

## GRADE 5: EXPLANATION OF ACADEMIC CODE

4 Exceeds Standards	3 Meets Standards	2 Works Toward Standards	1 Performs Below Standards
<ul style="list-style-type: none"> <li>Consistently expands upon standards for grade level</li> </ul>	<ul style="list-style-type: none"> <li>Consistently achieves standards for grade level</li> </ul>	<ul style="list-style-type: none"> <li>Meets some standards for grade level</li> </ul>	<ul style="list-style-type: none"> <li>Seldom meets standards for grade level</li> </ul>
<ul style="list-style-type: none"> <li>Applies higher level thinking to expand knowledge, skills, vocabulary and strategies</li> </ul>	<ul style="list-style-type: none"> <li>Understands and applies knowledge, skills, vocabulary and strategies</li> </ul>	<ul style="list-style-type: none"> <li>Sometimes understands and applies knowledge, skills, vocabulary and strategies</li> </ul>	<ul style="list-style-type: none"> <li>Seldom understands and applies knowledge, skills, vocabulary and strategies</li> </ul>
<ul style="list-style-type: none"> <li>Applies problem solving skills to new situations</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates problem solving skills</li> </ul>	<ul style="list-style-type: none"> <li>Sometimes demonstrates problem solving skills</li> </ul>	<ul style="list-style-type: none"> <li>Seldom demonstrates problem solving skills</li> </ul>

## GRADE 5: EXPLANATION OF STANDARDS

### MATHEMATICS – *The student will...*

#### Number Sense

- recognize and describe decimals and fractions as parts of a whole unit
- read, write, identify, and compare decimals through thousandths
- identify, model, compare, and order rational numbers (decimals, fractions, and mixed numbers)
- recognize and describe the relationship between common fractions and their equivalent decimal form

#### Computation and Estimation

- use understanding of relationships of whole number operations and decimal operations to create and solve addition, subtraction, multiplication, and division problems
- interpret the meaning of a remainder in the context of a division problem
- estimate and find the product of two decimals through thousandths
- find the quotient of dividends expressed as thousandths and a single-digit divisor
- add and subtract fractions and mixed numbers (e.g.,  $\frac{3}{4} + 2\frac{1}{8}$ ) and express answers in simplest form

#### Measurement

- describe and determine the perimeter of a polygon and the area of a square, rectangle, and right triangle
- identify and describe the relationship between the diameter, radius, chord, and circumference of a circle
- explain the difference between perimeter, area, and volume (while identifying the appropriate measure)
- estimate and measure weight and mass in customary/metric units
- identify equivalent measurements between customary and metric (length, mass, weight, volume)

#### Geometry

- use knowledge of relationships among angles to classify angles and triangles as right, acute, or obtuse
- analyze properties of 2-D figures and 3-D geometric solids
- identify and describe congruent, non-congruent, and similar figures
- investigate and accurately describe the results of combining and subdividing shapes
- recognize/describe the images of figures resulting from transformations (translation, reflection, rotation)

#### Statistics and Probability

- predict/test probability of outcomes of simple experiments and represent measurements from 0 to 1
- solve problems by constructing a sample space using a tree diagram, list or chart to represent outcomes
- collect, organize, and display data in a variety of forms (e.g. bar graph, stem & leaf plots, line plots)
- analyze, make predictions, and draw conclusions using data (find mean, median, mode, and range)

#### Patterns, Functions & Algebra

- analyze the structure of numerical and geometric patterns and express relationships using words, tables, graphs or a numerical sentence
- investigate and describe the concept of a variable
- use a variable expression to represent a given quantitative expression involving one operation
- write an open sentence ( $b + 4 = 12$ ) to represent a given mathematical relationship with a variable
- create a problem situation based on a given open sentence with a single variable

**Process Skills: Problem Solving and Communication**

- use appropriate and efficient strategies to solve problems
- explain and justify solution strategy leading to a correct answer
- use representations to organize, record, and communicate mathematical ideas

**ORAL LANGUAGE – *The student will...***

- listen attentively, ask and respond to questions, and explain what has been learned
- use correct grammar and specific vocabulary to communicate ideas
- present brief oral reports
- actively participate in discussions across content areas
- make oral presentations using effective verbal and non-verbal skills

**READING – *The student will...*****Vocabulary/Word Analysis**

- use knowledge of word roots, prefixes, and suffixes to read and understand unfamiliar texts
- use and apply vocabulary, context clues (e.g. grammar, surrounding text), and word reference materials to read unfamiliar words and determine their meanings
- understand and use homonyms, synonyms, antonyms, and multiple meaning words to increase comprehension

**Comprehension**

- use various strategies such as predicting, questioning, comparing, contrasting, summarizing, and evaluating to make sense of written material
- use knowledge of text structure, skills, and strategies to independently read and demonstrate understanding of both fiction and nonfiction material
- analyze point of view, word choice, plot, character development, and author's purpose to demonstrate understanding of written material

**Fluency**

- read aloud at appropriate rate with expression and accuracy
- use expression and phrasing to convey meaning when reading aloud

**WRITING – *The student will...*****Composition**

- develop a plan and organize information for writing
- compose well-developed paragraphs to describe, inform, entertain, and explain

**Written Expression**

- write for a variety of purposes and audiences
- use precise and descriptive vocabulary to create tone and voice
- use details and sentence variation to elaborate on the main idea in paragraphs
- revise language, organization, and content of writing

**Usage and Mechanics**

- edit for correct grammar and sentence structure (usage), spelling, capitalization, and punctuation (mechanics)

**SCIENCE – *The student will...*****Concepts, Facts, Principles and Vocabulary**

- investigate and understand how sound is transmitted and is used as a means of communication, basic characteristics of visible light and how it behaves, matter is anything that has mass, takes up space, and occurs as a solid, liquid, or gas, organisms are made of cells and have distinguishing characteristics, characteristics of the ocean environment, and how the Earth's surface is constantly changing.

**Recording and Interpreting Scientific Data**

- predictions are made using patterns, and simple graphical data are extrapolated; manipulated and responding variables are identified; and an understanding of the nature of science is developed and reinforced

**SOCIAL STUDIES – *The student will...*****History**

- demonstrate an understanding of the people and events in the history of the United States prior to 1865.

**Geography**

- locate and describe the geographic regions and major physical features of North America

- explain how people adapted to their environment
- use map, chart, and graph skills to gather and classify (organize) information

### **Economics**

- explain how people throughout the history of the United States used available resources to adapt to their environment
- explain the role economics played in producing conflict and cooperation throughout U.S. history

### **Civics**

- describes the principles in the Declaration of Independence that the United States was founded on
- describe the historical development of the United States Constitution and American government