

Curriculum Map

Course Title: Fifth Grade Science	Quarter 1	Academic Year: 2014-2015
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Essential Question(s) for this Quarter:

Unit/Time Frame		Indiana Standards	Content	Learning Objectives	Assessment	Resources
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Quarter 1 Cycle 1		5.2.1 Recognize that our earth is part of the solar system in which the sun, an average star, is the central and largest body. Observe that our solar system includes the sun, moon, seven other planets and their moons, and many other smaller objects like asteroids and comets.	Solar system, planet, gravity, inertia, revolve, constellation	Observe, describe and ask questions about patterns in the sun-moon-earth system.	Class participation, guided practice, independent practice, spiral review, tests, etc. for all standards listed in Quarter 1.	https://www.youtube.com/watch?v=uhNBYKTGfk0 https://www.youtube.com/watch?v=Qd6nLM2QIWw
Quarter 1 Cycle 1		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.		Observe, describe and ask questions about patterns in the sun-moon-earth system.		https://www.brainpop.com/science/sun/preview.weml
Quarter 1 Cycle 1		5.2.3 In Monthly intervals, observe and draw the length and direction of shadows cast by the sun at several chosen times during the day. Use the recorded data as evidence to explain how those shadows were affected by the relative position of the earth and sun.		Observe, describe and ask questions about patterns in the		https://www.brainpop.com/science/sun/preview.weml

				sun-moon-earth system.		
Quarter 1 Cycle 2		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.		Observe, describe and ask questions about patterns in the sun-moon-earth system.		https://www.brainpop.com/science/space/moonphases/preview.html https://www.youtube.com/watch?v=uqek1e3DBsE
Quarter 1 Cycle 2		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.	Producers, consumers, decomposers, predator, prey	Observe, describe and ask questions about how changes in one part of an ecosystem create changes in other parts of the ecosystem.		https://www.youtube.com/watch?v=SWvtRf4TAO4 https://www.brainpop.com/science/ecologyandbehavior/foodchains/

Course Title: Fifth Grade Science	Quarter 2	Academic Year: 2014-2015
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Essential Question(s) for this Quarter:

Unit/Time Frame		Indiana Standards	Content	Learning Objectives	Assessment	Resources

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Quarter 2 Cycle 1		5.3.2 Investigate the action of different decomposers and compare their role in an ecosystem with that of producers and consumers.		Observe, describe and ask questions about how changes in one part of an ecosystem create changes in other parts of the ecosystem.	Class participation, guided practice, independent practice, spiral review, tests, etc. for all standards listed in Quarter 2.	https://www.youtube.com/watch?v=Z6V0a_7N1Mw
Quarter 2 Cycle 2		Science Fair The Nature of Science Students gain scientific knowledge by observing the natural and constructed world, performing and evaluating investigations, and communicating their findings. - Make predictions & formulate testable questions - Design a fair test - Plan & carry out investigations - Perform investigations using appropriate units when collecting data - Test predictions with multiple trials - Keep accurate records in a notebook during investigations & communicate findings using	Question, hypothesis, materials, data, results, conclusion			https://www.brainpop.com/science/scientificinquiry/scienceprojects/preview.wml https://www.brainpop.com/science/scientificinquiry/scienceprojects/preview.wml

		graphs, charts, maps & models through oral & written reports. - Identify simple patterns in data and propose explanations to account for the patterns. - Compare the results of an investigation with the prediction.				
Course Title: Fifth Grade Science			Quarter 3	Academic Year: 2014-2015		

Essential Question(s) for this Quarter:

Unit/Time Frame		Indiana Standards	Content	Learning Objectives	Assessment	Resources

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Quarter 3 Cycle 1		Science Fair The Nature of Science Students gain scientific knowledge by observing the natural and constructed world, performing and evaluating investigations, and communicating their findings. - Make predictions & formulate testable questions - Design a fair test - Plan & carry our investigations - Perform investigations using appropriate units when collecting data - Test predictions with multiple trials - Keep accurate records in a notebook during investigations & communicate findings using graphs, charts, maps & models through oral & written reports. - Identify simple patterns in data and propose explanations to account for the patterns.				
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		Compare the results of an investigation with the prediction.				
Quarter 3 Cycle 1		5.1.1 Describe and measure the volume and weight of a sample of given material	Matter, mass, volume, weight, density	Describe the weight and volume and measure the weight and volume of various objects.	Class participation, guided practice, independent practice, spiral review, tests, etc. for all standards listed in Quarter 3.	https://www.youtube.com/watch?v=gfhQDJYjqN
Quarter 3 Cycle 2		5.1.2 Describe the difference between weight and mass. Understand that weight is dependent on gravity and mass is the amount of matter in a given substance or material.		Describe the weight and volume and measure the weight and volume of various objects.		https://www.youtube.com/watch?v=-F5nmIJOF4U
Quarter 3 Cycle 2		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.		Demonstrate that mass is conserved even when a substance has undergone a change in its state.		

Course Title: Fifth Grade Science	Quarter 4	Academic Year: 2014-2015
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Quarter 4 Cycle 1		5.1.4 Determine if matter has been added or lost by comparing weights when melting, freezing or dissolving a substance.	State of matter, melting point, boiling point, freezing point	Demonstrate that mass is conserved even when a substance has undergone a change in its state.	Class participation, guided practice, independent practice, spiral review, tests, etc. for all standards listed in Quarter 4.	http://study.com/academy/lesson/phase-change-evaporation-condensation-freezing-melting.html
Quarter 4 Cycle 1		5.4.1 Investigate technologies that mimic human or animal musculoskeletal systems in order to meet a need.		Design a prototype that replaces a function of a human body part.		
Quarter 4 Cycle 2		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.		Design a prototype that replaces a function of a human body part.		
Quarter 4 Cycle 2		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.		Design a prototype that replaces a function of a human body part.		

Quarter 4 Cycle 2		The Design Process As citizens of the constructed world, students will participate in the design process. Students will learn to use materials and tools safely and employ the basic principles of the engineering design process in order to find solutions to problems. - Identify a need or problem to be solved. - Brainstorm potential solutions. - Document the design throughout the entire design process. - Select a solution to the need or problem. - Select the most appropriate materials to develop a solution that will meet the need. - Create the solution through a prototype. - Test and evaluate how well the solution meets the goal. - Evaluate and test the design using measurement.				
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