

		<b>KINDERGARTEN SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 1</b>	<b>Quarter 1</b>				
	<b>Physical Science</b>				
	<b>Observe, manipulate, sort and generate questions about objects and their physical properties.</b>				
	K1.1 Use all senses as appropriate to observe, sort, and describe objects according to their composition and physical properties, such as size, color and shape. Explain these choices to others and generate questions about the topics.	Day and Night	Fabrics	Fabrics	Day and Night
	K1.2 Identify and explain possible uses for an object based on its properties and compare these uses with other students' ideas.				
	<b>Earth and Space Science</b>				
	<b>Observe, record and recognize patterns and generate questions about night and day and the seasons.</b>				
	K2.3 Describe in words and pictures the changes in weather from month to month and season to season				
	<b>Life Science</b>				
	<b>Observe living organisms, compare and contrast their characteristics, and ask questions about them.</b>				
	K3.1 Observe and draw physical features of common plants and animals.				

		<b>KINDERGARTEN SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 2</b>	<b>Quarter 2</b>				
	No indicators introduced				

<b>KINDERGARTEN SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 3</b>	<b>Quarter 3</b>				
	<b>Earth and Space Science</b>				
	<b>Observe, record and recognize patterns and generate questions about night and day and the seasons.</b>				
	K2.2 Describe and compare objects seen in the night and day sky.				

		<b>KINDERGARTEN SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 4</b>	<b>Quarter 4</b>				
	<b>Earth and Space Science</b>				
	<b>Observe, record and recognize patterns and generate questions about night and day and the seasons.</b>				
	K2.1 Observe and record during sunny days when the sun shines on different parts of the school building.				
	<b>Life Science</b>				
	<b>Observe living organisms, compare and contrast their characteristics, and ask questions about them.</b>				
	K3.2 Describe and compare living animals in terms of shape, texture of body covering, size, weight, color and the way they move.				
	K3.3 Describe and compare living plants in terms of growth, parts, shape, size, color and texture.				

		<b>FIRST GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 1</b>	<b>Quarter 1</b>				
	<b>Standard 1: Physical Science</b>				
	<b>Describe objects in terms of the materials that compose them and in terms of their physical properties.</b>				
	1.1.1 Use all senses as appropriate to identify the component parts of objects and the materials from which they are made.				
	1.1.2 Characterize materials as solid or liquid, investigate their properties, record observations and explain the choices to others based on evidence (i.e., physical properties).				
	1.1.3 Experiment with simple methods for separating solids and liquids based on their physical properties.				
	<b>Standard 4: Science, Engineering and Technology</b>				
	<b>Determine properties of natural and man-made materials and their most important uses.</b>				
	1.4.1 Use all senses as appropriate to sort objects as being composed of materials that are naturally occurring, human made or a combination of the two.				

		<b>FIRST GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	q1	q2	q3	q4
<b>Quarter 2</b>	<b>Quarter 2</b>				

		<b>FIRST GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 3</b>	<b>Quarter 3</b>				
	<b>Standard 3: Life Science</b>				
	<b>Observe, describe and ask questions about living things and their relationships to their environments.</b>				
	1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages) and describe how those features may provide an advantage for survival in different environments				
	1.3.2 Observe organisms closely over a period of time in different habitats such as terrariums, aquariums, lawns and trees. Draw and write about observations.				
	1.3.3 Observe and explain that plants and animals have basic needs for growth and survival: plants need to take in water and need light, and animals need to take in water and food and have a way to dispose of waste.				
	1.3.4 Describe how animals' habitats, including plants, meet their needs for food, water, shelter and an environment in which they can live.				
	1.3.5 Observe and describe ways in which animals and plants depend on one another for survival.				
	<b>Standard 2: Earth and Space Science</b>				
	<b>Observe, describe and ask questions about soil components and properties.</b>				
	1.2.1 Observe and compare properties of sand, clay, silt and organic matter. Look for evidence of sand, clay, silt and organic matter as components of soil samples.				
	1.2.2 Choose, test and use tools to separate soil samples into component parts.				

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<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
	1.2.3 Observe a variety of soil samples and describe in words and pictures the soil properties in terms of color, particle size and shape, texture, and recognizable living and nonliving items.				
	1.2.4 Observe over time the effect of organisms like earthworms in the formation of soil from dead plants. Discuss the importance of earthworms in soil.				



