

Science Curriculum Guide Kindergarten - Fifth Grade

	Kindergarten	First Grade	Second Grade
September	<p>Characteristics of living Principles of scientific inquiry: Apple tree life cycle; Formulate questions, predict, estimate, observe, discuss. Scientific language: throughout year Sink and float experiment Life Sciences: size, shape and color comparison Technology: Computers-practical use and applications (throughout year) Weather and Seasons (Calendar-during year) Five Senses Magnet exploration</p>	<p>Weather, the sky and seasons</p> <p>Chapter 1 Measuring weather What is weather? What is temperature? What is wind?</p> <p>Chapter 2 The sky and the seasons What can we see in the sky? Why do we have day and night?</p> <p>What is spring? What is summer? What is fall? What is Winter?</p> <p>Supplemental: <i>Time for Kids, Scholastic News</i></p>	<p>Beginning late September: Unit C: Exploring Earth's Surface</p> <p>Chapter 1: Earth's Resources</p> <ul style="list-style-type: none"> • Rocks • Soils • Plants
October	<p>Pumpkin life cycle Life science-Characteristics of living things: Bats, Spiders, and Pumpkins Scientific Inquiry: Weigh, measure, and predict inside of pumpkins; sink and float experiment with pumpkins Calendar: Weather and Seasonal change How living things change and adapt Five senses: Taste, touch, Sight</p>	<p>Weather, the sky and seasons</p> <p>Chapter 1 Measuring weather What is weather? What is temperature? What is wind?</p> <p>Chapter 2 The sky and the seasons What can we see in the sky? Why do we have day and night?</p> <p>What is spring? What is summer? What is fall? What is Winter?</p> <p>Supplemental: <i>Time for Kids, Scholastic News</i></p>	<p>Unit C: Exploring Earth's Surface</p> <p>Chapter 1: Earth's Resources</p> <ul style="list-style-type: none"> • Rocks • Soils • Plants
November	<p>Calendar: Weather and change of seasons Characteristics of living things: Turkey Leaves: Variation and change; shape and color Migration Scientific inquiry: How things change: Liquid to solid; Making butter experiment</p>	<p>Weather, the sky and seasons</p> <p>Chapter 1 Measuring weather What is weather? What is temperature? What is wind?</p> <p>Chapter 2 The sky and the seasons What can we see in the sky? Why do we have day and night?</p> <p>What is spring? What is summer? What is fall? What is Winter?</p> <p>Supplemental: <i>Time for Kids, Scholastic News</i></p>	

Science Curriculum Guide Kindergarten - Fifth Grade

	Kindergarten	First Grade	Second Grade
December	<p>Calendar: Winter weather and seasonal change Hibernation (change and adaptation) How animals interact with the environment during seasonal change Characteristics of living things: Bears and Reindeer Scientific Inquiry: Gingerbread-Discuss, predict, draw conclusions</p>	<p>Living Together</p> <p>Chapter 1 Plants and animals need one another How do animals need plants? how do animals help plants? How do we need plants and animals?</p> <p>Chapter 2 A Place to live What lives in a forest? What lives in the desert? What lives in a rain forest? What lives in the ocean? Supplemental: <i>Time for Kids</i>, <i>Scholastic News</i></p>	
January	<p>Calendar: Seasonal change and weather Properties of solids and liquids: Scientific inquiry-ice and water experiment Antarctic Animals: Penguins Living things and their environment: groundhogs</p>	<p>Living Together</p> <p>Chapter 1 Plants and animals need one another How do animals need plants? how do animals help plants? How do we need plants and animals?</p> <p>Chapter 2 A Place to live What lives in a forest? What lives in the desert? What lives in a rain forest? What lives in the ocean? Supplemental: <i>Time for Kids</i>, <i>Scholastic News</i></p>	<p>Unit E: Exploring Matter</p> <p>Chapter 1: Observing and Measuring Matter</p> <ul style="list-style-type: none"> • States of Matter • Properties of Matter • Changes in matter • Mixtures • Reversible/irreversible changes

Science Curriculum Guide Kindergarten - Fifth Grade

	Kindergarten	First Grade	Second Grade
February	<p>Calendar: Seasonal change and weather The Rain Forest: Plants and animals Burrowing animals: Groundhogs Dental Health Nutrition: Healthy Foods Scientific Inquiry: Chemical reaction-penny experiment</p>	<p>Living Together Chapter 1 Plants and animals need one another How do animals need plants? how do animals help plants? How do we need plants and animals? Chapter 2 A Place to live What lives in a forest? What lives in the desert? What lives in a rain forest? What lives in the ocean? Supplemental: <i>Time for Kids</i>, <i>Scholastic News</i></p>	
March	<p>Calendar: Seasonal changes for Spring and Weather Scientific Inquiry: Solids and liquids Hibernation and migration-Spring Plant Experiment-seeds Diagram: What seeds need Greenhouse: Lima bean experiment Eggs and vinegar experiment</p>	<p>Plants and Animals All Around Chapter 1 Living and Nonliving Things How do my senses help me learn? What are living and nonliving things? Chapter 2 All About Plants What are the parts of a plant? How do plants grow? What do plants need? Chapter 3 All About Animals What do animals need? What are some kinds of animals? What are insects? How do animals grow? How does a butterfly grow? How does a frog grow? Supplemental: <i>Time for Kids</i>, <i>Scholastic News</i></p>	
April	<p>Calendar: Seasonal change and weather Ecology: Earth Day-recycling Oviparous animal life cycle (frog, butterfly, chicks) Solar System: Planets, stars, and moon Gravity</p>	<p>Plants and Animals All Around Chapter 1 Living and Nonliving Things How do my senses help me learn? What are living and nonliving things? Chapter 2 All About Plants What are the parts of a plant? How do plants grow? What do plants need? Chapter 3 All About Animals What do animals need? What are some kinds of animals? What are insects? How do animals grow? How does a butterfly grow? How does a frog grow? Supplemental: <i>Time for Kids</i>, <i>Scholastic News</i></p>	<p>Unit F: Energy in Motion Chapter 1: Forces in Motion</p> <ul style="list-style-type: none"> • Forces • Gravity • Magnetism • Measuring Motion • Hearing sound <ul style="list-style-type: none"> •vibration, volume, pitch

