



What every FIFTH GRADE student should know and be able to do!

A Message To The Reader

This resource is provided by Mesa Public Schools. It contains the fifth grade expectations for English Language Arts, Mathematics, Science, and Social Studies. The goal for Mesa Public Schools is to help all students be successful and ready to move forward to the next grade level. These skills and expectations are aligned to the Arizona Standards and our district adopted curriculum. Each standard builds on the standard that came before and toward the standard that comes in the next grade level.

For additional information on grade-level readiness, please visit the National Parent Teacher Association, <https://www.pta.org/docs/default-source/uploadedfiles/5th-grade-june20>

ENGLISH LANGUAGE ARTS

The 2016 Arizona English Language Arts standards include reading and writing foundational skills to help put your child on the path to academic success. Daily reading and writing practice is an important component for grade-level readiness.

Students should know and be able to . . .

Phonics and Word Recognition

- read multisyllabic words accurately
- apply knowledge of the six syllable patterns
- use combined knowledge of morphology to read grade-level words accurately

Fluency

- read grade-level text with purpose and understanding
- read orally with accuracy, appropriate rate, and expression
- use context clues to self-correct word recognition and understanding

Sound-letter Basics and Handwriting

- read and write cursive letters, upper and lower case

Literature

- quote accurately from a text when explaining what the text says explicitly and when drawing inferences
- use details from the text to determine a theme of a story, including how characters respond to challenges
- compare and contrast two or more characters, settings, or events in a story, drawing on specific details
- determine the meaning of words and phrases, including figurative language such as metaphors and similes
- determine the structure of stories, poems, and dramas
- describe how a narrator's or speaker's point of view influences how events are described
- analyze how visual/multimedia elements contribute to the text
- compare and contrast stories in the same genre

Informational Text

- quote accurately from a text when explaining what the text says explicitly and when drawing inferences
- determine two or more main ideas of a text and explain how it is supported by key details; summarize the texts
- explain the relationships between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text
- determine the meaning of academic words and phrases
- compare and contrast the structure of events, ideas, concepts, or information in two or more texts
- analyze multiple accounts of the same event or topic, including the point of view
- locate information from multiple print or digital sources
- explain how an author uses reasons and evidence to support particular points in text
- integrate information from several texts on the same topic

Writing

- write opinion pieces, on topics or texts, supporting a point of view with clearly explained reasons and information
- write informative/explanatory pieces to examine a topic and convey ideas and information clearly
- write narratives to develop real or imagined experiences with events using effective technique, descriptive details, and clear event sequences
- produce clear and coherent writing
- develop and strengthen writing by planning, revising, and editing
- use technology to produce and publish writing and to interact and collaborate with others
- conduct short research projects that use several sources to build knowledge of a topic
- gather information from print and digital sources, summarize or paraphrase the information, and provide a list of sources
- draw evidence from literary and informational texts to support analysis, reflection and research
- write routinely over extended and shorter time frames

Speaking and Listening

- engage in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own ideas clearly
- pose and respond to questions; make comments that contribute to the discussion and link to the remarks of others
- summarize a written text read aloud or information presented in diverse media and formats
- report on a topic or present an opinion, using appropriate facts and relevant details to support main ideas

Language

- use parts of speech correctly when writing or speaking
- use appropriate capitalization, punctuation, and spelling when writing
- spell grade-appropriate words correctly, using print and digital references as needed
- expand, combine, and reduce sentences to improve meaning
- use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word
- use reference materials including digital resources
- demonstrate understanding of figurative language, word relationships, and nuances in word meanings

MATH

The goal of MPS is for every child to be successful in developing the concepts and understanding of mathematics and to recognize the connections between mathematics and everyday life.

Students should know and be able to ...