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Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 4</b>	<b>Quarter 4</b>				
	<b>Standard 4: Science, Engineering and Technology</b>				
	<b>Determine properties of natural and man-made materials and their most important uses.</b>				
	1.4.2 Choose two animals that build shelters within their habitats. Compare the shelters in terms of the materials and tools they use and the type and purpose of shelter they provide.				
	1.4.3 Construct a simple shelter for an animal with natural and human-				

SECOND GRADE SCIENCE					
Highlighted quarters represent mastery expected					
CCSS	Indiana 2010 Science Academic Standard	Q1	Q2	Q3	Q4
<b>Quarter 1</b>	<b>Quarter 1</b>				
	<b>Core Standard 1 Physical Science</b>				
	<b>Observe and describe the motion of an object and how it changes when a force is applied to it.</b>				
	2.1.4 Observe, sketch, demonstrate and compare how objects can move in different ways (e.g. straight, zig-zag, back and forth, rolling, fast and slow.)				
	2.1.5 Describe the position or motion of an object relative to a point of reference (e.g., background, another object).				
	2.1.6 Observe, demonstrate, sketch and compare how applied force (i.e., push or pull) changes the motion of objects.				
	2.1.7 Investigate the motion of objects when they are acted upon at a distance by forces like gravity and magnetism.				

<b>SECOND GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Quarter 2</b>	<b>Quarter 2</b>				
	<b>Core Standard 1 Physical Science</b>				
	<b>Observe and describe that the properties of materials can change, but not all materials respond in the same way to the same action.</b>				
	2.1.1 Observe, describe, and measure ways in which the properties of a sample of water (including volume) change or stay the same as the water is heated and cooled and then transformed into different states.				
	2.1.2 Predict the result of combining solids and liquids in pairs. Mix; observe, gather, record and discuss evidence of whether the result may have different properties than the original materials.				
	2.1.3 Predict and experiment with methods (e.g. sieving, evaporation) to separate solids and liquids based on their physical properties.				
	<b>Core Standard 4 Science, Engineering and Technology</b>				
	<b>Describe how technologies have been developed to meet human</b>				
	2.4.2 Identify technologies developed by humans to meet human needs . Investigate the limitations of technologies and how they improve the quality of life.				

<b>SECOND GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Quarter 3</b>	<b>Quarter 3</b>				
	<b>Core Standard 2 Earth Science</b>				
	<b>Day to day and over the seasons, observe, measure, record and recognize patterns and ask questions about features of the weather.</b>				
	2.2.1 Construct and use tools to observe and measure weather phenomena like precipitation, changes in temperature, windspeed and direction.				
	2.2.2 Experience and describe wind as a motion of the air.				
	2.2.3 Chart or graph weather observations such as cloud cover, cloud type, and type of precipitation on a daily basis over a period of weeks.				
	2.2.4 Ask questions about charted observations and graphed data. Identify the day to day patterns in cycles of weather. Understand seasonal time scales in terms of temperature and amounts of rainfall and snowfall.				
	2.2.5 Ask questions and design class investigations on the effect of the sun heating the surface of the earth.				
	2.2.6 Learn about, report on, and practice severe weather safety procedures.				
	<b>Core Standard 2 Earth Science</b>				
	<b>Investigate how the position of the sun and moon and the shape of the moon change in observable patterns.</b>				
	2.2.7 Investigate how the sun appears to move through the sky during the day by observing and drawing the length and direction of shadows.				

<b>SECOND GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
	2.2.8 Investigate how the moon appears to move through the sky during the day by observing and drawing its location at different times.				
	2.2.9 Investigate how the shape of the moon changes from day to day in a repeating cycle that lasts about a month.				
	<b>Core Standard 3 Life Science</b>				
	<b>Observe, ask, questions about and describe how organisms change</b>				

<b>SECOND GRADE SCIENCE</b>					
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<b>Quarter 4</b>	<b>Quarter 4</b>				
	2.3.1 Observe closely over a period of time and then record in pictures and words the changes in plants and animals throughout their life cycles - including details of their body plan, structure and timing of growth, reproduction, and death.				
	2.3.2 Compare and contrast details of body plans and structures within the life cycles of plants and animals.				

		<b>THIRD GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 1</b>	<b>Quarter 1</b>				
	<b>Life Science (Two classes)</b>				
	<b>Core Standard:</b>				
	<b>Observe, describe and ask questions about plant growth and development</b>				
	3.3.1 Identify the common structures of a plant including its roots, stems, leaves, flowers, fruits, and seeds. Describe their functions.				
	3.3.2 Investigate plant growth over time, take measurements in SI units, record the data and display the data in graphs. Examine factors that might influence plant growth.				
	<b>Earth Science</b>				
	<b>Core Standard:</b>				
	<b>Observe, describe, and identify rocks and minerals by their specific properties.</b>				
	<b>Observe, and describe how natural materials meet the needs of plants and animals (including humans).</b>				
	3.2.1 Examine the physical properties of rock samples and sort them into categories based on size using simple tools like as sieves.				
	3.2.2 Observe the detailed characteristics of rocks and minerals. Identify rocks as being composed of different combinations of minerals.				
	3.2.3 Classify and identify minerals by their physical properties of hardness, color, luster, and streak.				
	3.2.4 Identify fossils and describe how they provide evidence about the plants and animals that lived long ago and the nature of their environment at that time.				
	3.2.5 Describe natural materials and give examples of how they sustain the lives of plants and animals.				

