



What every FOURTH 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 fourth 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/4th-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 knowledge of roots and affixes 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

Literature

- refer to details from the text when explaining and drawing inferences
- determine the theme of a story from details in the text; summarize the text
- describe a character, setting, or event, drawing on specific details
- determine the meaning of words and phrases as they are used in a text
- compare and contrast the narrator's point of view in stories
- make connections between the text and visual or oral presentations
- compare and contrast the treatment of similar themes, topics, and/or patterns of events from different cultures

Informational Text

- refer to details from the text when explaining and drawing inferences
- determine the main idea of a text and explain how it is supported by key details; summarize the text
- explain events, procedures, ideas, or concepts based on specific details
- describe the overall structure of events, ideas, concepts, or information
- compare and contrast different accounts of the same event or topic
- interpret and explain information presented visually and/or orally and explain how the information contributes to an understanding of the text
- explain how an author uses reasons and evidence to support particular points in a text
- integrate information from two texts on the same topic

Sound-letter Basics and Handwriting

- read and write cursive letters, upper and lower case
- transcribe ideas legibly and fluently with appropriate spacing and indentation

Writing

- write opinion pieces, supporting a point of view with reasons and information
- write informative/explanatory text to examine a topic and convey ideas and information clearly
- write narratives to develop real or imagined experiences or 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 builds knowledge through investigations
- draw evidence from literary and informational text 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
- paraphrase portions of a text read aloud or information presented in diverse media and formats
- identify the reasons and evidence a speaker provides to support particular points
- present information in an organized and clearly stated manner
- add audio and visual media to presentations when appropriate
- use formal or informal English when appropriate to task and situation

Language

- use parts of speech correctly when writing or speaking
- produce complete sentence, recognizing and correcting inappropriate fragments and run-ons
- correctly use frequently confused words
- use appropriate capitalization, punctuation, and spelling when writing
- choose words and phrases to convey ideas precisely
- use common, grade-appropriate Greek and Latin prefixes, suffixes, and roots as clues to the meaning of a word
- use context to determine meaning of a word or phrase

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

- find and apply factors and multiples of a given whole number to solve problems
- fluently recall multiplication and division facts through 12x12
- solve problems by multiplying multi-digit whole numbers with and without regrouping

MATH Operations and Algebraic Thinking *continued*

- solve problems by dividing multi-digit whole numbers by a single-digit number with and without remainders
- create a number or shape pattern with a given rule

Number and Operations in Base Ten

- read, write, compare, and order whole numbers
- use place value to solve problems
- round multi-digit whole numbers to any place
- use estimation strategies to verify reasonableness of a calculation in a variety of situations
- fluently add and subtract multi-digit whole numbers

Number and Operations- Fractions

- understand decimal notation for fractions
- compare decimals
- model, write, and compare fractions

Number and Operations- Fractions - *continued*

- convert fractions (tenths and hundredths) to decimals
- solve problems by adding and subtracting fractions and mixed numbers
- solve problems by multiplying fractions by whole numbers

Measurement and Data

- convert measurements within a measurement system
- solve word problems involving distance, time, volume, mass, and money
- make line plots to display measurement data to the nearest fraction of unit
- solve problems using formulas
- measure angles between 0-360 degrees and solve degree problems to find the unknown measurement of angles
- solve problems involving perimeter and area

Geometry

- draw and identify lines and angles
- recognize and draw lines of symmetry in a 2-dimensional figure
- classify 2-dimensional shapes using properties of lines and angles

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

- differentiate inferences from observations
- formulate relevant questions and predictions based on observed cause and effect relationships
- plan a simple investigation that identifies the variables to be controlled
- analyze data and draw conclusions
- communicate data

History and Nature of Science

- describe history of science as a human endeavor including diversity of people and science-related careers
- explain the role of experimentation in scientific inquiry
- describe components in a system
- explain ways that scientists generate ideas

Personal and Social Perspectives

- describe the beneficial and harmful impact of natural events and human activities on the environment
- explain how science and technology have improved the lives of many people describe benefits and risks related to the use of technology

Personal and Social Perspectives *continued*

- design and construct a technological solution to a common problem or need

Life Science

- compare structures of plants and animals
- classify animals
- describe resources and how they meet the needs of a population
- differentiate between renewable and non-renewable resources
- describe conservation methods of reduce, reuse, and recycle
- recognize adaptations that allow plants and animals to survive

Physical Science

- demonstrate that electricity flowing in circuits can produce light, sound, heat, and magnetic effects
- construct series and parallel circuits

Earth and Space Science

- identify earth processes that cause erosion
- compare rapid and slow processes that change the Earth's surface
- analyze evidence that indicates life and environmental conditions have changed

SOCIAL STUDIES

Students should know and be able to ...

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

- *locate information using primary and secondary sources**
- *use timelines, graphs, tables, charts, and maps to interpret historical data**
- describe the legacy, cultures, and influences of prehistoric people in Arizona
- recognize the features and achievements of the Maya, Aztec, and Inca people
- describe Spanish, Mexican explorers, colonization, and interactions with the first inhabitants of Arizona
- describe events in the Mexican-American and Civil Wars that led to Arizona becoming a territory
- describe events in the Great Depression and World War II that impacted Arizona
- discuss the connections between American current events and historical events
- describe the influence of key individuals and diverse populations in Arizona

World History

- discuss life in Europe: castles, knights, and the Crusades
- describe encounters, trade with European explorers
- discuss connections between world current events and historical events

Civics/Government

- describe the state and national symbols, and monuments that represent American democracy and values
- discuss the three branches of state government and how laws are made
- identify rights and freedoms supported by American documents
- describe the levels and roles of government, including local, tribal, and state

Geography

- use different types of maps and geography skills to solve problems
- demonstrate understanding of the physical and human features that define Arizona
- describe impact of people on natural environment
- describe how Mexico and Arizona are connected by the movement of people, goods, and ideas

Economics

- explain the decision for personal spending choice
- identify that specialization improves standards of living
- give examples of how voluntary exchanges of goods and services can be mutually beneficial
- describe economics as it pertains to price incentives, taxes, career choices and income, and the role of financial institutions