# **FIFTH GRADE** Learning Objectives for **Language Arts**

## ***READING AND LITERATURE***

**The learner will**

- ☑ use prior knowledge and experience to describe or explain.
- ☑ predict and categorize information in informational texts.
- ☑ locates information to support opinions, predictions and conclusions.
- ☑ determine the progression of ideas to locate information.
- ☑ interpret, synthesize and evaluate information gathered from a variety of sources.
- ☑ recognize example of literary techniques and figurative language including: metaphor, simile, alliteration, onomatopoeia, rhythm, rhyme, hyperbole, imagery and personification.
- ☑ understand and identify the features of different literary forms including non-fiction, myths, biographies, plays, poems, stories and limericks.
- ☑ identify literary elements including storyline, conflict, climax, foreshadowing, theme, point of view, narration, dialogue, protagonist and antagonist.
- ☑ describe character development including trait, motivation and point of view.
- ☑ describe the development of the plot and explain how conflicts are resolved.
- ☑ describe the setting and explain why it is important to the story.
- ☑ apply decoding skills and reading strategies independently.
- ☑ read and learn new vocabulary related to the literature and content areas being studied.
- ☑ read a variety of literary forms including fiction, non-fiction, myths, textbooks and news articles to acquire information and for pleasure.
- ☑ summarize the main idea of oral and written narrative text and major ideas of oral and written expository text with relevant detail.
- ☑ read a variety of fifth grade texts with accuracy, appropriate rate, expression and comprehension.
- ☑ analyze element and style and explains how each defines a particular genre, e.g., mystery, adventure, cartoons, historical fiction, science fiction, myths, legends, news stories, biographies, autobiographies.
- ☑ analyze characters' personality traits, physical attributes, feelings and motivation, citing evidence from the story.
- ☑ distinguish between fact and opinion.
- ☑ apply personal understanding of ideas and themes in texts to empathize with characters, relate to author's viewpoint and discuss real life applications.

## ***WRITING AND GRAMMAR***

**The learner will**

- ☑ use vocabulary effectively.
- ☑ revise writing for clarity.
- ☑ edit final copies for correct grammar, capitalization, spelling, punctuation.
- ☑ demonstrate effective recording/writing techniques in a cooperative group setting.
- ☑ apply criteria to own and others' writing to assess growth as a writer.
- ☑ complete 3-4writing tasks during the year that use all stages of writing process and Six-Trait method such as: narratives, essays, letters, plays, short stories and poetry.
- ☑ can switch between cursive and print with ease.
- ☑ write in complete sentences using correct structure and varying sentence types such as compound and complex to make writing more interesting.
- ☑ use adjectives and adverbs to make writing more vivid or precise.
- ☑ apply standard grammar and usage including subject/verb agreement, pronouns, parts of speech, conjunctions and prepositional phrases.
- ☑ write in a variety of styles including: essays, poetry, short stories, letters, plays and narratives.
- ☑ to work through a variety of word activities for given spelling words.
- ☑ review the previous learned types of writing forms learned in grades K through 4.

# **FIFTH GRADE** Learning Objectives for **Language Arts**

## ***SPEAKING AND LISTENING***

**The learner will**

- ☑ share responses in subject-related learning.
- ☑ participate in and contribute to discussions across content areas.
- ☑ organize information to present reports of group and individual activities.
- ☑ make effective oral presentations including poetry readings, dramatizations, oral reading.
- ☑ clarifying and supporting ideas with evidence and examples when appropriate.
- ☑ giving clear directions and instructions when appropriate.
- ☑ incorporating visual aids to support presentation.
- ☑ maintain eye contact with listeners.
- ☑ use appropriate posture for setting.
- ☑ apply the basic elements of courtesy desirable in person to person and group discussions.

## ***STUDY SKILLS/RESEARCH METHODS***

**The student will**

- ☑ skim materials to develop a general overview of content or to locate specific information.
- ☑ develop notes that include important concepts, paraphrasing and summarizing of ideas and identification of information sources.
- ☑ organize and record information using visual aids such as charts, maps and graphs.
- ☑ use available electronic databases to access information.
- ☑ present information in various forms using available technology.
- ☑ develops an outline.
- ☑ select an appropriate topic for writing.
- ☑ generating ideas about topic.
- ☑ organizing information into coherent paragraph form.
- ☑ selects and uses the appropriate resources for the task: dictionary for word meaning, encyclopedia for concept information and thesaurus for synonyms.

