

Math

- Recognize patterns
- Identify properties of geometric figures
- Solve problems using Order of Operations
- Identify mathematical properties (i.e., Commutative, etc.)
- Identify/Classify polygons
- Transformations (translations, rotations, reflections, symmetry)
- Determine unknown angle measures with triangles and quadrilaterals
- Write equivalent fractions
- Compare decimals; Add and subtract decimal numbers
- Represent, order, compare and graph integers
- Compare and order fractions
- Use Venn Diagrams to solve problems
- Write percents in fractional form and decimal form
- Interpret, construct, and evaluate graphs
- Evaluate Stem and Leaf Plots
- Calculate the mean, median, and mode of numbers
- Round and divide decimal numbers
- Experimental/Theoretical Probabilities
- Round and estimate decimal numbers
- Graph coordinate points
- Write and solve equations
- Identify and extend arithmetic and geometric sequences
- Evaluate algebraic expressions
- Simplify algebraic expressions involving like terms

- Graph simple inequalities on a number line
- Solve linear equations
- Compare equivalent fractions and decimals
- Addition/Subtraction of fractions using mixed numbers
- Finding mixed number quotients
- Use ratios to make comparisons
- Find unit rates
- Solve proportions; Use proportions to find missing lengths
- Identify similar and congruent figures
- Record probability as fractions, decimals, or percents
- Use Tree Diagrams to find probabilities
- Convert measurements (distance, weight and temperature)
- Volume of prisms and cylinders
- Calculate the surface area of 3-D geometric figures
- Calculate the circumference/area of geometric figures
- Compare/Order integers; Add and subtract integers
- Solve word problems using percents; Write percents greater than 100%
- Use scientific notation to write numbers

This curriculum guide is designed to give parents and students alike a clear representation of the academic goals and expectations of a particular grade level. Please utilize this information to support your child's quest to pursue a quality education.

Materials are available to you from our school to assist you with helping your child achieve these academic goals.

SIXTH GRADE CURRICULUM GUIDE

Spencer Technology Academy

*“Moving Students
Beyond the Immediate”*



Spencer Technology Academy

*214 N. Lavergne
Chicago, Il. 60644*

*Phone: 773-534-6150
Fax: 773-534-6239*

A Sixth Grade Seahawk Student must have:

Literacy

A. Word Analysis and Vocabulary

- Identify and apply appropriate word analysis and vocabulary strategies and contextual clues to identify unfamiliar words.
- Use denotation and connotation strategies to determine meanings of words in context.

B. Comprehension and Fluency

- Read age-appropriate material aloud with fluency, accuracy, and expressions.
- Use appropriate questioning strategies before, during, and after reading to understand meaning of text.
- Apply appropriate reading strategies to fiction and nonfiction text within and across content areas.
- Ask and respond to open-ended questions regarding meaning of text.
- Compare themes, topics, and story elements of various selections.
- Interpret imagery and figurative language
- Confirms, rejects, and modifies questions, predictions, and hypotheses based on evidence in text.
- Make inferences and draws conclusions about contexts, events, characters, and settings.
- Read independently for extended periods of time and for pleasure.

C. Writing and Spelling

- Use prewriting strategies (e.g. webbing, brainstorming, listing, note taking, outlining, graphic organizers).
- Write paragraphs that include a variety of sentence types (i.e. declarative, interrogative, exclamatory, imperative).
- Develop multi-paragraph compositions that include introduction, first and second level support, and conclusion.

- Use transitional words and phrases to connect and unify key ideas.
- Elaborate ideas through facts, details, description, reasons, and narration.
- Establish and maintain focus within and between paragraphs.
- Write correct standard English conventions, including appropriate grammar, spelling, capitalization and punctuation.
- Use stages of writing process (prewriting, drafting, revising, editing, and publishing) to produce well-developed expository, narrative, and persuasive pieces.
- Write creatively for specified purpose and audience (e.g. sort story, poetry, rap, play, parody, song, letter)
- Use varied and descriptive vocabulary to enrich written language.

D. Listening and Speaking

- Formulate relevant and focused questions and answers in a variety of settings.
- Paraphrase and summarize the content to both formal and informal presentations or messages.
- Deliver oral presentation that is coherent, well organized and rehearsed.
- Use spoken language that is clear, audible, and appropriate.
- Contribute meaningfully and politely to small and large group discussions with relevant responses, and respectful listening behaviors.

Technology

Basic Operations and Concepts:

Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.

Demonstrate and understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving.

Social, ethical, and human issues:

- Demonstrate knowledge of current changes in information technologies and effect those changes have on workplace and society.
- Exhibit legal and ethical behaviors when using information and technology, and discuss consequences and misuse.
- Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

Technology productivity tools:

- Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.
- Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.

Technology Communication tools:

- Design, develop, publish, and present products (e.g., Webpages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.

Technology research tools:

- Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum related problems, issues and information, and to develop solutions or products for audiences inside and outside the classroom.
- Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.

Technology problem-solving and decision-making tools:

- Demonstrate an understanding of concepts underlying hardware, software, and connectivity and of practical applications to learning and problem solving.