Operations and Algebraic Thinking

- write and apply mathematical expressions using order of operations
- use number patterns and identify relationships in patterns
- understand and decompose prime numbers

Number and Operations in Base Ten

- understand the value of multi-digit numbers in relation to place value
- read, write, compare, and round decimals to the thousandths
- multiply multi-digit whole numbers fluently
- solve problems involving division of numbers with up to four digits divided by two digits
- solve problems involving addition, subtraction, multiplication, and division of decimals to the hundredths place

Number and Operations - Fractions

- add and subtract fractions with unlike denominators, including word problems
- use equivalent fractions to add and subtract fractions
- multiply a fraction or a whole number by a fraction
- find the area of a rectangle with fractional side lengths
- solve real world problems involving multiplication of fractions, mixed numbers, and division of unit fractions

Number and Operations - Fractions *continued*

- convert between standard measurement units; use these conversions in solving real world problems

Measurement and Data

- create line plots that include fractions and use operations on fractions to solve problems
- use math manipulatives to calculate volume
- solve real world problems relating to volume
- use operations on fractions to solve problems involving information from line plots

Geometry

- plot and interpret positive numbers on a coordinate plane using real world and mathematical problems
- understand attributes of 2-dimensional figures
- classify 2-dimensional figures based on properties

Mathematical Practices

- apply the eight Standards for Mathematical Practice such as problem solving, modeling, and logical reasoning to solve math problems

SCIENCE

Students should know and be able to ...

Inquiry Process

- formulate testable questions and predictions
- locate and use background research
- plan and conduct simple investigations based on student developed questions
- measure, record, and analyze data
- develop new questions and predictions
- communicate results of investigations

History and Nature of Science

- describe history of science as a human endeavor including diversity of people and science-related careers
- explain the cycle of how new scientific knowledge generates new scientific inquiry
- describe how scientific knowledge is subject to modification and/or change
- compare collaborative approaches that scientists use

Personal and Social Perspectives

- explain the impacts of natural hazards on habitats
- propose a solution, resource, or product that addresses a need
- describe the relationship between science and technology
- design and construct a technological solution to a common problem or need

Life Science

- identify functions and parts of the skeletal and nervous systems
- identify types of muscles
- distinguish between voluntary and involuntary response

Physical Science

- identify matter and describe changes in matter
- distinguish between mixtures and compounds
- describe the forces of gravity and friction
- examine forces and motion with simple machines
- demonstrate effects of variables on an object's motion
- explain the concepts of flight

Earth and Space Science

- describe phases of the moon
- describe Earth's rotation
- describe the role of gravity between celestial objects
- identify the planets and their characteristics
- describe changes in position and motion of objects in the sky
- explain motion of the Sun and stars
- describe efforts to explore space

SOCIAL STUDIES

Students should know and be able to ...

American History (**These skills are repeated in World History.*)

- *interpret historical data and construct timelines**
- *describe difference between and locate information using primary/secondary sources**
- *discuss connections between current and historical events/issues studied**
- *describe how archaeological research helps us understand the past**
- describe causes/effects of exploration and colonization, and how they shaped the U.S.
- describe events and historical figures in the American Revolution and Revolutionary War
- describe events of 19th Century presidencies
- describe factors leading to the Civil War and key figures in the reform movement prior to the war

World History

- describe effects of European exploration, trade, and colonization on other parts of the world
- explain rationale and characteristics of rebellion and the impact it has on society
- compare causes and outcomes of the American Revolution to others around the world

Civics/Government

- identify democratic principles associated with the Articles of Confederation, Mayflower Compact, Declaration of Independence, U.S. Constitution, and Bill of Rights, and how each works
- recognize contributions of key figures in the creation of the American government
- describe how the checks/balance system works
- describe the importance of citizens being involved in the democratic process
- describe characteristics of a monarchy and republic

Geography

- describe how geographic features influenced events in the past
- describe and locate major natural and human features that define places
- describe ways European colonists and American Indians viewed and used the environment

Economics

- use economic concepts to examine historical events
- describe major institutions in the U.S. economy
- describe interaction of U.S. consumers/businesses
- describe costs/benefits of economic choices
- explain how personal finance options are used to purchase goods and services