

What your sixth grader will be able to do by the end of the year

Science

Ecosystems

- Identify biotic and abiotic components of an ecosystem
- Classify organisms based on their source of energy
- List examples of populations, communities, and ecosystems
- Identify factors in an ecosystem that influence changes in population size, including overpopulation or changes in the food web
- Describe common patterns of relationships between organisms and how they can become interdependent within an ecosystem
- Recognize predictable and unpredictable change within an ecosystem
- Describe ways in which humans alter the environment

Plants

- Describe the life cycle of a flowering plant
- Provide evidence that plants make and store food
- Describe how organisms acquire energy directly or indirectly from the sun

Motion and Forces

- Describe and compare motion in two dimensions
- Relate motion to balanced and unbalanced forces
- Identify kinetic and potential energy in everyday situations
- Demonstrate the transformation between potential and kinetic energy in simple mechanical systems.
- Explain the methods of energy transfer from one place to another
- Illustrate how energy can be transferred while no energy is lost or gained

Astronomy

- Demonstrate using a model, how seasons are the result of the tilt of the Earth and our revolution around the sun
- Describe the position and relationship of the planets and other objects in our solar system
- Describe rotation, revolution, and the moon phases
- Recognize that objects in the sky appear to move because of the Earth's rotation and revolution. Explain tides as they are related to the moon's gravity

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Social Studies

History

- Analyze and explain what influenced the rise of the earliest human communities, their migration throughout the world, and the consequences of the growth of agriculture
- Describe the characteristics of early civilizations

Geography

- Map and analyze the physical and human characteristics of regions in the Western Hemisphere
- Describe the processes that shape the Earth's surface, which along with humans, plants and animals, affect the major ecosystems on Earth
- Explain the relationship between people and their environment

Economics

- Use the concepts, terms, and data of a market economy, and explain the role of government in that economy
- Explain how a national economy functions and the reasons trade occurs internationally

Government

- Explain the purposes of government
- Analyze how various governments in the Western Hemisphere are organized and interact with each other
- Describe the relationship of the United States to other nations and world affairs

Global Issues and Citizen Involvement

- Identify and analyze public policy issues that affect countries and people in the Western Hemisphere
- Collect data, compose a persuasive essay, and develop an action plan to inform others



August 2009



In line with State of Michigan
Grade Level Content Expectations

**Belding Middle School
Sixth Grade
Student Learning
Objectives**

Belding Middle School
Grades 6-8
410 Ionia Street
Belding, MI 48809
616-794-4400

What your sixth grader will be able to do by the end of the year

English Language Arts

- Read informational texts and write a summary about them
- Read and analyze science fiction texts to identify the characteristics of the genre and theme
- Read and analyze fantasy texts to identify the characteristics of the genre and theme
- Read realistic fiction and analyze a main character based on character traits
- Read and analyze multicultural folktales for characteristics of the genre and for theme
- Automatically recognize frequently encountered words in grade-level texts
- Write and respond to poetry using figurative language that includes: simile, metaphor, alliteration, personification, hyperbole, and onomatopoeia
- Write a short story, focusing on story elements and literary devices such as foreshadowing and flashback
- Write an essay that compares thematically-linked texts
- Write a persuasive essay in response to a prompt
- Formulate research questions using multiple resources and organize the information into a final presented project
- Correctly use writing conventions and a variety of grammatical structures including compound sentences, introductory phrases, periods, commas, quotation marks, and others

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English Language Arts

- Correctly spell words in independent work
- Deliver a presentation interacting with an audience
- Employ listening strategies to analyze a variety of oral texts
- Research a topic or issue using a variety of resources to investigate and compare multiple perspectives

Math

Number and Operations

- Demonstrate division of fractions as the inverse of multiplication, fluently multiply and divide any two fractions, write a mathematical statement to represent a situation involving division of fractions, and solve the unknown
- Order, add, subtract, multiply, and divide positive rational numbers and translate between rational forms (fractions and decimals)
- Estimate and calculate sums, differences, products, and quotients of positive rational numbers in applied situations
- Explain the meaning of integers, absolute values, and fractions (including positive and negative fractions) and compute with integers to solve problems
- Understand and use integer exponents and express numbers in scientific notation
- Find equivalent ratios, percentages of numbers, and use rates, ratios, percentages, and proportions to solve real-life situations

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Math

Algebra

- Write an algebraic expression or equation related to a given situation, simplify expressions of the first degree, and evaluate expressions using specific values
- Understand and use properties of equations to solve equations of the form $ax + b = c$ and solve contextual problems
- Plot ordered pairs, use ordered pairs to graph linear equations, write equations for linear functions of the form $y = mx$, and represent simple relationships between quantities

Measurement

- Convert between basic units of measurement within the metric or customary systems
- Construct circles with given diameters or radii, measure the diameter and radius of given circles, determine circumferences, and use a grid to determine areas

Geometry

- Understand and apply basic properties of lines, angles, triangles, and congruence of polygons, use paper folding for geometric construction, and solve equations
- Perform the basic rigid motions in the plane (transformations such as rotations, reflections, translations), relate them to congruence, and apply them to solve problems

Data and Probability

- Read and interpret circle graphs, gather data, construct graphs, and formulate sentences to state conclusions, which will include the use of mean, median, mode, and range in real-life situations
- Express probabilities as fractions, decimals, and percentages between 0 and 1, inclusive; determine probabilities empirically from simple experiments; and compute probabilities theoretically by listing all possibilities