

Grade 7: 2024-2025 Science

Assessment	Topics Covered	Approximate Date	Standards
Benchmark 1	<p>How Energy drives the World</p> <p>Waves and Information</p> <p>Earth's Systems</p>	Week ending in: 10/30/24	<p><u>MS-PS4-1, MS-PS4-2, MS-PS4-3, MS-ESS2-1, MS-ESS2-4, MS-ESS3-1, MS-ESS2-5, MS-ESS2-6, MS-LS1-1, MS-LS1-2, MS-LS2-4, MS-LS2-2, MS-LS1-4, MS-LS1-5, MS-LS4-5, MS-LS4-1, MS-LS4-2, MS-ESS1-4, MS-ESS3-5, MS-ESS3-2, MS-ESS3-3, MS-ESS3-4</u></p> <p><u>MS-PS4-1: Wave Properties</u> Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave. (Patterns)</p> <p><u>MS-PS4-2: Wave Reflection, Absorption, and Transmission</u> Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials. (Structure and Function)</p> <p><u>MS-PS4-3: Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.</u> (Structure and Function)</p> <p>MS-LS1-8: Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.</p> <p><u>MS-ESS2-1: Cycling of Earth's Materials</u> Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process. (Stability and Change)</p> <p><u>MS-ESS2-4: Cycling of Water Through Earth's Systems</u> Develop a model to describe the cycling of water through earth's systems driven by energy from the sun and the force of gravity. (Energy and Matter)</p> <p><u>MS-ESS3-1: Uneven Distribution of Earth's Resources</u> Construct a scientific explanation based on evidence for how the uneven distributions of earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes. (Cause and Effect)</p> <p><u>MS-ESS2-5: Interacting Air Masses and Weather</u> Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions. (Cause and Effect)</p> <p><u>MS-ESS2-5- Air Masses and Weather</u> Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions. (Cause and Effect)</p>

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<p>Benchmark 2</p>	<p>Living Things & How They Work</p>	<p>1/22/25</p>	<p>MS-LS1-8 Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. (Cause and Effect)</p> <p>MS-LS 1-1: Cell Theory: Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. (Scale, Proportion, and Quantity)</p> <p>MS-LS 1-2: Cell parts and functions: Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. (Structure and Function)</p> <p>MS-LS2-4: Ecosystem Interactions and Dynamics</p> <p><u>MS-LS2-2: Interdependent Relationships in Ecosystems</u></p> <p>MS-LS1-4: Animal Behaviors and Plant Structures - Reproductive Success MS-LS1-5: Environmental and Genetic Growth Factors</p>
<p>Benchmark 3</p>	<p>The Bigger Picture</p>	<p>3/25/25</p>	<p>MS-LS4-5: Artificial Selection</p> <p><u>MS-LS4-1: Fossil Evidence of Common Ancestry and Diversity</u></p> <p><u>MS-LS4-2: Anatomical Evidence of Evolutionary Relationships</u></p> <p>MS-ESS1-4: Geologic Time Scale</p> <p><u>MS-ESS3-5: Causes of Global Warming</u></p> <p><u>MS-ESS3-2: Natural Hazards</u></p> <p><u>MS-ESS3-3: Human Impact on the Environment</u> <u>MS-ESS3-4: Human Consumption of Natural Resources</u></p>
<p>Next Grade Level Assessment</p>			

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Assessment	Approximate Date Week ending On:	Standards	Labs/Investigations
Week 1	9/13/24	MS-PS3-2 Energy PS3.A: Definitions of Energy PS3.C: Relationship Between Energy and Forces	The Gravity Light https://docs.google.com/document/d/1eLOK47LAKqLjsTWZS9I2moOTyoNYT0zgotAEatWwho0/edit?usp=sharing https://newsela.com/view/ck9noom9n07s60iqj4tysfvz3
Week 2	9/20/24	Waves and Information MS-PS4-1: Wave Properties Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave. (Patterns) MS-PS4-2: Wave Reflection, Absorption, and Transmission MS-PS4-3: Digitized Wave Signals	Spaghetti Resonance https://newsela.com/subject/other/2000159170/resources/text-set/2000159170
Week 3	9/27/24		Doppler Effect (Includes Lab) https://newsela.com/view/ck9noomju07xh0iqjb8txsejc
Week 4	10/4/24		https://thewonderofscience.com/instructional-resources/2018/6/11/waves-and-information

