



Mathematics

Operations and Algebraic Thinking

- Show mastery of multiplication and division facts through 12
- Use the operation symbols, +, -, ×, ÷, =, <, >, () to represent mathematical thinking
- Determine simple two step, two operation patterns [Example: 5,8,6,9,7,10,8, (+3,-2)]

Numbers and Operations

- Use place value to compare and order numbers less than 100,000
- Show mastery of addition & subtraction facts through 18
- Solve addition & subtraction problems to five digits
- Explain the patterns in the number of zero when multiplying and dividing whole numbers and decimals by powers of 10
- Solve multiplication problems up to 3-digit by 2-digit
- Solve division problems up to 4-digit numbers by a 2-digit number
- Interpret and reason the remainder in a problem
- Add, subtract, multiply and divide with decimals through hundredths

Geometry

- Figure volume of a rectangular prism
- Classify quadrilaterals
- Identify irregular figures
- Determine area and perimeter with whole and fractional units
- Plot points and solve problems on the coordinate grid
- Read, write, compare and round numbers to the thousandths
- Add & subtract fractions with unlike denominators and express answers in lowest terms. This includes realworld situations
- Multiply and divide a fraction by a whole number, including real world situations

Measurement and Data

- Tell how many inches are in a foot, feet in a yard, inches in a yard, and centimeters in a meter
- Measure to the nearest $\frac{1}{2}$ centimeter or $\frac{1}{8}$ inch
- Solve elapsed time problems on an analog clock
- Read, draw, write, and interpret information from bar graphs, line plots, pictographs, tables, charts, and Venn Diagrams

Science

Science and Engineering Practices

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data
- Use math and computational thinking
- Construct explanations and designing solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

Disciplinary Core Ideas

- Explain the structure, properties and interactions of matter
- Explain and predict interactions between objects and within systems of objects.
- Explain how energy is transferred and conserved.
- Explain how organisms live, grow, respond to their environment and reproduce.
- Explain how and why organisms interact with their environment and what the effects of those interactions are.
- Explain what the universe is and Earth's place in it.
- Explain how and why the Earth is constantly changing.
- Explain how the Earth's surface processes and human activities affect each other

Cross-cutting Concepts

- Observe patterns to guide classification and prompt questions about relationships and the factors that influence them.
- Investigate and explain causal relationships and the mechanisms by which they are mediated.
- Recognize how changes in scale, proportion, or quantity affect a system's structure or performance.
- Define the system under study to provide tools for understanding and testing ideas that are applicable throughout science and engineering.
- Track fluxes of energy and matter into, out of, and within systems to help one understand the systems' possibilities and limitations.
- Understand that the shape of an object or living thing determines its properties and functions.
- Understand that stability and change for natural and built systems are critical elements of study.



NASHUA SCHOOL DISTRICT

ELEMENTARY GRADE

GRADE FIVE

YOUR CHILDREN ARE OUR CHILDREN





GRADE FIVE

Student “I can” Statements



ELA

Fifth grade students read increasingly complex literature. Students use reading, writing, listening, and speaking skills to communicate for different purposes.



Mathematics

Fifth grade students develop proficiency in using whole numbers, fractions, and decimals to solve problems. They design surveys and collect, display, and analyze data to draw conclusions and make predictions. Algebraic reasoning develops as students identify, describe, and represent patterns and relationships in the number system. Students use spatial sense and geometric concepts to develop an understanding of the relationship between two- and three-dimensional figures.



Science

Fifth grade students develop a deeper understanding of science concepts and content. Students practice similar scientific and engineering practices as those used by scientists.



Social Studies

Fifth grade students build upon the geography, civics and government, and economics concepts and historical inquiry from earlier grades and begin a more disciplinary-centered approach concentrating on the early history of the United States

English Language Arts

Foundational Skills

- Use context clues and phonics to decode multi-syllable words and determine word meanings
- Read with sufficient accuracy and fluency to support comprehension
- Read grade level text, of a variety of genres, independently and proficiently
- Determine the meaning of grade level, subject area vocabulary
- Use proper conventions, grammar, and spelling
- Pose and respond to questions as well as build on the ideas of others

Reading Literary Text

- Identify and describe the main problem or conflict, and explain how it is resolved within the story
- Make inferences supported by the text about characters' traits and motivations
- Describe the theme
- Identify and explain the different points of view an author can use in writing a story
- Explain a lesson learned based on events and/or a character's actions
- Describe and analyze how an author uses figurative language (simile, metaphor, and personification) in text

Reading Informational Text

- Identify and use text features to comprehend and interpret information for specific purposes
- Identify words and phrases that reveal an author's tone and language used for persuasion and propaganda
- Explain an author's use of figurative language: simile, metaphor
- Recognize and use text structures (sequential/chronological order, cause and effect, problem and solution, main idea/details) to aid in comprehension
- Describe the main idea or theme in a text
- Use information to answer specific questions
- Make connections to self, other text, and/or the world
- Make and revise predictions and inferences based on evidence
- Distinguish between fact and opinion

Writing, Language, and Speaking

- Identify and use the steps in the writing process (generate ideas, draft, revise, edit, publish)
- Write personal narratives and literary essays
- Conduct research to produce informative writing and persuasive writing
- Use tools, resources and technology to make writing better
- Use powerful words to make writing come alive for the reader
- Speak effectively when making a presentation
- Present information on a specific topic using resources, reference materials and technology
- Ask follow-up questions and make connections to ideas to participate in a discussion
- Draw conclusions and summarize based on the ideas of others and incorporate them into thinking

Social Studies

Civics, Government, and Economics

- Understand the responsibilities and rights of citizenship
- Understand the foundations of the United States System of government
- Understand the different roles that governments play in society
- Understand fundamental principles and concepts of economics such as supply and demand and scarcity
- Understand the impact of trade and exchange of goods on the people in society

Geography and History

- Understand how location and geography impacted the success of settlements, colonies, cities, and regions
- Make connections between the lives of people in the past with our own lives, and how history continues to shape our shared cultures
- Use primary and secondary sources (artifacts, written documents, oral traditions etc.)

Student Success Skills



RESEPECT:

- Positively and appropriately interact with peers and staff
- Resolve situations and conflicts with problem-solving strategies
- Value and follow the academic, social, and emotional goals and rules of the community



RESPONSIBILITY:

- Act as a partner for their learning by responsibly maintaining home and school connection and communication
- Take responsibility for learning by being prepared and organized with class work and homework.
- Recognize when they need help and can advocate for themselves appropriately.



READY TO LEARN:

- Manage transitions and is able to refocus as a learner.
- Maintain attention and focus through learning activities and tasks.
- Take charge of their learning and perform at the best of their ability and perseveres through challenges

