

Middle/Senior High School Curriculum Map
Curriculum Map

Course Title: 6th Grade Science	Quarter: 1	Academic Year: 2024-2025
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Essential Questions for this Quarter:

1. What is a wavelength?
2. What is wave frequency?
3. What is the amplitude of a wave?
4. What are the parts of a wave?
5. What is a longitudinal wave?
6. What is a transverse wave?
7. What are the different wavelengths of electromagnetic waves?
8. How is sound a wave?
9. How do we see things using visible light?

Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
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Physical Science Unit 1 (3 weeks)	MS-PS4-1	PS4.A: Wave Properties	SEP.5: Using Mathematics and Computational Thinking	8 Marking Period Formative Quizzes (10% cumulative)	CPO Textbooks
Physical Science Unit 2 (3 weeks)	MS-PS4-2	CC.1: Patterns	SEP.2: Developing and Using Models	Projects/Labs (40% cumulative)	CPO Exploration Manual
Physical Science Unit 3 (3 Weeks)	MS-PS4-3	PS4.B: Electromagnetic Radiation	SEP.8: Obtaining, Evaluating, and Communicating Information	Classwork (40% cumulative)	CPO Lab Equipment
		CC.6: Structure and Function		End of Marking Period Summative Test (10%)	
		PS4.C: Information Technologies and Instrumentation			

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Course Title: 6th Grade Science	Quarter: 2	Academic Year: 2024-2025
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Essential Questions for this Quarter:

1. How do plants and algae use the process of photosynthesis to make food?
2. What are the reactants, catalysts, and products of photosynthesis?
3. What is the difference between biotic and abiotic?
4. How do biotic things rely on abiotic things?
5. What are some ways that organisms compete within an environment?
6. How do resources limit the growth of organisms and populations?
7. What are some relationships between predators, consumers, and producers?
8. How do food webs model energy and matter transfer between producers, consumers, and decomposers?
9. How can small changes in one part of a system cause large changes in another part?

Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
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Life Science Unit 1 (3 week)	MS-LS1-6	LS1.C: Organization for Matter and Energy Flow in Organisms.	SEP.6: Constructing Explanations and Designing Solutions.	8 Marking Period Formative Quizzes (10% cumulative)	CPO Textbooks
Life Science Unit 2 (3 week)	MS-LS2-1	PS3.D: Energy in Chemical Processes and Everyday Life.	SEP.4: Analyzing and Interpreting Data.	Projects/Labs (40% cumulative)	CPO Exploration Manual
Life Science Unit 3 (3 week)	MS-LS2-2	CC.5: Energy and Matter.	SEP.2: Developing and Using Models.	Classwork (40% cumulative)	CPO Lab Equipment
	MS-LS2-3	LS2.A: Interdependent Relationships in Ecosystems	SEP.7: Engaging in Arguments from Evidence.	End of Marking Period Summative Test (10%)	
	MS-LS2-4	CC.2: Cause and Effect.			
	MS-LS2-5	CC.1: Patterns			
		LS2.B: Cycles of Matter and Energy Transfer in Ecosystems.			
		LS2.C: Ecosystem Dynamics, Functioning, and Resilience.			
		CC.7: Stability and Change.			
		LS4.D: Biodiversity and Humans.			
		ETS1.B: Developing Possible Solutions			

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Course Title: 6th Grade Science	Quarter: 3	Academic Year: 2024-2025
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Essential Questions for this Quarter:

<ol style="list-style-type: none"> 1. What are the phases of the moon? 2. How does the Earth move in space? 3. How are the planets in our solar system similar and different? 4. What kind of star is our sun? 5. How are the seasons related to the movement of the Earth? 6. How are the tides related to the movement of the moon? 7. How did our solar system form? 8. What are the different types of galaxies? 9. How many stars and galaxies are predicted to be in our galaxy and universe?
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Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
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Earth and Space Science Unit 1 (3 weeks)	MS-ESS1-1	ESS1.A: The Universe and Its Stars.	SEP.2: Developing and Using Models.	8 Marking Period Formative Quizzes (10% cumulative)	CPO Textbooks
Earth and Space Science Unit 2 (3 weeks)	MS-ESS1-2	ESS1.B: Earth and the Solar System. CC.1: Patterns.	SEP.4: Analyzing and Interpreting Data.	Projects/Labs (40% cumulative)	CPO Exploration Manual
Earth and Space Science Unit 3 (3 weeks)	MS-ESS1-3	CC.4: Systems and System Models. CC.3: Scale, Proportion, and Quantity.		Classwork (40% cumulative) End of Marking Period Summative Test (10%)	CPO Lab Equipment

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Course Title: 6th Grade Science	Quarter: 4	Academic Year: 2024-2025
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Essential Questions for this Quarter:

1. What are the steps of the engineering process?
2. What are the steps of the scientific method?
3. What are the differences and similarities between criteria, constraints, specifications, and outcomes?
4. How can scientific research lead to technological advances?
5. How can technological advances be both positive and negative?
6. What are the systematic processes for evaluating solutions to engineering/scientific problems?
7. How can different solutions to different problems be synthesized to create new solutions?
8. Why do engineers redesign things?
9. How do engineers use testing and models to come up with the best outcomes?

Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
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Engineering Technology and Science Unit 1 (2 weeks)	MS-ETS1-1	ETS1.A: Defining and Delimiting Engineering Problems.	SEP.1: Asking Questions and Defining Problems.	8 Marking Period Formative Quizzes (10% cumulative)	CPO Textbooks
Engineering Technology and Science Unit 2 (2 weeks)	MS-ETS1-2	ETS1.B: Developing Possible Solutions.	SEP.7: Engaging in Arguments from Evidence.	Projects/Labs (40% cumulative)	CPO Exploration Manual
Engineering Technology and Science Unit 3 (2 weeks)	MS-ETS1-3	ETS1.C: Optimizing the Design Solution.	SEP.4: Analyzing and Interpreting Data.	Classwork (40% cumulative)	CPO Lab Equipment
Engineering Technology and Science Unit 4 (2 weeks)	MS-ETS1-4		SEP.2: Developing and Using Models.	End of Marking Period Summative Test (10%)	