Science Curriculum Guide Kindergarten - Fifth Grade

	Kindergarten	First Grade	Second Grade
May	Calendar: Seasonal change and weather Insect study: Ants Farm Animals Ocean animals and their environment Measurement and mixing (create a suspension) Making a milk shake Nutrition: Healthy foods Plant life cycle	Plants and Animals All Around Chapter 1 Living and Nonliving Things How do my senses help me learn? What are living and nonliving things? Chapter 2 All About Plants What are the parts of a plant? How do plants grow? What do plants need? Chapter 3 All About Animals What do animals need? What are some kinds of animals? What are insects? How do animals grow? How does a butterfly grow? How does a frog grow? Supplemental: <i>Time for Kids</i> , <i>Scholastic News</i>	Unit F: Energy in Motion Chapter 2: Hearing Sound <ul style="list-style-type: none"> • Vibrations • Volume • Pitch

Science Curriculum Guide Kindergarten - Fifth Grade

	Third Grade	Fourth Grade
September	<p>The Water Cycle why water is important where water is found on Earth how water changes form</p> <p>Weather the layers of the atmosphere types of weather measure temperature, precipitation and wind reading weather maps</p>	<p>Scientific Method using process skills to observe and ask questions form a hypothesis plan and conduct an experiment reading/writing skills in Science safety in Science</p> <p>Begin Life Processes</p>
October	<p>Solar system names and orders of planets other bodies in the solar system what causes the seasons what causes day and night the moon's phases solar and lunar eclipses solar system assessment</p>	<p>Living Things Cells Animal & animal types plants with seeds fungi</p>
November	<p>Energy different forms of energy how energy can be stored and used sources of energy how energy moves light waves sound waves energy as electricity</p>	<p>Animal and Plant Growth and Adaptation Basic Needs Parts help organism survive Animal Behavior for survival Plant Reproduction</p>
December	<p>Heat thermal energy and how it moves heat friction how to measure temperature ways to control thermal energy</p>	<p>Human Body Systems Skeletal, muscular, Respiratory Circulatory, Nervous, Digestive</p>
January	<p>Forces and Motion how motion begins how to find speed what is gravity what is work simple machines (lever, pulley, wedge, screw, inclined plane)</p>	<p>Forces and Motion Electricity and Magnetism Electrical currents, magnetism Electromagnets, Study Island</p>

Science Curriculum Guide Kindergarten - Fifth Grade

Third Grade

Fourth Grade

February

Plants
four needs of plants
how roots, stems and leaves help plants
plant cells
leaf shapes and sizes

Motion Forces at Work
Motion , Forces & their
effect,
types of forces
Study Island

March

Plants
how plants reproduce
what are seeds
seed parts
what seeds need
ways seeds are spread
how plants make food
photosynthesis
chlorophyll

Simple Machines
Lever, pulley, wheel & axle
and other simple
machines

April

Animals
what animals need
animal cells versus plant cells
four traits of mammals
five traits of birds
four traits of amphibians
four traits of fish
three traits of reptiles

Oceans
Water cycle
Motions of Oceans- waves
Currents
Ocean Floor

May

Animals
different kinds of animal behavior
hibernation
migration
camouflage
mimicry
why animals become extinct
how some animals are protected from
extinction
animal inspiration research project

Weather Conditions
Earth's Atmosphere
Air masses
Weather prediction

Science Curriculum Guide Kindergarten - Fifth Grade

Fifth Grade

September	Scientific method Scientific processing Skills Processes that change earth erosion stream table wind -ce mass movement
October	Continental drift Volcanoes Mt. St. Helens Mountain formation Earthquakes Plate movement Continental drift Pangea Fossil record
November	Rocks/Rock Cycle
December	Human body systems skeletal muscular digestive circulatory nervous respiratory excretory cells - types, structure
January	Classification Systems vertebrates invertebrates vascular plants nonvascular plants Mitosis/Meiosis
February	Life cycles Genetics traits of parents mutation inherited and learned Cycles in nature water cycle nitrogen cycle carbon-oxygen cycle

Science Curriculum Guide Kindergarten - Fifth Grade

Fifth Grade

March	Inherited and learned traits Natural and artificial selection Ecosystems habitats populations limiting factors competition Food chains Adaptations Extinction Biomes
April	Biomes Preserving ecosystems succession pioneer plants Damaging ecosystems Reduce, reuse, recycle
May	Light Spectrum Forms of energy kinetic, potential, electric, light, sound, thermal, chemical How people use energy Fossil fuels Electricity