		<b>THIRD GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
	3.2.6 Describe how the properties of earth materials make them useful to humans in different ways. Describe ways that humans have altered these resources to meet their needs for survival.				



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<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 2</b>	<b>Quarter 2</b>				
	<b>Science, Engineering and Technology</b>				
	<b>Core Standard:</b>				
	<b>Define a real world problem and list criteria for a successful solution.</b>				
	3.4.1 Choose and use the appropriate tools to estimate and measure length, mass and temperature in SI units.				
	3.4.2 Define the uses and types of simple machines and utilize simple machines in the solution to a —real world problem.				

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Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 3</b>	<b>Quarter 3</b>				
	<b>Physical Science</b>				
	<b>Core Standard:</b>				
	<b>Observe and describe how sound is produced by vibrations. (3.1.1, 3.1.2, 3.1.3)</b>				
	<b>Observe and describe how light travels from point to point. (3.1.4, 3.1.5, 3.1.6)</b>				
	3.1.1 Generate sounds using different materials, objects and techniques. Record the sounds and then discuss and share the results.				
	3.1.2 Investigate how the loudness and pitch of sound changes when the rate of vibrations changes.				
	3.1.3 Investigate and recognize that sound moves through solids, liquids and gases (e.g., air).				
	3.1.4 Investigate how light travels through the air and tends to maintain its direction until it interacts with some other object or material.				
	3.1.5 Observe and describe how light is absorbed, changes its direction, is reflected back and passes through objects. Observe and describe that a shadow results when light cannot pass through an object.				
	3.1.6 Describe evidence to support the idea that light and sound are forms of energy.				

		<b>THIRD GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 4</b>	<b>Quarter 4</b>				

<b>FOURTH GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Quarter 1</b>	<b>Quarter 1</b>				
	<b>Physical Science</b>				
	<b>Core Standard:</b>				
	<b>Provide evidence that heat and electricity are forms of energy. (4.1.1, 4.1.2)</b>				
	<b>Core Standard:</b>				
	<b>Design and assemble electric circuits that provide a means of transferring energy from one form or place to another. (4.1.3, 4.1.4, 4.1.5)</b>				
	4.1.1 Describe and investigate the different ways in which heat can be generated.				
	4.1.2 Investigate the variety of ways in which heat can be generated and moved from one place to another. Explain the direction the heat moved.				
	4.1.3 Construct a complete circuit through which an electrical current can pass as evidenced by the lighting of a bulb or ringing of a bell.				
	4.1.4 Experiment with materials to identify conductors and insulators of heat and electricity.				
	4.1.5 Demonstrate that electrical energy can be transformed into heat, light, and sound.				
	<b>Earth Science</b>				
	<b>Core Standard:</b>				
	<b>Observe, investigate and give examples of ways that the shape of land changes over time. (4.2.1, 4.2.2, 4.2.3)</b>				
	<b>Core Standard:</b>				

<b>FOURTH GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
	<b>Describe how the supply of natural resources is limited and investigate ways that humans protect and harm the environment. (4.2.4, 4.2.5, 4.2.6)</b>				
	4.2.1 Demonstrate and describe how smaller rocks come from the breakage and weathering of larger rocks in a process that occurs over a long period of time.				
	4.2.2 Describe how wind, water and glacial ice shape and reshape earth's land surface by eroding rock and soil in some areas and depositing them in other areas in a process that occurs over a long period of time.				
	4.2.3 Describe how earthquakes, volcanoes and landslides suddenly change the shape of the land.				
	4.2.4 Investigate earth materials that serve as natural resources and gather data to determine which ones are limited by supply.				
	4.2.5 Describe methods that humans currently use to extend the use of natural resources.				
	4.2.6 Describe ways in which humans have changed the natural environment. Explain if these changes have been detrimental or beneficial.				

