

LANGUAGE ARTS

STATE GOAL 1: READ WITH UNDERSTANDING AND FLUENCY

LEARNING STANDARD A: Apply word analysis and vocabulary skills to comprehend selections.

FIFTH GRADE OBJECTIVES:

1. Identify the meaning of a word by using the context of a sentence.
2. Identify the meaning of a word by using the dictionary or other sources.
3. Develop an increased vocabulary through individualized reading.
4. Use a combination of word analysis and vocabulary strategies within context to identify new words.
5. Apply the meanings of root words, prefixes, and suffixes to understand word meanings.
6. Use synonyms, antonyms, homonyms, homophones, contractions and compound words to understand the meaning of a new word.
7. Determine the meaning of a word in context when the word has multiple meanings.
8. Identify and interpret common idioms, similes, and metaphors.

LANGUAGE ARTS

STATE GOAL 1: READ WITH UNDERSTANDING AND FLUENCY

LEARNING STANDARD B: Apply reading strategies to improve understanding and fluency.

FIFTH GRADE OBJECTIVES:

1. Identify details that support the main idea of a paragraph.
2. Locate a sentence in a selection which answers a specific question.
3. Sequence five main details of a reading selection.
4. Match cause statements with their corresponding effect statements.
5. Establish purposes for reading before and during reading.
6. Apply survey strategies (e.g. Use of bold print, organization of content, key words, graphics).
7. Make judgments based on prior knowledge during reading.
8. Distinguish between major and minor details in a reading selection.
9. Connect, clarify and extend ideas through discussion.
10. Read age appropriate material aloud with fluency and accuracy.
11. Apply self-monitoring and self-correcting strategies.
12. Discriminate between fact and opinion.
13. Use information from text and own experiences to make inferences.
14. Use details from text to compare and contrast how story elements are similar and different.

LANGUAGE ARTS

STATE GOAL 1: READ WITH UNDERSTANDING AND FLUENCY

LEARNING STANDARD C: Comprehend a broad range of reading materials.

FIFTH GRADE OBJECTIVES:

1. Summarize the main idea of a reading selection.
2. Make inferences and conclusions pertaining to reading selections.
3. Identify and interpret imagery and figurative language.
4. Use evidence in text to form and refine questions, predictions and hypotheses.
5. Identify evidence for inferences and interpretations based on text combined with prior knowledge.
6. Compare the context and organization of various reading selections.
7. Recognize the similarities/differences of varying points of view.
8. Synthesize ideas and supporting details to form conclusions.
9. Explain how authors and illustrators use text and art to express their ideas.
10. Interpret information from tables, maps, visual aids and charts to enhance understanding of text.
11. Apply appropriate reading strategies to fiction and non-fiction texts within and across content areas.

LANGUAGE ARTS

STATE GOAL 2: READ AND UNDERSTAND LITERATURE REPRESENTATIVE OF VARIOUS SOCIETIES, ERAS AND IDEAS.

LEARNING STANDARD A: Understand how literary elements and techniques are used to convey meaning.

FIFTH GRADE OBJECTIVES:

1. Identify ways in which fiction and nonfiction works are organized differently.
2. Identify literary elements and techniques in literary works (fables, biographies, historical fiction) and tell how they affect the story.
3. Predict how the story might be different if the author changed literary elements or techniques.
4. Make inferences about character traits and check text for verification.
5. Analyze the use of unfamiliar vocabulary.
6. Use comprehension strategies (association, categorization, graphic organizers) to enhance understanding.

LANGUAGE ARTS

STATE GOAL 2: READ AND UNDERSTAND LITERATURE REPRESENTATIVE OF VARIOUS SOCIETIES, ERAS AND IDEAS.

LEARNING STANDARD B: Read and interpret a variety of literary works.

FIFTH GRADE OBJECTIVES:

1. Distinguish between different forms of poetry.
2. Identify reading selections as being fact or fiction.
3. Create an extension to a literary text (alternate ending, additional dialogue for a character).
4. Apply personal background knowledge and experience to a literary text.
5. Analyze and remedy difficulties in comprehension (question, rephrasing, analyzing).
6. Compare ideas from texts representing a variety of times and cultures.

LANGUAGE ARTS

STATE GOAL 3: WRITE TO COMMUNICATE FOR A VARIETY OF PURPOSES

LEARNING STANDARD A: Use correct grammar, spelling, punctuation, capitalization and structure.

FIFTH GRADE OBJECTIVES:

1. Capitalize the first word and all other important words in a title.
2. Use appropriate punctuation at the end of a sentence.
3. Use quotation marks around a direct quote or spoken words.
4. Use an apostrophe to show ownership or when letters in a word have been omitted.
5. Use a comma to separate words in a list, after the greeting and closing of a letter, between a city and state, to indicate who is being spoken to, to separate what is being said from the identification of the speaker, with a quotation, and in a sentence beginning with yes or no.
6. Spell words correctly on dictated tests or in written work.
7. Identify and use a noun in a sentence.
8. Identify and use verbs, linking verbs, helping verbs and verb tenses in a sentence.
9. Match a pronoun with its corresponding noun.
10. Identify and use pronouns in a sentence.
11. Identify and use adjectives and adverbs in a sentence.
12. Identify nouns described by adjectives.
13. Identify and use conjunctions in a sentence.
14. Write paragraphs that include a variety of sentence types.
15. Use a variety of sentence structures.
16. Use basic transition words to connect ideas.

