken during class or read a novel or textbook.

Ensure your student has a system for recording dates that assignments are due. Help students map out due dates for each part of a project (bibliography, research, draft, revisions).

Designate quiet time every day for silent reading. Ask your students questions about the book they selected. Read the book. Yourself so you can talk about it together.

Encourage your child to select informational books about science, history, art, music, and famous people. Building background knowledge is important for comprehension.

Expect your child to write daily. Encourage them to use the strategies they learn in school. Writing about what they have read improves comprehension.

As you child to solve basic math mentally. Expect a quick verbal response. Practice multiplication tables if answers are not automatic.

Involve your child in tasks at home that require math like cooking, measuring, building, etc.



#### **SCIENCE**

- Understand and apply concepts, principles, theories related to living environment
- Recognize the historical development of ideas in science: scientific method; cell; genetics; human body;
   evolution; ecology; classification
- Use scientific equipment to take measurement, using standard metric units
- Recognize that objects have properties that can be observed, describe, and/or measured (states of matter, density, temperature, conductor, volume, etc.)
- Use scientific inquiry to demonstrate understanding of the scientific process and science concepts by making observations and testing proposed explanations, analyze using both conventional and invented methods, to provide insights into different phenomena

#### **SOCIAL STUDIES**

- Analyze post-Civil War efforts to heal the nation and redefine the status of African Americans
- Understand how industrialization and immigration contributed to urbanization
- Analyze westward expansion and America's foreign policy in the later 19<sup>th</sup> Century
- Understand the impact of WWI and the Great Depression on American society
- Analyze WWII and its effect s, and why post-WWII foreign policy must address environmental concerns and increased economic interdependence and competition
- Examine the Civil Rights Movement and the Great Society as ways to address major social, legal, economic, and environmental problems societies

#### **ART**

- Analyze, reflect, discuss, and interpret artwork, identify artists' inferences
- Research, discuss and demonstrate are from diverse cultures throughout time
- Use Elements of Art/Principles of Design to share meanings and ideas with others
- Use a variety of materials and tools, including digital technology media

## **MUSIC**

- Perform complex sight singing melodies and rhythms
- Identify musical elements including triads, major and minor scales, key signatures
- Demonstrate knowledge of music periods: Classical, Romantic, 20<sup>th</sup> Century
- Choose a literary excerpt (poem, short story, etc.) and set it to music

#### **PHYSICAL EDUCATION**

- Demonstrate competency in varied motor and specialized manipulative skills
- Apply tactical concepts in physical activity
- Demonstrate safe, responsible, personal, and social behavior

# **HOME & CAREER SKILLS**

- Demonstrate management of consumer resources, clothing, age-appropriate finances, human development, interpersonal relationships, personal environments, and nutrition/wellness through hands-on, practical application
- Identify age-appropriate connections to the workplace by researching and exploring careers and their connection to the community

#### **WORLD LANGUAGES**

- Understand simple vocabulary and language structures in face-to-face dialogue and main ideas of longer conversations with unfamiliar vocabulary and structures
- Understand the main idea and some details of simple informative materials written for native speakers
- Compose short, informal notes and messages
- Understand some key cultural traits of the societies speaking the target language

#### INTRODUCTION TO TECHNOLOGY

- Demonstrate problem solving using technology, management of technological resources, and the effects of technology on everyday life though practical application
- Research and explore careers related to the technological world around them
- Apply core skills and concepts to complete technological tasks effectively