	<b>FOURTH GRADE SCIENCE</b>				
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Quarter 2</b>	<b>Quarter 2</b>				

<b>FOURTH GRADE SCIENCE</b>					
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
<b>Quarter 3</b>	<b>Quarter 3</b>				
	<b>See Health Standards</b>				
	<b>Science, Engineering, and Technology</b>				
	<b>Core Standard:</b>				
	<b>Design a moving system and measure its motion. (4.4.1, 4.4.2, 4.4.3, 4.4.4)</b>				
	4.4.1 Investigate transportation systems and devices that operate on or in land, water, air and space and recognize the forces (lift, drag, friction, thrust and gravity) that affect their motion.				
	4.4.2 Make appropriate measurements to compare the speeds of objects in terms of the distance traveled in a given amount of time or the time required to travel a given distance.				
	4.4.3 Investigate how changes in speed or direction are caused by forces: the greater the force exerted on an object, the greater the change.				
	4.4.4 Define a problem in the context of motion and transportation. Propose a solution to this problem by evaluating, reevaluating and testing the design. Gather evidence about how well the design meets the needs of the problem. Document the design so that it can be easily replicated.				

FOURTH GRADE SCIENCE					
Highlighted quarters represent mastery expected					
CCSS	Indiana 2010 Science Academic Standard	Q1	Q2	Q3	Q4
Quarter 4	Quarter 4 Life Science				
	<b>Core Standard:</b>				
	<b>Observe, describe and ask questions about structures of organisms and how they affect their growth and survival. (4.3.1, 4.3.2, 4.3.3, 4.3.4)</b>				
	4.3.1 Observe and describe how offspring are very much, but not exactly, like their parents or one another. Describe how these differences in physical characteristics among individuals in a population may be advantageous for survival and reproduction.				
	4.3.2 Observe, compare and record the physical characteristics of living plants or animals from widely different environments. Describe how each plant or animal is adapted to its environment.				
	4.3.3 Design investigations to explore how organisms meet some of their needs by responding to stimuli from their environments.				
	4.3.4 Describe a way that a given plant or animal might adapt to a change arising from a human or non-human impact on its environment.				



		<b>FIFTH GRADE SCIENCE</b>			
Highlighted quarters represent mastery expected					
<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 1</b>	<b>Quarter 1</b>				
	Core Standard 1 Physical Science: Describe the weight and volume and measure the weight and volume of various objects. Core Standard 1 Physical Science: Demonstrate that mass is conserved even when a substance has undergone a change in its state				
	5.1.2 Describe the difference between weights and mass. Understand that weight is dependent on gravity and mass is the amount of matter in a given substance or material.				
	5.1.1 Describe and measure the volume and weight of a sample of a given material.				
	5.1.4 Determine if matter has been added or lost by comparing weights when melting, freezing, or dissolving a sample of a substance.				
	5.1.3 Demonstrate that regardless of how parts of an object are assembled the weight of the whole object is identical to the sum of the weight of the parts; however, the volume can differ from the sum of the volumes.				
	Core Standard 4 Science: Engineering and Technology: Design a prototype that replaces a function of a human body part.				
	5.4.1 Investigate technologies that mimic human or animal musculoskeletal systems in order to meet a need.				
	5.4.2 Investigate the purpose of prototypes and models when designing a solution to a problem and how limitations in cost and design features might affect their construction.				
	5.4.3 Design solutions to problems in the context of musculoskeletal body systems. Using suitable tools, techniques and materials, draw or build a prototype or model of a proposed design.				

FIFTH GRADE SCIENCE					
Highlighted quarters represent mastery expected					
CCSS	Indiana 2010 Science Academic Standard	Q1	Q2	Q3	Q4
<b>Quarter 2</b>	<b>Quarter 2</b>				
	Core Standard 2 Earth Science: Observe, describe and ask questions about patterns in the sun.				
	5.2.1 Recognize that our earth is part of the solar system in which				
	5.2.2 Observe and use pictures to record how the sun appears to move across the sky in the same general way every day but rises and sets in different places as the seasons change.				
	5.2.3 In monthly intervals, observe and draw the length and				
	5.2.4 Use a calendar to record observations of the shape of the moon and the rising and setting times over the course of a month. Based on the observations, describe patterns in the moon cycle.				

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<b>CCSS</b>	<b>Indiana 2010 Science Academic Standard</b>	Q1	Q2	Q3	Q4
<b>Quarter 3/4</b>	<b>Quarter 3/4</b>				
	Core Standard 3: Life Science: Observe, describe and ask questions about how to change in one part of an ecosystem create changes in other parts of the ecosystem.				
	5.3.1 Observe and classify common Indiana organisms as producers, consumers, decomposers, predator and prey based on their relationships and interactions with other organisms in their ecosystem.				
	5.3.2 Investigate the action of different decomposers and compare their role in an ecosystem with that of producers and consumers.				