LANGUAGE ARTS

STATE GOAL 3: WRITE TO COMMUNICATE FOR A VARIETY OF PURPOSES

LEARNING STANDARD B: Compose well-organized and coherent writing for specific purposes and audiences.

FIFTH GRADE OBJECTIVES:

1. Elaborate on supporting information.
2. Recognize purpose for writing (ie: narrative, expository, persuasive).
3. Identify audience prior to writing activity.
4. Revise and edit (self and/or peer) for appropriate spelling, punctuation and grammar.
5. Use prewriting strategies to choose a topic and generate ideas (webbing, brainstorming, listing, note taking, outlining, drafting and graphic organizers).
6. Establish and maintain focus.
7. Develop a topic sentence that is supported with details.
8. Use basic transition words to connect ideas.
9. Vary types of sentences.

LANGUAGE ARTS

STATE GOAL 3: WRITE TO COMMUNICATE FOR A VARIETY OF PURPOSES

LEARNING STANDARD C: Communicate ideas in writing to accomplish a variety of purposes.

FIFTH GRADE OBJECTIVES:

1. Develop Narrative writing skills.
2. Develop Persuasive writing skills.
3. Develop Expository writing skills.
4. Develop letter writing skills.
5. Use appropriate language, detail and format for a specified audience.
6. Write creatively for a specified purpose and audience.
7. Use available technology to design, produce and present compositions and multimedia works.
8. Write to respond to reading selections.
9. Develop autobiography writings.

LANGUAGE ARTS

STATE GOAL 4: LISTEN AND SPEAK EFFECTIVELY IN A VARIETY OF SITUATIONS.

LEARNING STANDARD A: Listen effectively in formal and informal situations.

FIFTH GRADE OBJECTIVES:

1. Follow a set of two consecutive oral directions.
2. Recognize the specific purpose of a variety of oral messages.
3. Paraphrase and summarize the content of a formal/informal spoken message.
4. Form relevant and focused questions and comments based upon the content of a presentation and a variety of audiences or groups for real purposes.

LANGUAGE ARTS

STATE GOAL 4: LISTEN AND SPEAK EFFECTIVELY IN A VARIETY OF SITUATIONS.

LEARNING STANDARD B: Speak effectively using language appropriate to the situation and audience.

FIFTH GRADE OBJECTIVES:

1. Recognize the need to use language appropriate to audience and setting.
2. Respond using a complete thought.
3. Identify and demonstrate different traits of oral presentations intended to inform, to entertain and to persuade.
4. Analyze the characteristics of one's audience and prepare appropriate presentations.
5. Use details to elaborate and develop main ideas for purposes of informing, entertaining and persuading.
6. Use positive verbal and nonverbal communication elements.
7. Use notes and outlines.
8. Prepare and practice the presentation to fit within a given time limit.

LANGUAGE ARTS

STATE GOAL 5: USE THE LANGUAGE ARTS TO ACQUIRE, ASSESS AND COMMUNICATE INFORMATION.

LEARNING STANDARD A: Locate, organize and use information from various sources to answer questions, solve problems and communicate ideas.

FIFTH GRADE OBJECTIVES:

1. Generate questions of interest and narrow the focus of research.
2. Develop hypotheses based on prior knowledge.
3. Gather information based on a hypotheses.
4. Recognize criteria for determining credible sources.
5. Determine appropriate resources.
6. Arrange information in an orderly manner.
7. Design a research plan and prepare a project.

LANGUAGE ARTS

STATE GOALS 5: USE THE LANGUAGE ARTS TO ACQUIRE, ASSESS AND COMMUNICATE INFORMATION.

LEARNING STANDARD B: Analyze and evaluate information acquired from various sources.

FIFTH GRADE OBJECTIVES:

1. Evaluate sources by applying a set of criteria (accuracy, currency and reliability).
2. Use information from footnotes, illustrations, diagrams, charts and graphs.
3. Identify primary resources.
4. Recognize the purpose of a bibliography.

LANGUAGE ARTS

STATE GOAL 5: USE THE LANGUAGE ARTS TO ACQUIRE, ASSESS AND COMMUNICATE INFORMATION.

LEARNING STANDARD C: Apply acquired information, concepts and ideas to communicate in a variety of formats.

FIFTH GRADE OBJECTIVES:

1. Compose and present an oral presentation based on research.
2. Design and present a non-print document based on research.
3. Compose and present a print document based on research.
4. Communicate in an appropriate format, information that was gathered by either inquiry or research.
5. Revise and edit the work.

MATH

NUMBER SENSE

STATE GOAL M6: DEMONSTRATE AND APPLY A KNOWLEDGE AND SENSE OF NUMBERS, INCLUDING NUMERATION AND OPERATIONS (ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION), PATTERNS, RATIOS AND PROPORTIONS.

LEARNING STANDARD A: Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.

FIFTH GRADE OBJECTIVES:

1. Identify and define prime numbers.
2. Reduce fractions to their lowest terms.
3. Write a number from expanded notation form and write the expanded notation form of a number in standard form.
4. Convert improper fractions to mixed numbers and mixed numbers to improper fractions.
5. Use parentheses to determine order of operation.
6. Identify decimals to the thousandth's place.
7. Place mixed numbers and decimals on a number line.
8. Differentiate how fractions are used: part of a whole, part of a set, location on a number line, and division of a whole number.
9. Describe integers using familiar applications.
10. Represent, order, and compare decimals.
11. Represent place values from units through billions using powers of ten.
12. Represent repeated factors using exponents.

