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

## A Message to the Reader

This resource is provided by Salt River Schools. It contains the fifth grade expectations for English Language Arts, Mathematics, Science, and Social Studies. The goal for Salt River Schools is to help all students be successful and ready to move forward to the next grade level. These skills and expectations align to the Arizona Standards and our Division's 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 Arizona Department of Education site: https://www.azed.gov/standards-practices

## English Language Arts

The 2018 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 . . .

**Reading Standards for Literature**

- independently and proficiently read grade-appropriate and increasingly complex literature from a variety of genres
- determine themes in literary texts
- analyze elements of literature, including an author's use of figurative language
- quote accurately by referring to the text
- compare and contrast different texts
- analyze the way a text is structured

**Reading Standards for Informational Text**

- read and analyze grade appropriate informational text from a variety of content areas such as history/social studies, science and technical texts
  determine meaning from reading informational texts
- quote text accurately by referring to the text
- summarize informational text accurately
- integrate information gained from a variety of texts to determine different points of view

**Reading Standards Foundational Skills**

- apply a variety of strategies to read unknown words in and out of context
- read text with purpose and understanding, self-monitoring understanding

**Writing Standards**

- write opinion and explanatory pieces that include evidence to support ideas, linking words, precise vocabulary and a conclusion
- write narratives that include a clear sequence of events, descriptive details, dialogue, and words that indicate a change in time
- conduct short research projects to build knowledge through investigation
- plan, draft, revise and edit to produce clear and coherent writing
- demonstrate sufficient command of keyboarding skills to complete a writing task

**Writing Foundational Standards**

- read and write cursive and manuscript

**Speaking and Listening Standards**

- collaborate in discussions through effectively speaking and listening in a variety of settings
- prepare for a discussion by reading and studying the required materials, drawing on that preparation during the discussion
- paraphrase information from a wide range of sources
- report on a topic or text, sequencing ideas logically, using relevant facts and details, and including multimedia components

**Language Standards**

- demonstrate mastery of grade level conventions (grammar, capitalization, punctuation, and spelling)
- construct paragraphs that include an introduction of the topic, supporting details, and conclusion
- use knowledge of Greek and Latin prefixes, suffixes, and roots to determine the meaning of unknown words
- determine the meaning of unknown words using root words, prefixes, suffixes, context clues, and dictionaries
- demonstrate the meaning of idioms and figurative language

## Mathematics

The goal of Salt River Schools is for every child to develop a deep understanding of mathematical concepts and procedures, while discovering connections to other subjects through real-life problem solving.
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 Focus: Patterns. Scale, Proportion, and Quantity

Students should know and be able to …

Understand the **Science & Engineering Practices** as they relate to the application of 5th grade Science: ***Ask questions and define problems; Develop and use models; Plan and carry out investigations; Analyze and interpret data; Use mathematics and computational thinking; Construct explanations and design solutions; Engage in argument from evidence; Obtain, evaluate, and communicate information***

Understand the **Crosscutting Concepts** and how to apply them to 5th Grade Science: ***Patterns; Cause and Effect; Scale, Proportion and Quantity; Systems and System Models; Energy and Matter; Structure and Function; Stability and Change***

**Physical Science**
- analyze and interpret data to explain that matter of any type can be subdivided into particles too small to see and, in a closed system, if properties change or chemical reactions occur, the amount of matter stays the same
- plan and carry out investigations to demonstrate that some substances combine to form new substances with different properties and others can be mixed without taking on new properties
- construct an explanation using evidence to demonstrate that objects can affect other objects even if they are not touching
- obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects

**Earth and Space - *continued***
- obtain, analyze, and communicate evidence to support an explanation that the gravitational force of Earth on objects is directed toward the planet's center

**Life Science**
- obtain, evaluate, and communicate information about patterns between the offspring of plants, and the offspring of animals (including humans); construct an explanation of how genetic information is passed from one generation to the next
- construct an explanation based on evidence that the changes in an environment can affect the development of the traits in a population of organisms

| | |
|---|---|
| • define problems and design solutions pertaining to force and motion<br>• analyze and interpret data to determine how and where energy is transferred when objects move<br>**Earth and Space**<br>• develop, revise, and use models based on evidence to construct explanation about the movement of the Earth and Moon within our solar system | • obtain, evaluate, and communicate evidence about how natural and human-caused changes to habitats or climate can impact populations<br>• construct and argument based on evidence that inherited characteristics can be affected by behavior and/or environmental conditions |

## Social Studies Focus: United States Studies (American Revolution to Industrialism – 1763 to 1900s)

Students should know and be able to …

***Understand the Six Elements of the Inquiry Arc: 1. Developing compelling questions; 2. Constructing supporting questions; 3. Gathering and evaluating sources; 4. Developing claims; 5. Communicating conclusions; 6. Taking informed action***

| | |
|---|---|
| **Disciplinary Skills and Processes**<br>• create and use chronological sequence of related events to compare developments that happened at the same time<br>• explain how events of the past affect students' lives and society<br>• generate questions about individuals and groups who have shapes significant historical changes and continuities<br>• explain why individuals and groups during the same historical period differed in their perspectives<br>• develop compelling and supporting questions about the United States that are open to different interpretations<br>• use distinctions among fact and opinion to determine the credibility of multiple sources<br>• compare information provided by multiple sources about events and developments in the United States<br>• infer the intended audience and purpose of a source about events and developments in the United States<br>• use information about a historical source including the author, date, place of origin, intended audience, and purpose to judge the extent to which the source is useful for studying a topic and evaluate the credibility of the source<br>• construct and present arguments using claims and evidence from multiple sources<br>• construct and present explanation using reasoning, correct sequence, examples and details with relevant information and data<br>• explain probable causes and effects of events and developments in United State history for the revolutionary period to the rise of industry and urbanization<br>• use evidence to develop a claim about the past summarize the central claim in a secondary source<br>**Civics**<br>• explain how a democracy relies on people's responsible participation within the context of key historical events pre-American Revolution to Industrialization<br>• describe the origins, functions, and structure of the United States Constitution and the three branches of government<br>• using primary sources and secondary sources to examine historical and contemporary means of changing society through laws and policies in order to address public problems | **Civics continued**<br>• use a range of deliberate and democratic procedures to make decisions about and act on issues and civic problems in their classrooms and schools<br>**Economics**<br>• give examples of financial risks that individuals and households face within the context of the time period studied<br>• compare the benefits and costs of individual choices within the context if key historical events<br>• develop an understanding of the characteristics of entrepreneurship within a market economy and apply these characteristics to individuals<br>• describe how government decisions on taxation, spending, protections, and regulation affected the national economy<br>• analyze how agriculture, new industries, new technologies changes in transportation, and labor impacted the national economy including productivity, supply and demand, and price<br>• generate questions to explain how trade leads to increasing economic interdependence on different nations<br>**Geography**<br>• use and construct maps and graphs to represent changes in the United States<br>• describe how natural and human-caused changes to habitats or climate change our world<br>• use key historical events with geographic tools to analyze the cause and effects of environmental and technological events on human settlements and migration<br>• describe how economic activities, natural phenomenon and human-made events in one place or region are impacted by interactions with nearby and distant places or regions<br>**History**<br>• use primary and secondary sources to summarize the causes and effects of conflicts, resolutions an social movements throughout the historical timeframe<br>• use primary and secondary sources to describe how different groups shaped the United States' multicultural society with the historical timeframe |