# **FIFTH GRADE** Learning Objectives for **Mathematics**

## ***NUMBER SENSE***

**The learner will**

- ☑ reads, writes, orders and determines place value for numbers from the billions to the thousandths.
- ☑ uses strategy for rounding whole numbers to a given place.
- ☑ uses exponential notation: converts between exponential, expanded and standard notation.
- ☑ identifies the factors and the prime factorization of a number.
- ☑ determines whether a number is prime or composite.
- ☑ begins to use test of divisibility rules.
- ☑ identifies fractional part of a region and/or collection of objects.
- ☑ compares fractions.
- ☑ finds equivalent fractions (2/4=1/2).
- ☑ renames fractions in simplest form.
- ☑ renames basic fractions as decimals and percents
- ☑ calculates to rename any fraction as decimal or percent.
- ☑ uses fractions to represent ratios.
- ☑ begins to convert between mixed numbers and “improper” fractions.
- ☑ shades hundreds grid to represent a fraction or a decimal.
- ☑ begins to find decimals on the number line.
- ☑ begins to round decimals to a given place.
- ☑ begins to describe terminating and repeating decimals.
- ☑ shades a percent of a region.
- ☑ begins to find a percent of a number.
- ☑ begins to use unit fractions and percents to find a whole.
- ☑ compares and orders positive and negative numbers.
- ☑ begins to recognize the situation in which negative numbers are used.

## ***COMPUTATION***

**The learner will**

- ☑ know basic multiplication facts by rote memory up to twelve.
- ☑ multiply a three digit number by a three digit number.
- ☑ divide five digit numbers by two digit divisors.
- ☑ add and subtract decimals representing tenths, hundredths and thousandths.
- ☑ add, subtract and multiply fractions, including mixed numbers and write the sum, difference or product in simplest form.
- ☑ estimate results of computations with whole numbers, fractions, decimals and percents.
- ☑ know math terminology such as: factor, product, multiple, divisor, dividend, quotient, sum, difference, total.
- ☑ begin to multiply decimal numbers.
- ☑ develop and solve word problems involving division, multiplication, subtraction and addition.
- ☑ solve division problems involving money.

## ***ALGEBRA***

**The learner will**

- ☑ write and solve simple algebraic equations.
- ☑ use formulas to calculate answers.
- ☑ use the order of operations to solve simple algebraic equations.

# **FIFTH GRADE** Learning Objectives for **Mathematics**

## ***GEOMETRY***

**The learner will**

- ☑ sorts polygons according to their properties.
- ☑ classify triangles as isosceles, scalene or equilateral.
- ☑ identifies acute, obtuse, straight and right angles.
- ☑ measures and draws angles with a protractor.
- ☑ identifies and describes parallel lines.
- ☑ begins to use a compass and straightedge to copy a line segment and triangle.
- ☑ identifies and compares properties of geometric solids.
- ☑ begins to tessellate a regular polygon.
- ☑ understands and can find the perimeter of a polygon.
- ☑ uses formulas to find the area of a rectangle and triangle.
- ☑ defines and labels the diameter and radius of a circle.
- ☑ finds the area and circumference of a circle.
- ☑ recognize and compare shapes that are congruent and similar.
- ☑ describe and apply techniques such as: reflections, rotations and translations.

## ***MEASUREMENT***

**The learner will**

- ☑ recognize and use customary and metric measurement.
- ☑ solve problems using units of measurement.
- ☑ identify benchmarks for the measure of: length, weight, volume and time.
- ☑ order items by measures of weight and by measures of liquid amount.
- ☑ measure weight with a balance scale and weights.
- ☑ develop meaning for the concepts of volume and density; distinguishing between quantity and weight.
- ☑ determine when precise measurement is required and when estimates are good enough.
- ☑ use benchmarks to estimate measurements.
- ☑ choose and accurately use appropriate tools for measuring: weight, volume, capacity and time.
- ☑ develop, use, describe and justify the methods of determining volume.
- ☑ determine elapsed time.
- ☑ read and use a calendar.
- ☑ recognize and know values for coins and bills of Rand and U.S. currency.
- ☑ tell temperature using Celsius and Fahrenheit scales.