NUMBER SENSE

STATE GOAL M6: DEMONSTRATE AND APPLY A KNOWLEDGE AND SENSE OF NUMBERS, INCLUDING NUMBERATION AND OPERATIONS (ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION), PATTERNS, RATIOS AND PROPORTIONS.

LEARNING STANDARD B: Investigate, represent and solve problems using number facts, operations (addition, subtraction, multiplication, division) and their properties, algorithms and relationships.

FIFTH GRADE OBJECTIVES:

1. Solve word problems involving two or more processes using the four operation strategies with whole numbers and decimals.
2. Solve number sentences and word problems using addition and subtraction of fractions with like and unlike denominators, and addition and subtraction of decimals.
3. Use divisibility rules.
4. Compute with powers of 10.
5. Describe classes of numbers according to characteristics such as factors and multiples.
6. Determine whether a number is prime or composite.
7. Explore and identify properties of square numbers.
8. Write prime factorizations of numbers.
9. Determine Least Common Multiple (LCM) and Greatest Common Factor (GCF).
10. Demonstrate the meaning of multiplication of fractions.

NUMBER SENSE

STATE GOAL M6: DEMONSTRATE AND APPLY A KNOWLEDGE AND SENSE OF NUMBERS, INCLUDING NUMERATION AND OPERATIONS (ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION), PATTERNS, RATIOS AND PROPORTIONS.

LEARNING STANDARD C: Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.

FIFTH GRADE OBJECTIVES:

1. Add and subtract fractions with like and unlike denominators.
2. Add mixed numbers with like and unlike denominators.
3. Add and subtract whole numbers and fractions.
4. Add and subtract decimals through the thousandth's place.
5. Multiply three digit numbers by two-digit numbers.
6. Multiply decimals through the hundredth's place.
7. Multiply mixed numbers.
8. Multiply two fractions and state the product in the lowest term.
9. Divide multi-digit numbers, with remainders.
10. Divide decimals by whole numbers.
11. Develop and use strategies to estimate computations involving familiar fractions and decimals in situations relevant to students' experience (ie: recipes).
12. Evaluate estimates to judge their reasonableness and degree of accuracy.
13. Determine and justify whether exact answers or estimates are appropriate.
14. Estimate the sum or difference of a number sentence containing decimals using a variety of strategies.
15. Analyze algorithms for computing with whole numbers, familiar fractions, decimals and develop fluency in their use.

NUMBER SENSE

STATE GOAL M6: DEMONSTRATE AND APPLY A KNOWLEDGE AND SENSE OF NUMBERS, INCLUDING NUMERATION AND OPERATIONS (ADDITION, SUBTRACTION, MULTIPLICATION, DIVISION), PATTERNS, RATIOS AND PROPORTIONS.

LEARNING STANDARD D: Solve problems using comparison of quantities, ratios, proportions and percents.

FIFTH GRADE OBJECTIVES:

1. Identify the ratio symbols such as 3:5, $\frac{3}{5}$, and 3 to 5.
2. Identify and express ratios using appropriate notation (i.e: $\frac{a}{b}$, a to b, a:b).
3. Model the concept of percent using manipulatives or drawings.
4. Determine 50% and 100% of a given group in context.
5. Solve number sentences and word problems using percents.
6. Create and explain a pattern that shows a constant ratio.
7. Determine equivalent ratios.

ESTIMATION AND MEASUREMENT

STATE GOAL M7: ESTIMATE, MAKE AND USE MEASUREMENTS OF OBJECTS, QUANTITIES AND RELATIONSHIPS AND DETERMINE ACCEPTABLE LEVELS OF ACCURACY.

LEARNING STANDARD A: Measure and compare quantities using appropriate units.

FIFTH GRADE OBJECTIVES:

1. Identify liter and its uses.
2. Identify a degree symbol and the use of a thermometer.
3. Utilize simple English and metric units of measure.
5. Identify the use of a thermometer.
6. Use both Fahrenheit and Celsius systems to measure temperature.
7. Identify measurements using appropriate units.
8. Measure a line or object to the nearest $\frac{1}{4}$ inch or millimeter.
9. Measure the perimeter of a figure.
10. Measure the area of a square, rectangle and right triangle.
11. Measure the radius, diameter, and circumference of a circle.
12. Convert United States customary and metric units into larger or smaller units.
13. Use formulas to determine the area of squares, rectangles, and triangles.
14. Draw an angle of any given measure using a protractor or angle ruler.
15. Read and interpret a scale on a map or a scale drawing using a constant ratio.

ESTIMATION AND MEASUREMENT

STATE GOAL M7: ESTIMATE, MAKE AND USE MEASUREMENTS OF OBJECTS, QUANTITIES AND RELATIONSHIPS AND DETERMINE ACCEPTABLE LEVELS OF ACCURACY.

LEARNING STANDARD B: Estimate measurements and determine acceptable levels of accuracy.

