



Office of Instruction Buffalo Public Schools

Grade Level Expectations

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 additional skills that a well-rounded student should possess. Listed below are examples of Buffalo Public Schools' 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, specific details from text to support answers, 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 & individuals, events, & ideas are developed

WRITING & 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 the meaning of unknown words
- Understand figurative language, word relationships and nuances in meaning
- Acquire and use grade-appropriate general academic and content area words

LISTENING & SPEAKING

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

MATH

GRADE LEVEL FLUENCY:

THE NUMBER SYSTEM: Know that there are numbers that are not rational and approximate them by rational numbers

EXPRESSIONS & EQUATIONS

- Work with radicals and integer exponents
- Understand the connections between proportional relationships, lines, & linear equations
- Analyze and solve linear equations and pairs of simultaneous linear equations

GEOMETRY

- Understand congruence and similarity using physical models, transparencies, and geo software
- Understand and apply the Pythagorean Theorem
- Solve real-world and mathematical problems involving volume of cylinders, cones spheres

STATISTICS AND PROBABILITY

FUNCTIONS

- Define, evaluate and compare functions
- Use functions to model relationships between quantities

GRADE 8

Grade 8 Mathematics Screening Measure

Short, computer adaptive diagnostic assessment that screens students across four domains:

- Algebra and Algebraic Thinking
- Measurement and Data
- Number and Operations
- Geometry

Grade 8 students take periodic assessments in mathematics, English language arts, science and social studies to measure their progress toward standards.

Students in grade 8 use a computer based adaptive diagnostic that assesses vocabulary and comprehension.

Grade 8 students take State Assessments in Mathematics, English Language Arts, and Science.



GRADE

8



TIPS FOR PARENTS

Set aside a designated homework space. Your student should do school work each night, even if work isn't 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 (e.g., bibliography, research, draft, revisions).

Designate quiet time every day for silent reading. Ask students questions about the book they have chosen. Read the book yourself to foster better conversation.

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

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

Ask your student to solve math mentally; expect a quick verbal response. Practice multiplication tables if answers are not automatic.

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

SCIENCE

- Understand & apply concepts, principles, theories related to the living environ
- Recognize the historical development of the ideas in science: scientific method; cell; genetics; human body; evolution; ecology; classification
- Use scientific equipment to take measurements using standard metric units
- Recognize that objects have properties that can be observed, described, and/or measured (e.g., states of mater, 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 19th Century
- Understand the impact of WWI and the Great Depression on American society
- Analyze WWII and its effects, and why post-WWII foreign policy must address environmental concerns & increased economic interdependence & competition
- Examine the civil rights movement and the Great Society as ways to address major social, legal, economic, and environmental problems

MUSIC

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

ART

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

PHYSICAL EDUCATION

- Demonstrate competence 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
- Research and explore career options and their connection to the community

INTRODUCTION TO TECHNOLOGY

- Demonstrate problem solving using technology, management of technological resources, & the effects of technology on everyday life through practical application
- Identify age-appropriate connections to the workplace through research and exploration of career options related to the technological world around them

WORLD LANGUAGES

- Understand simple vocabulary and language structures in face-to-face dialogue & main ideas of longer conversations with unfamiliar vocabulary & 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