

MATHEMATICS

Students will effectively communicate accurate mathematical reasoning in problem solving contexts integrated across diverse curriculum disciplines and everyday situations. They will apply skills from the following math sub-categories:

Number Sense

Students will develop proficiency understanding and applying: place value concepts, scientific notation, square roots, factorization, exponents, decimals/fractions/percents, ratios, and positive and negative numbers.

Computation

Students will accurately and efficiently:

- Add, subtract, multiply, and divide whole numbers, fractions, and decimals,
- Use estimation to determine the reasonableness of an answer
- Apply the associative, commutative, and distributive properties to simplify computation

Geometry

Students will explore, understand, and apply concepts in:

- Linear, 2-D (perimeter, circumference, and area of polygons and circles), and 3-D (volume and surface area) contexts
- Coordinate geometry, including congruency, symmetry and transformations (translations, reflections, and rotations).

Measurement

Students will explore and apply appropriate units in Metric and U.S. Standard systems in: linear, area, weight/mass, volume/capacity, temperature, time, and money contexts.

Data Analysis

Students will confidently:

- Collect, organize, and present data in a variety of graphs formats.
- Draw inferences and make decisions by analyzing and interpreting data with understanding of mean, median, range, and mode of a given set.
- Make predictions based on interpretation of probability within the data set.
- Explore the basic elements of sampling.

Algebra

Students will develop confidence exploring basic mathematical patterns and relationships and applying them in problem solving. They will:

- Apply the rules for order of operations
- Use the commutative, associative, and distributive properties and identify inverse elements
- Use literal variables and expressions to solve simple linear equations.
- Translate a word problem into an equation

Mathematics of Change

Students will understand the connection between rates of change (e.g. time, speed, cost per unit, temperature, etc.) and representation (discrete and continuous change and relation to slope/straight line) on a coordinate graph.

SOCIAL STUDIES

Immigration, Industrialization, Urbanization

Basic Ideals and Principles of American Democracy

Lasting Ideals from Ancient Greece and Rome

Similar Attempts for Revolutionary Reforms

Current Events

Geography is explored throughout all units

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GRADE 6 CURRICULUM

A Message for the Parents:

The outlines in this pamphlet are the products of several years of ongoing curriculum work by the administrators and teachers of the Lebanon School District. Using National Standards and the New Hampshire State Curriculum Frameworks as guides, the district staff has completed documents of content and skills for Language Arts, Mathematics, Social Studies and Science that have been adopted by the Lebanon School Board. This pamphlet includes the scope and sequence outlines from those documents.

The curriculum documents that have been completed will ensure the fulfillment of two district goals: (a) that the content and skills are taught in our classrooms are in alignment with the state frameworks, and (b) that the consistency and continuity of curriculum and instruction will be enhanced in schools across the district. The district's focus is on the refinement of the curricula as we meet the needs of diverse learners in the regular classrooms. Curricular accountability is ensured through the use of the New England Common Assessment Program (NECAP) tests and other district wide assessments.

This pamphlet is designed to help parents understand the classroom curriculum for a given grade. Your child's teacher can give you more detail about the presentation of topics and the expectations for students. We hope that this information will help you to support your child's learning and to contribute to the continued improvement of curriculum and instruction in the district. Public knowledge and input are critical to the ongoing curriculum review process. We invite parents and community members to participate in the process and to provide comments and recommendations.

Michael Harris, Ph.D., Superintendent

LEBANON SCHOOL DISTRICT

READING

Construct Meaning

- Read fluently and accurately with understanding multiple sources of information
- Determine literal meanings, summarize materials, and develop informed inferences, judgments and interpretations from texts
- Compare and contrast authors' styles and themes
- Notice figurative language including analogies, personification, multiple meanings, and hyperbole

Comprehension Skills & Strategies

- Use strategies to think about meaning before, during and after reading
- Before reading, skim to get a general idea of content and to locate information
- During reading, cope with longer time sequences and more complex characters
- After reading, discuss and summarize main ideas, supporting details, main and supporting characters, mood, tone, internal and external conflicts, subplots, foreshadowing, turning point, suspense and climax

Vocabulary & Reading New Words

- Utilize the multiple sources of information available to read and understand words with sufficient fluency in context to focus on meaning
- Use increasing knowledge of letter clusters, suffixes, prefixes, roots and compound words

Information Gathering

- Understand how information is gathered, stored and retrieved by electronic means; principles of on-line ethics and meaning of plagiarism
- Identify local, regional and national databases
- Collect, compare and use information presented in written, spoken, audio-visual, and graphic forms
- Use the thesaurus, almanac, periodicals, catalogs, and phone books in addition to basic reference tools
- Manage long-term research and task projects
- Organize, analyze and evaluate information using a variety of tools including thinking maps
- Use skills of reading, writing, speaking and listening to produce effective presentations in the appropriate media

Literature

- Differentiate among a wide variety of genres: short stories, mysteries, poetry, drama, biographies, autobiographies, legends, historical fiction, science fiction, adventure, informational/ factual articles
- Demonstrate competence in understanding, appreciating, interpreting and critically analyzing recognized literature from a wide

variety of eras and cultures: stories, poetry, novels, speeches, and author studies

WRITING

Write for a variety of purposes and audiences including creative, expository, narrative, persuasive and practical writing

- Use facts and logic to support a position
- Organize writing appropriately using chronological order, ordered examples, or compare and contrast
- Use paragraphing to show changes in central idea, examples, dialogue and other elements of topic development
- Write friendly letters, reports, news articles scripts, captions, interviews, fiction, poetry, biography, invitations, charts, and essays
- Include a formal bibliography with a report
- Use a tone, style and language appropriate to the content

Use a variety of techniques before, during, and after to generate ideas, plan, draft, revise, edit and publish

- Before writing, identify the topic, choose appropriate form and content, use knowledge and experiences to generate ideas, and use strategies such as planning, sketching, note-taking, mapping and brainstorming to organize ideas
- During writing, analyze their own writing independently and in collaboration with others
- Use revising and editing strategies to improve the writing; add more information, re-organize, delete, improve leads and endings, develop introductions and conclusions, choose vivid and effective words
- After writing, proofread for spelling based on personal and other spelling lists and for adherence to grammatical rules such as verb tense and subject-verb agreement
- Publish writing in a variety of forms including magazines and newsletters

Maintain meaning through correct grammar, usage and mechanics

- Use capitalization, punctuation, dialogue and abbreviations correctly
- Recognize complete and incomplete sentences and names for parts of speech
- Recognize independent and dependent clauses in writing sample, compound and complex sentences
- Indent paragraphs
- Follow grammatical conventions: double negatives, subject-verb agreement, pronoun and antecedent agreement, using helping verbs to establish tense, and complete sentences
- Identify direct and indirect objects
- Use appropriate form for citing sources of information

SCIENCE

Physical Science

- **Energy:** Review Sound/Light/Heat principles. Study six forms of energy, transfer, conversion, current sources (sustainable or finite?), and alternative sources and applications.
- **Managing Material Resources:** Apply Reduce/Reuse/Recycle in our own community. Explore sustainability of resources for classroom use.

Life Science

- **Investigation of Human Body System:** Study reproductive and endocrine systems with focus on adolescent changes. Overview of immune system and microorganisms (bacteria and viruses), simple cell structure and function, heredity/genetics.
- **Introduction to Classification Systems:** Study Kingdom through species

Earth/Space Science

- **Oceanography/Earth History:** Study effects of topography on Ocean currents and meteorology. Study Earth changes over time with focus on structure of Ocean floor: eras of geologic time, Plate Tectonic Theory, adaptation and evolution of species.