FIFTH GRADE OBJECTIVES:

1. Demonstrate a knowledge of United States customary measurements.
2. Demonstrate a knowledge of metric measures.
3. Compare an estimate with an actual measurement to determine accuracy.
4. Describe how precision is effected by choice of units.
5. Estimate the perimeter, area and the volume of regular and irregular shapes and objects.
6. Use common referents for volume, weight/mass, capacity, area and angle measures to make comparisons and estimates.
7. Estimate distance, weight, temperature and elapsed time using reasonable units and with acceptable levels of accuracy.
8. Calculate the surface of a cube, rectangular prism and triangular prism.
9. Develop and use formulas for determining the circumference and area of circles.

ESTIMATION AND MEASUREMENT

STATE GOAL M7: ESTIMATE, MAKE AND USE MEASUREMENTS OF OBJECTS, QUANTITIES AND RELATIONSHIPS AND DETERMINE ACCEPTABLE LEVELS OF ACCURACY.

LEARNING STANDARD C: Select and use appropriate technology, instruments and formulas to solve problems, interpret results and communicate findings.

FIFTH GRADE OBJECTIVES:

1. Select appropriate tools to draw or construct circles and measure angles.
2. Develop and demonstrate strategies for determining area and perimeter of irregular shapes.
3. Select and apply appropriate standard units and tools to measure the size of angles.
4. Determine the volume of a cube or rectangular prism using concrete materials.
5. Create an accurate representation of a polygon with a given perimeter or area.
6. Develop and use formulas to determine the area of squares, rectangles and right triangles.
7. Select an appropriate formula to find the area of triangles, parallelograms and trapezoids.
8. Use the formula for determining the volume of a rectangular and triangular prism.

ALGEBRA AND ANALYTICAL METHODS

STATE GOALS M8: USE ALGEBRAIC AND ANALYTICAL METHODS TO IDENTIFY AND DESCRIBE PATTERNS AND RELATIONSHIPS IN DATA, SOLVE PROBLEMS AND PREDICT RESULTS.

LEARNING STANDARD A: Describe numerical relationships using variables and patterns.

FIFTH GRADE OBJECTIVES:

1. Identify and solve algebraic equations.
2. Describe, extend and make generalizations about given geometric and numeric patterns.
3. Describe a pattern, with at least two operations, verbally and symbolically, given a table of input/output numbers.
4. Describe situations involving inverse relationships (i.e: the more people, the fewer cookies per person).
5. Determine the missing numbers in a complex repeating pattern.
6. Demonstrate equality of two expressions with variables.
7. Investigate, extend and describe arithmetic and geometric sequence of numbers whether presented in numeric or pictorial form.
8. Evaluate algebraic expressions for given values.
9. Express properties of numbers and operations using variables.

ALGEBRA AND ANALYTICAL METHODS

STATE GOAL M8: USE ALGEBRAIC AND ANALYTICAL METHODS TO IDENTIFY AND DESCRIBE PATTERNS AND RELATIONSHIPS IN DATA, SOLVE PROBLEMS AND PREDICT RESULTS.

LEARNING STANDARD B: Interpret and describe numerical relationships using tables, graphs and symbols.

FIFTH GRADE OBJECTIVES:

1. Construct and interpret tables, bar graphs, pictographs, line graphs and circle graphs.
2. Identify ordered pairs on a coordinate grid.
3. Solve word problems involving graphs.
4. Model problem situations with objects and equations to draw conclusions.
5. Demonstrate how the change in one quantity affects the other in a functional relationship involving whole numbers and whole unit fractions.
6. Create a table that describes a function rule for a single operation.
7. Represent and analyze patterns and functions using words, tables and graphs.
8. Graph simple inequalities on a number line.

ALGEBRA AND ANALYTICAL METHODS

STATE GOAL M8: USE ALGEBRAIC AND ANALYTICAL METHODS TO IDENTIFY AND DESCRIBE PATTERNS AND RELATIONSHIPS IN DATA, SOLVE PROBLEMS AND PREDICT RESULTS.

LEARNING STANDARD C: Solve problems using systems of numbers and their properties.

FIFTH GRADE OBJECTIVES:

1. Identify and provide examples of the commutative and associative properties of addition and multiplication.
2. Understand the distributive property of addition.
3. Solve problems with whole numbers using order of operations.
4. Identify and provide examples of inverse operations.

ALGEBRA AND ANALYTICAL METHODS

STATE GOAL M8: USE ALGEBRAIC AND ANALYTICAL METHODS TO IDENTIFY AND DESCRIBE PATTERNS AND RELATIONSHIPS IN DATA, SOLVE PROBLEMS AND PREDICT RESULTS.

LEARNING STANDARD D: Use algebraic concepts and procedures to represent and solve problems.

FIFTH GRADE OBJECTIVES:

1. Create and solve linear equations involving whole numbers using a variety of methods.
2. Solve one-step linear equations with one missing value in isolation and in problem solving situations.

GEOMETRY

STATE GOAL M9: USE GEOMETRIC METHODS TO ANALYZE, CATEGORIZE AND DRAW CONCLUSIONS ABOUT POINTS, LINES, PLANES AND SPACE.

LEARNING STANDARD A: Demonstrate and apply geometric concepts involving points, lines, planes and space.

