

**FIFTH GRADE**  
**Grade Level Expectations**

**Mathematics Curriculum Overview**

**Number and Operations**

Students will be able to understand numbers, ways of representing numbers, relationships among numbers and number systems

1. Read, write and compare numbers
2. Represent and use rational numbers
3. Compose and decompose numbers
4. Classify and describe numeric relationships

Students will be able to understand meanings of operations and how they relate to one another

1. Represent operations
2. Describe effects of operations
3. Apply properties of operations

Students will be able to compute fluently and make reasonable estimates

1. Describe or represent mental strategies
2. Compute problems
3. Estimate and justify solutions

**Algebraic Relationships**

Students will be able to understand patterns, relations and functions

1. Recognize and extend patterns
2. Create and analyze patterns

Students will be able to represent and analyze mathematical situations and structures using algebraic symbols

1. represent mathematical situations
2. describe and use mathematical manipulations

Students will be able to use mathematical models to represent and understand quantitative relationships

Students will be able to analyze change in various contexts

## **Geometric and Spatial Relationships**

Students will be able to analyze characteristics and properties of two- and three- dimensional geometric shapes and develop mathematical arguments about geometric relationships

1. Describe and use geometric relationships
2. Compose and decompose shapes

Students will be able to specify locations and describe spatial relationships using coordinate geometry and other representational systems

Students will be able to apply transformations and use symmetry to analyze mathematical situations

1. Use transformations on objects
2. Use symmetry

Students will be able to use visualization, spatial reasoning and geometric modeling to solve problems

1. Recognize and draw three- dimensional representations

## **Measurement**

Students will be able to understand measurable attributes of objects and the units, systems and processes of measurement

1. Determine unit of measurement
2. Identify equivalent measures
3. Tell and use units of time

Students will be able to apply appropriate techniques, tools and formulas to determine measurements

1. Apply geometric measurements
2. Use relationships within a measurement system

## **Data and Probability**

Students will be able to formulate questions that can be addressed with data and collect, organize and display relevant data to answer them

1. formulate questions
2. Represent and interpret data

Students will be able to select and use appropriate statistical methods to analyze data

1. Describe and analyze data
2. Compare data representations

Students will be able to develop and evaluate inferences and predictions that are based on data

Students will be able to understand and apply basic concepts of probability

## **Communication Arts - Reading Curriculum Overview**

### **Develop and apply skills and strategies to the reading process**

Phonics - apply decoding strategies to independently "problem-solve" unknown words when reading & when needed

Fluency -read grade-level instructional text with fluency, accuracy and expression adjusting reading rate to difficulty and type of text

Vocabulary - develop vocabulary through text, using

1. roots and affixes
2. context clues
3. glossary and dictionary

Pre-Reading - apply pre-reading strategies to aid comprehension

1. access prior knowledge
2. preview
3. predict
4. set a purpose for reading

During reading, utilize strategies to

1. determine meaning of unknown words
2. monitor comprehension
3. question the text
4. infer
5. visualize
6. paraphrase
7. summarize

Post-Reading - apply post-reading skills to comprehend text:

1. identify cause and effect
2. make predictions
3. question to clarify
4. reflect
5. analyze
6. draw conclusions
7. summarize
8. paraphrase

Making Connections - compare, contrast and analyze connections between

1. information and relationships in various fiction and non-fiction works (text to text)
2. text ideas and own experiences (text to self)
3. text ideas and the world by responding to literature that reflects a culture and historic time frame (text to world)

**Develop and apply skills and strategies to comprehend, analyze and evaluate fiction, poetry & drama from a variety of cultures and times.**

Text Features - locate and

1. apply information in title, table of contents and glossary
2. recognize the text features of fiction, poetry and drama in grade-level text

Literary Techniques - explain examples of literary techniques in text, emphasizing

1. simile
2. metaphor
3. personification

Literary Elements - use details from text to

1. make inferences about setting, character traits, problem and solution and story events
2. compare and contrast various elements
3. identify author's purpose

**Develop and apply skills and strategies to comprehend, analyze and evaluate nonfiction (such as biographies, newspapers, technical manuals) from a variety of cultures and times**

Text Features - apply information in format, graphics, sequence, maps, diagrams, charts and index to clarify and connect concepts to the main ideas

Literary Techniques - identify and explain figurative language in nonfiction text, emphasizing simile, metaphor and personification

Text Structures - use details from text to

1. explain main idea and supporting details
2. identify and sequence events
3. identify and explain cause and effect
4. compare and contrast
5. make predictions
6. make inferences
7. evaluate the accuracy of the information
8. identify and interpret author's ideas and purpose

Understanding Directions - read and follow multi-step directions to complete a complex task

**Communication Arts - Writing Curriculum Overview**

**Apply a writing process in composing text**

Writing Concepts - follow a writing process to

1. independently use a simple pre-writing strategy
2. generate a draft
3. continually reread and revise work for audience and purpose, ideas and content, organization and sentence structure, and word choice
4. continually edit conventions
5. publish writing

**Compose well-developed text**

Audience & Purpose - compose text

1. showing awareness of audience
2. in a format appropriate to audience and purpose

Ideas & Contents - compose text with

1. a clear controlling idea
2. relevant details /examples,( without assistance)

Organization & Sentence Structure - write text with

1. a clear beginning, middle, and end
2. a logical sequence of events
3. evidence of paragraphing
4. sentence variety

Word Choice - compose text using

1. words that are specific, accurate, and suited to the topic
2. sensory detail
3. purposeful dialogue, with assistance

Conventions - in written text

1. capitalize titles and proper nouns
2. use comma incompound sentences, apostrophe in singular possessives, and proper punctuation in titles
3. use correct verb tense and subject/verb agreement
4. use correct spelling of simple compounds, homophones, contractions and words with affixes
5. use standard spelling, classroom resources and dictionary to edit for correct spelling

**Write effectively in various forms and types of writing**

Forms/Types/Modes of Writing - compose a variety of texts

1. using narrative, descriptive, expository, and/or persuasive features
2. selecting and using an appropriate format
3. including a summary (narrative or informational)