## ***STATISTICS AND GRAPHING***

**The student will**

- ☑ finds statistical landmarks of a data set (median, mean, mode and range).
- ☑ collects, organizes and interprets data.
- ☑ constructs and interprets bar graphs, line graphs and pictographs.
- ☑ plan and conduct a survey, analyze and display results.
- ☑ begins to express the probability of an event as a fraction, decimal or percent.
- ☑ begins to use a percent circle to construct and interpret circle graphs.
- ☑ begins to plot and read ordered pairs.

# **FIFTH GRADE** Learning Objectives for **Science**

## *INQUIRY PROCESS*

**The student will**

- ☑ plan and implement experimental investigations.
- ☑ ask well-defined questions.
- ☑ formulate testable hypotheses.
- ☑ collect information by observing and measuring.
- ☑ analyze and interpret information.
- ☑ construct reasonable explanations.
- ☑ communicate conclusions in a variety of ways including: graphs, tables, charts and written reports.

## *LIFE SCIENCE*

**The learner will**

- ☑ relate the invention of the microscope to the scientific study of cells.
- ☑ explain why the work of scientists who lived in the past is important to scientists who live today.
- ☑ identify and describe cell organelles.
- ☑ compare plant and animal cells.
- ☑ relate the importance of water to the life activities of cells.
- ☑ distinguish between osmosis and diffusion.
- ☑ explain why the movement of materials into and out of cells is an essential activity of cells.
- ☑ describe and explain the process of mitosis.
- ☑ recognize the need for the human body to produce cells.
- ☑ compare and contrast different levels of multi-cellular organization.
- ☑ explain how organization benefits a multi-cellular organism.
- ☑ distinguish the structures of the circulatory system.
- ☑ describe the functions of the different systems of the human body.
- ☑ conclude that the systems of the human body are dependent upon each other to complete life processes and activities.

## *PHYSICAL SCIENCE*

**The learner will**

- ☑ describe a frame of reference.
- ☑ explain how a frame of reference can change.
- ☑ describe how motion relates to time, distance and direction.
- ☑ compare and contrast speed and velocity.
- ☑ describe acceleration.
- ☑ explain how the acceleration of an object is related to its velocity.
- ☑ give examples of acceleration.
- ☑ compare and contrast kinetic and potential energy.
- ☑ compare and contrast elastic potential energy and gravitational potential energy.
- ☑ identify objects that display kinetic, potential, elastic potential and gravitational potential energy.
- ☑ describe the characteristics of force.
- ☑ explain how forces can be combined.
- ☑ identify the direction in which a force is acting.
- ☑ relate mass and distance to gravitational attraction.
- ☑ explain how the centre of mass of an object affects its ability to fall.
- ☑ compare and contrast weight and mass.
- ☑ explain how gravitational attraction can be measured.
- ☑ identify the force or forces that have been applied to an object.
- ☑ explain how the movement of an object is changed by the application of force.
- ☑ compare and contrast balanced and unbalanced forces.
- ☑ explain how forces combine to produce acceleration.
- ☑ compare and contrast balanced and unbalanced forces.
- ☑ explain how forces combine to produce acceleration.

# **FIFTH GRADE** Learning Objectives for **Science**

## ***PHYSICAL SCIENCE***

**The learner will**

- ☑ compare and contrast sliding friction, rolling friction and fluid friction.
- ☑ identify everyday activities in which forms of friction are present.
- ☑ evaluate the usefulness of friction.
- ☑ compare and contrast Newton's three laws of motion.
- ☑ relate acceleration to force and to mass.
- ☑ explain how the quantities of force and distance are related to the concept of work.
- ☑ compare and contrast power and work.
- ☑ relate the function of a machine to the direction and strength of applied forces.
- ☑ compare and contrast the efficiency of machines.
- ☑ give examples of common machines.
- ☑ compare and contrast simple machines.
- ☑ explain how simple and compound machines affect the ability to do work.
- ☑ identify common simple and compound machines.