FIFTH GRADE OBJECTIVES:

1. Identify, compare and analyze attributes of two and three dimensional shapes and develop vocabulary to describe the attributes.
2. Classify two and three dimensional shapes according to their properties.
3. Describe the results of subdividing and combining shapes.
4. Determine the distance between points along horizontal and vertical lines in a coordinate system.
5. Identify rotational symmetry in two and three dimensional shapes.
6. Explain how geometric figures are used in practical settings.
7. Identify, sketch and build two and three dimensional shapes given attribute clues.
8. Copy a line segment or an angle using a straight edge and a compass.
9. Construct a perpendicular bisector of a line segment.
10. Identify and define a tessellation.
11. Identify, draw and build regular and irregular polygons.
12. Read and plot ordered pairs of numbers in the positive quadrant of the Cartesian plane.
13. Differentiate between polygons and nonpolygons.

14. Identify and label the radius, diameter, chord and circumference of a circle.
15. Construct a circle with a specified radius or diameter using a compass.
16. Describe paths using coordinate systems.
17. Plot and read ordered pairs of numbers in all four quadrants.
18. Determine and describe the relationship between π , the diameter, the radius and the circumference of a circle.

GEOMETRY

STATE GOAL M9: USE GEOMETRIC METHODS TO ANALYZE, CATEGORIZE AND DRAW CONCLUSIONS ABOUT POINTS, LINES, PLANES AND SPACE.

LEARNING STANDARD B: Identify, describe, classify and compare relationships using points, lines, planes and solids.

FIFTH GRADE OBJECTIVES:

1. Identify a line, line segment, intersecting lines, parallel lines and perpendicular lines.
2. Identify the diameter of a circle.
3. Identify a triangle, sphere, quadrilateral hexagon, pentagon, an octagon, and trapezoid.
4. Identify right, acute, and obtuse angles.
5. Demonstrate congruence of plane figures using transformations (translation, rotation, reflection).
6. Determine if two polygons are congruent using measures of angles and sides.
7. Identify whether or not a figure has one or more lines of symmetry, and sketch or identify all lines of symmetry.
8. Match a front, right side, and top view drawing with a three dimensional model built with cubes.
9. Analyze quadrilateral for defining characteristics.

GEOMETRY

STATE GOAL M9: USE GEOMETRIC METHODS TO ANALYZE, CATEGORIZE AND DRAW CONCLUSIONS ABOUT POINTS, LINES, PLANES AND SPACE.

LEARNING STANDARD C: Construct convincing arguments and proofs to solve problems.

FIFTH GRADE OBJECTIVES:

1. Make, test and justify conjectures about various quadrilateral and triangle relationships.
2. Justify that the sum of the angles of a triangle is 180 degrees.

GEOMETRY

STATE GOAL M9: USE GEOMETRIC METHODS TO ANALYZE, CATEGORIZE AND DRAW CONCLUSIONS ABOUT POINTS, LINES, PLANES AND SPACE.

LEARNING STANDARD D: Use trigonometric ratios and circular functions to solve problems.

DATA ANALYSIS AND PROBABILITY

STATE GOAL M10: COLLECT, ORGANIZE AND ANALYZE DATA USING STATISTICAL METHODS; PREDICT RESULTS; AND INTERPRET UNCERTAINTY USING CONCEPTS OF PROBABILITY.

LEARNING STANDARD A: Organize, describe and make predications from existing data.

FIFTH GRADE OBJECTIVES:

1. Represent given data using double bar graphs, double line graphs, and stem and leaf plots with and without technology.
2. Select the appropriate graph format to display given data.
3. Read, interpret, infer, predict and evaluate data from any graph.
4. Determine mean, median, mode, minimum value, maximum value and range.
5. Explain what mean, median, mode, minimum value, maximum value and range does to help interpret a given set of data.
6. Represent data using tables and graphs such as line plots and line graphs.
7. Construct, read, interpret, infer, predict, draw conclusions and evaluate data from various displays including circle graphs.

DATA ANALYSIS AND PROBABILITY

STATE GOAL M10: COLLECT, ORGANIZE AND ANALYZE DATA USING STATISTICAL METHODS; PREDICT RESULTS; AND INTERPRET UNCERTAINTY USING CONCEPTS OF PROBABILITY.

LEARNING STANDARD B: Formulate questions, design data collection methods, gather and analyze data and communicate findings.

FIFTH GRADE OBJECTIVES:

1. Collect and interpret data to construct bar graphs, pictographs, and/or line graphs.
2. Propose and justify conclusions and predictions that are based on data.

DATA ANALYSIS AND PROBABILITY

STATE GOAL M10: COLLECT, ORGANIZE AND ANALYZE DATA USING UNCERTAINTY USING CONCEPTS OF PROBABILITY.

LEARNING STANDARD C: Determine, describe and apply the probabilities of events.

FIFTH GRADE OBJECTIVES:

1. List all possible outcomes of compound events (i.e: toss of a coin and spin of a spinner).
2. Assign a value of zero to probabilities that are impossible and a value of one to probabilities that are certain.
3. Express simple probabilities as a fraction.
4. Predict the probability of outcomes of simple experiments and test the predictions.
5. List all possible outcomes of a single event and tell whether an outcome is certain, impossible, likely or unlikely.
6. Describe the probability of an event using terminology such as “5 chances out of 8”.
7. Record probabilities as fractions, decimals or percents.
8. List outcomes by a variety of methods (tree diagram).
9. Determine theoretical probabilities of simple events.

SCIENCE

INQUIRY AND DESIGN

STATE GOAL SC11: UNDERSTAND THE PROCESSES OF SCIENTIFIC INQUIRY AND TECHNOLOGICAL DESIGN TO INVESTIGATE QUESTIONS, CONDUCT EXPERIMENTS AND SOLVE PROBLEMS.

LEARNING STANDARD A: Know and apply the concepts, principles and processes of scientific inquiry.

FIFTH GRADE OBJECTIVES:

1. Identify the principles of scientific research and experimentation.
2. Set-up and conduct an experiment.
3. Select appropriate materials for a scientific inquiry or an experiment.
4. Use observations and prior knowledge to predict an outcome.
5. Identify conditions that cause a change.
6. Distinguish between observations and inferences.
7. Form an inference from observation.
8. Construct charts and visualizations to display data by summarizing and organizing data.

SCIENCE
INQUIRY AND DESIGN

STATE GOAL SC11: UNDERSTAND THE PROCESSES OF SCIENTIFIC INQUIRY AND TECHNOLOGICAL DESIGN TO INVESTIGATE QUESTIONS, CONDUCT EXPERIMENTS AND SOLVE PROBLEMS.

LEARNING STANDARD B: Know and apply the concepts, principles and processes of technological design.

FIFTH GRADE OBJECTIVES:

1. Identify a design problem and propose possible design solutions.
2. Develop a plan, design a procedure to address the problem to be solved and identify variables.
3. Build a model according to a design using available tools and materials.
4. Test the model using quantitative measurements.
5. Report results of testing a model.

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD A: Know and apply concepts that explain how living things function, adapt and change.

FIFTH GRADE OBJECTIVES:

1. Identify the life cycle of simple animals.
2. Develop a classification system given specific objects.
3. Identify animals with and without backbones.
4. Identify and understand selected human body systems.
5. Understand growth and development of the human body at an introductory level.
6. Characterize traits as inherited or learned.

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD B: Know and apply concepts that describe how living things interact with each other and with their environment.

FIFTH GRADE OBJECTIVES:

1. Explain how certain adaptations help animals to survive.
2. Understand relationships between various organisms in the environment (ie: prey, predators, host, parasite, food chains).

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD C: Know and apply concepts that describe properties of matter and energy and the interactions between them.

FIFTH GRADE OBJECTIVES:

1. Develop a classification system given specific objects.
2. Identify the three states of matter.
3. Identify changes in matter as being physical or chemical.
4. Describe the structure of an atom.
5. Identify common forms of energy.
6. Compare and contrast different forms of energy.

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD D: Know and apply concepts that describe force and motion and the principles that explain them.

FIFTH GRADE OBJECTIVES:

1. Define and give examples of constant, variable and periodic motions.
2. Compare and contrast constant and variable motions.
3. Explain and demonstrate the casual relationships of forces in terms of actions and reactions.
4. Explain how variability in forces can affect action and reactions.
5. Describe and demonstrate the properties of magnets and magnetism.

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD E: Know and apply concepts that describe the features and processes of the Earth and its resources.

FIFTH GRADE OBJECTIVES:

1. Develop a classification system given specific objects.
2. Use the Fahrenheit and Celsius systems to measure temperature.
3. Identify and classify recyclable materials.
4. Understand the natural cycles of Earth's land, water and atmospheric systems.

CONCEPTS AND PRINCIPLES

STATE GOAL SC12: UNDERSTAND THE FUNDAMENTAL CONCEPTS, PRINCIPLES AND INTERCONNECTIONS OF THE LIFE, PHYSICAL AND EARTH/SPACE SCIENCES.

LEARNING STANDARD F: Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.

FIFTH GRADE OBJECTIVES:

1. Identify how the Earth's rotation effects day and night.
2. Identify the objects in our solar system and their effects on earth.
3. Compare and contrast the seasons in terms of the Earth's tilt and the path of the sun.
4. Identify surface features of the earth, sun and moon.
5. Understand life cycle of a star.

SCIENCE, TECHNOLOGY AND SOCIETY

STATE GOAL SC13: UNDERSTAND THE RELATIONSHIPS AMONG SCIENCE, TECHNOLOGY AND SOCIETY IN HISTORICAL AND CONTEMPORARY CONTEXTS.

LEARNING STANDARD A: Know and apply the accepted practices of science.

FIFTH GRADE OBJECTIVES:

1. Know and demonstrate ways to avoid injury when conducting activities related to science.
2. Understand why similar investigations may not produce similar results by identifying variables and faulty scientific method.
3. Understand and demonstrate the importance of keeping accurate and detailed records during science experiments and activities.

SCIENCE, TECHNOLOGY AND SOCIETY

STATE GOAL SC13: UNDERSTAND THE RELATIONSHIPS AMONG CONTEMPORARY CONTEXTS.

LEARNING STANDARD B: Know and apply concepts that describe the interaction between science, technology and society.

FIFTH GRADE OBJECTIVES:

1. Identify how individuals affect the environment.
2. Identify reasons and ways to protect the water environment, atmosphere, and natural resources.
3. Identify the impact of weather on the economy, health, and life styles.
4. Identify the impact of technology on the environment.
5. Understand how recycling, reducing, and reusing effects the environment.

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD A: Understand and explain basic principles of the United States government.