## ***EARTH SCIENCE***

**The learner will**

- ☑ recognize that the true sizes and distances of objects in the universe often differ from the way they appear to an observer from Earth.
- ☑ demonstrate the shape of an ellipse.
- ☑ model the actions that cause solar and lunar eclipses.
- ☑ recognize the connection between the motions of Earth and the moon and the systems of time on Earth.
- ☑ model the phases of the moon.
- ☑ compare and contrast the moon and Earth.
- ☑ explain the current theory of the origin of the moon.
- ☑ interpret data related to the moon's surface.
- ☑ demonstrate retrograde motion.
- ☑ construct a scale model of the solar system.
- ☑ compare and contrast the four inner planets.
- ☑ explain the asteroids' place in the solar system.
- ☑ identify the characteristics of the outer planets and contrast these planets with the inner planets.
- ☑ distinguish between the meteors and comets.
- ☑ construct constellation models.
- ☑ demonstrate the sun's position in the sky throughout the year.
- ☑ compare and contrast types of telescopes.
- ☑ demonstrate the capabilities of telescopes.
- ☑ recognize and interpret units of measure for distances in the universe.

# **FIFTH GRADE** Learning Objectives for **Social Studies**

## *HISTORY*

**The learner will**

- ☑ describe the three early civilizations of America and how they developed.
- ☑ summarize the contributions of early explorers.
- ☑ explain the Puritans' reasons for coming to North America.
- ☑ describe how European exploration affected Native Americans.
- ☑ understand the important events leading up to the Revolutionary War.
- ☑ identify and describe how the Revolutionary War impacted the British and the colonists.
- ☑ explain the key ideas contained within the Declaration of Independence.
- ☑ describe how slavery shaped social and economic life in the south.
- ☑ describe the main events leading to the Civil War.
- ☑ describe the significant contributions of various individuals and groups to the development of democratic society.
- ☑ describe the major causes of wars and conflicts in US history and describe their effects on society, culture and government.

## *CULTURE AND CIVICS*

**The learner will**

- ☑ compare and contrast early Native American cultures and recognize their contributions.
- ☑ identify similarities and differences among selected racial, ethnic and religious groups in the US.
- ☑ describe the role of religion in the early civilizations, the life of the Native Americans and the colonization of America.
- ☑ explain how different groups celebrate their heritage as an important part of preserving traditions of the past.

## *ECONOMICS*

**The learner will**

- ☑ describe commerce and trade during colonial times.
- ☑ describe how technology developments impacted growth in factories.
- ☑ identify the major industries and service professions in areas of US.
- ☑ explain the economic impact of significant events.
- ☑ identify ways people save money and the advantages and disadvantages of each.
- ☑ explain the concept of “supply and demand” and how changes in supply and demand affected prices in colonial history.

## *GEOGRAPHY*

**The learner will**

- ☑ read, interpret, identify and explain various types of maps, symbols, graphs and tables.
- ☑ use latitude and longitude to locate places on a map.
- ☑ identify and locate major land forms, landmarks and cities of the US on a map.
- ☑ memorize and locate the 50 states on a map and identify regional areas such as Northeast, Mid-West and West.
- ☑ describe the factors in the environment that affect the climate of different regions of the US.
- ☑ identify major natural resources and their uses.
- ☑ describe efforts that Americans have made to clean up the environment to provide a better quality of life for its citizens.
- ☑ use the Five Themes of Geography to research a country and create a poster displaying information.

# **FIFTH GRADE** Learning Objectives for **Social Studies**

## ***SOCIAL AND POLITICAL SYSTEMS***

**The learner will**

- ☑ identify important people and events in the history and explain their roles in the development of the government.
- ☑ identify the executive, legislative and judicial branch of the US government and describe their functions.
- ☑ describe the systems of checks/balances in the federal government.
- ☑ describe how power is shared between the federal government and the states.
- ☑ describe experiences that are part of leadership in a democracy that helps people live and work together.
- ☑ explain the concept of separation of church and state.