FIFTH GRADE OBJECTIVES:

1. Give examples of civic responsibility.
2. Explain the characteristics of a democracy.
3. Justify the need for laws.
4. Demonstrate the significance of the Bill of Rights for the citizens of the United States.
5. Examine and explain the importance of the Declaration of Independence and the Illinois and United States Constitutions.
6. Explain how the United States Constitution can be amended

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD B: Understand the structures and functions of the political systems of Illinois, the United States and other nations.

FIFTH GRADE OBJECTIVES:

1. Explain and demonstrate the need for the system of “Checks and Balances”.
2. Know the difference between a civil trial and a criminal trial.
3. Demonstrate knowledge of Europe’s political structure throughout America’s history.

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD C: Understand election processes and responsibilities of citizens.

FIFTH GRADE OBJECTIVES:

1. Predict the consequences of ignoring the rights of others.
2. Explain how an individual or group can solve problems within their community.
3. Identify voting requirements.
4. Describe the significance of “protection under the law”.

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD D: Understand the roles and influences of individuals and interest groups in the political systems of Illinois, the United States and other nations.

FIFTH GRADE OBJECTIVES:

1. Describe the roles of minority groups in the making of public policy.
2. Define the concept of lobbying to influence public opinion or legislative decisions.
3. Explain voting for representation.

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD E: Understand United States foreign policy as it relates to other nations and international issues.

FIFTH GRADE OBJECTIVES:

1. Summarize the way in which nations interact to avoid conflict.
2. Identify government branches and offices at the federal level that are responsible for conducting foreign affairs.

POLITICAL SYSTEMS

STATE GOAL SS14: UNDERSTAND POLITICAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD F: Understand the development of United States political ideas and traditions.

FIFTH GRADE OBJECTIVES:

1. Describe examples of the development of basic freedoms for the people of the United States.
2. Describe the limitations of our basic freedoms.
3. Explain the symbolism in our national symbols.
4. Describe historical examples featuring the denial or extensions of civil rights to various individuals or groups.
5. Explain how advances in technology have affected the spread of political information and influence.

ECONOMICS

STATE GOAL SS15: UNDERSTAND ECONOMIC SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD A: Understand how different economic systems operate in the exchange, production, distribution and consumption of goods and services.

FIFTH GRADE OBJECTIVES:

1. Explain how a market economy decides what to produce, how to produce and for whom to produce.
2. Identify human resources in their community and the goods and services they produce.
3. Analyze the relationship between the skills learned in school and the skills needed for a job.
4. Describe how unemployment affects economy.

ECONOMICS

STATE GOAL SS15: UNDERSTAND ECONOMIC SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD B: Understand that scarcity necessitates choices by consumers.

FIFTH GRADE OBJECTIVES:

1. Identify factors that effect consumer choices.
2. Describe how supply and demand effects the price of goods and services.
3. Define prices as what consumers pay when buying goods or services and what sellers receive when selling goods or services.
4. Demonstrate knowledge that every choice made by consumers is weighed by what the consumer has to give up.

ECONOMICS

STATE GOAL SS15: UNDERSTAND ECONOMIC SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD C: Understand that scarcity necessitates choices by producers.

FIFTH GRADE OBJECTIVES:

1. Predict how a large increase or decrease in the price of a good or service will effect how much producers will make and sell of that good or service.
2. Analyze why producers will produce more goods and services at higher prices and fewer at lower prices.
3. Identify the characteristics of risks taken by entrepreneurs and why they are important to the economy.

ECONOMICS

STATE GOAL SS15: UNDERSTAND ECONOMIC SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD D: Understand trade as an exchange of goods or services.

FIFTH GRADE OBJECTIVES:

1. Explain the benefits of exchanging with the use of money.
2. Predict how people's lives would be different if they did not trade with others for goods and services.
3. Illustrate how division of labor in a production process can increase productivity.

ECONOMICS

STATE GOAL SS15: UNDERSTAND ECONOMIC SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD E: Understand the impact of government policies and decisions on production and consumption in the economy.

FIFTH GRADE OBJECTIVES:

1. Identify public goods and services in the community, state and nation.
2. List the types of taxes paid by individuals and businesses.

HISTORY

STATE GOAL SS16: UNDERSTAND EVENTS, TRENDS, INDIVIDUALS AND MOVEMENTS SHAPING THE HISTORY OF ILLINOIS, THE UNITED STATES AND OTHER NATIONS.

LEARNING STANDARD A: Apply the skills of historical analysis and interpretation.

FIFTH GRADE OBJECTIVES:

1. Identify a timeline chronology of major developments in United States history.
2. Gather information from more than one source (re: a particular event or person).
3. Examine past events and people and explain how they are (were) important.
4. Describe trends during a time period using political, economic, environmental and social data from appropriate graphs or charts.
5. Distinguish between primary and secondary sources.
6. Identify sources in the school or local library that will help answer a research question.

HISTORY

STATE GOAL SS16: UNDERSTAND EVENTS, TRENDS, INDIVIDUALS AND MOVEMENTS SHAPING THE HISTORY OF ILLINOIS, THE UNITED STATES AND OTHER NATIONS.

LEARNING STANDARD B: Understand the development of significant political events.

FIFTH GRADE OBJECTIVES:

1. Describe the necessities and ideologies of groups like Pilgrims, Puritans and Quakers that began a form of self-government and ideals for a new government.
2. Describe taxation without representation.
3. Identify the impact of events such as the Boston Tea Party and Boston Massacre on American history.
4. Identify the contributions of specific American leaders during specific historical time periods.
5. Identify specific historical events such as exploration, colonization, the American Revolution, the Civil War, Westward Expansion, and the Industrial Revolution.
6. List the key figures, events and ideas in the development of the United States government during the Early National Period.

HISTORY

STATE GOAL SS16: UNDERSTAND EVENTS, TRENDS, INDIVIDUALS AND MOVEMENTS SHAPING THE HISTORY OF ILLINOIS, THE UNITED STATES AND OTHER NATIONS.

LEARNING STANDARD C: Understand the development of economic systems.

FIFTH GRADE OBJECTIVES:

1. Identify the contributions of inventions and technological developments in historical economic periods.
2. Describe how slavery and indentured servitude were related to the wants of economic interest groups in the United States.
3. Explain how the economic choices people made in the past affected their political and social lives and their environment.

HISTORY

STATE GOAL SS16: UNDERSTAND EVENTS, TRENDS, INDIVIDUALS AND MOVEMENTS SHAPING THE HISTORY OF ILLINOIS, THE UNITED STATES AND OTHER NATIONS.

LEARNING STANDARD D: Understand Illinois, United States and world social history.

FIFTH GRADE OBJECTIVES:

1. Describe why people would want to settle in Colonial America.
2. Use news sources to understand current world issues.
3. Describe how the Westward Movement effected families and communities.
4. Assess the influence that significant cultures and people had on the social lives of others in the United States.
5. Identify key individuals and groups and their influence on the United States policy and social perception.

HISTORY

STATE GOAL SS16: UNDERSTAND EVENTS, TRENDS, INDIVIDUALS AND MOVEMENTS SHAPING THE HISTORY OF ILLINOIS, THE UNITED STATES AND OTHER NATIONS.

LEARNING STANDARD E: Understand Illinois, United States and world environmental history.

FIFTH GRADE OBJECTIVES:

1. Identify turning points in United States environmental history.
2. Explain how a community or state's location helps to explain its growth and development over time.
3. Describe how various people around North America used human or animal power to cultivate crops before the onset of mechanized technology.

TEACHING STRAND: GEOGRAPHY

STATE GOAL SS17: UNDERSTAND WORLD GEOGRAPHY AND THE EFFECTS OF GEOGRAPHY ON SOCIETY, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD A: Locate, describe, and explain places, regions and features on the Earth.

FIFTH GRADE OBJECTIVES:

1. Name the seven continents and the five major oceans of the Earth.
2. Mark landforms, and climate regions on a map.
3. Create maps of the United States and the world using data and a variety of colors and symbols.

GEOGRAPHY

STATE GOAL SS17: UNDERSTAND WORLD GEOGRAPHY AND THE EFFECTS OF GEOGRAPHY ON SOCIETY, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD B: Analyze and explain characteristics and interactions of the Earth's physical systems.

FIFTH GRADE OBJECTIVES:

1. Covered in Science (Biomes).
2. Explain how and why people alter their physical environment.

GEOGRAPHY

STATE GOAL SS17: UNDERSTAND WORLD GEOGRAPHY AND THE EFFECTS OF GEOGRAPHY ON SOCIETY, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD C: Understand relationships between geographic factors and society.

FIFTH GRADE OBJECTIVES:

1. Identify how physical geography and different environments affect people.
2. Analyze maps of the local community, Illinois and the United States to determine how humans use, abuse and protect resources.
3. Identify factors that influence the location of cities.

GEOGRAPHY

STATE GOAL SS17: UNDERSTAND WORLD GEOGRAPHY AND THE EFFECTS OF GEOGRAPHY ON SOCIETY, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD D: Understand the historical significance of geography.

FIFTH GRADE OBJECTIVES:

1. Compare maps of the United States showing landforms, climate and the natural vegetation to maps that show population distribution to identify the relationship between settlement and physical features.
2. Describe how physical characteristics of a region or a nation influence people's points of view and the decisions they make over time.

SOCIAL SYSTEMS

STATE GOAL SS18: UNDERSTAND SOCIAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD A: Compare characteristics of culture as reflected in language, literature, the arts, traditions and institutions.

FIFTH GRADE OBJECTIVES:

1. Describe how culture is shared through music, art and literature throughout the world over time.
2. Describe how artistic traditions have changed due to technology.
3. Describe how social celebrations reinforce cultural values.

SOCIAL SYSTEMS

STATE GOAL SS18: UNDERSTAND SOCIAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD B: Understand the roles and interactions of individuals and groups in society.

FIFTH GRADE OBJECTIVES:

1. Identify major motivations for human actions such as food, shelter, religion, need for justice and social advancement.
2. Explain how the interactions of individuals and groups impact the local community.

SOCIAL SYSTEMS

STATE GOAL SS18: UNDERSTAND SOCIAL SYSTEMS, WITH AN EMPHASIS ON THE UNITED STATES.

LEARNING STANDARD C: Understand how social systems form and develop over time.

FIFTH GRADE OBJECTIVES:

1. Identify the differences and contributions of various cultural, racial, religious and ethnic groups.
2. Identify how the needs of people form the foundation for economic systems.
3. Define belief system.
4. Identify historically significant people who affected social life or institutions.