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Week 5	10/11/25	<p>MS-ESS2-4 Earth's System</p> <p>MS-ESS2-Cycling of Earth's Materials</p> <p>ESS2.C: The Roles of Water in Earth's Surface Processes</p>	<p style="text-align: center;">Modeling the Hydrologic Cycle</p> <p>https://docs.google.com/document/d/1OQFvsb1DgRAI8LJ33yZsapUmUUJaqNPL6lqpAYP4AQs/edit#heading=h.gjdgxs</p> <p style="text-align: center;">Exploring the Erosive Energy of Waves</p> <p>https://newsela.com/view/ck9noook208yc0iqjzcyfq86/?levelId=ck7ecy6b61ai414p7as5ljzt0</p> <p>https://media.newsela.com/article_media/extra/Middle_School_Earth_and_Space_Sciences_Master_Materials_List_.pdf</p>
Week 6	10/18/24	<p>MS-ESS2-5 Airmasses & Weather</p>	<p>https://newsela.com/subject/other/2000457798/</p> <p>https://newsela.com/subject/other/2000457800/resources/text-set/2000457800</p> <p>MS-ESS3-5 Assessment - Clarifying Climate Claims.docx</p>
Week 7	10/25/24	<p>MS-ESS3-1: Uneven Distribution of Earth's Resources</p>	<p>https://newsela.com/subject/other/2000047735/2000159068/resources/text-set/2000159068</p> <p>https://docs.google.com/document/d/1bG9h6UZPf9fzLWhR0-Qku9UUbdGUPvWjFQuLpa9NHo/edit</p>
Week 8	11/1/24	<p>Review; Benchmark assessment</p>	
Week 9	11/8/24	<p>Structure, Function, and Information Processing</p> <p>MS-LS1-1: Cell Theory</p>	<p style="text-align: center;">Is it alive?</p> <p>https://newsela.com/subject/other/2000035556/resources/text-set/2000035556/lesson-sparks/2000007705</p> <p>Slime Mold Lab/Observations</p> <p style="text-align: center;">A Walk Around Bozeman</p>

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		<p>MS-LS1-2: Cell Parts and Function</p> <p>MS-LS1-8</p>	<p>https://docs.google.com/document/d/1BBiDx0bUnMPUQF8kUK_gnFWkcgLRPr5i3W0CtEbCLNk/edit?usp=sharing</p> <p>Assessment: What Do You Hear? https://docs.google.com/document/d/1QRuwNm1kara-TSC5ZxU7wLgX-Xx_ussctcZggc5c3PU/edit#heading=h.3hb5g37dibjf</p> <p>Cell Comparison Microscope Lab (State Lab)</p>
<p>Week 10</p>	<p>11/15/24</p>	<p>Matter and Energy in Organisms and Ecosystems</p> <p>Photosynthesis</p> <p>Cellular Respiration</p> <p>MS-LS1-7 Assessment - 30-</p> <p>MS-LS2-4: Ecosystem Interactions and</p>	<p style="text-align: center;">Modeling Photosynthesis and Cellular Respiration</p> <p>Investigation: Photosynthetic Flootation</p> <p style="text-align: center;">https://newsela.com/subject/other/2000159104/resources/text-set/2000159104/lesson-sparks/2000111902</p> <p style="text-align: center;">https://docs.google.com/document/d/1yySNKDsyrh5DZBa3uM03hpiu4qo4KPRyBcneGhdecC8/edit#heading=h.gjdgxs</p> <p style="text-align: center;">Florida's balloon ban will protect sea turtles, birds and other marine life</p> <p style="text-align: center;">https://newsela.com/view/clxxn8m6q00073b6f7a4y8ixo/?levelId=clxxngsci1n9c08ptgqr5b0bd</p> <p style="text-align: center;">How to make biodegradable plastics https://issuu.com/nat_arc/docs/bioplastic_cook_book_3/s/159731</p> <p style="text-align: center;">Day Soylent Challenge</p> <p style="text-align: center;">https://docs.google.com/document/d/1yySNKDsyrh5DZBa3uM03hpiu4qo4KPRyBcneGhdecC8/edit?usp=sharing</p>

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		Dynamics	
Week 11	11/22/24	<p>Interdependent Relationships in Ecosystems</p> <p>MS-LS2-2</p> <p>BOCES Outdoor Ed Grant? Garvies' point is a good place for this</p>	<p style="text-align: center;">Garvies Point Museum and Preserve</p> <p>https://newsela.com/view/ck9nool69074n0iqjnrw5282p/?levelId=cl3osqryn00010cotzoh3avpx</p> <p>On- site- school backyard field trip- Ecological Survey</p> <p style="text-align: center;">Interesting Interactions</p> <p>https://docs.google.com/document/d/1Ov8NuD7E3yczOpmYRYzgytufBgVXL-lAysslvnemcac/template/preview</p>
Week 12	11/29/24	<p>11/28→11/29 Thanksgiving Recess</p>	<p style="text-align: center;">Thinking in Patterns Simulations</p> <p>https://docs.google.com/presentation/d/1Wvjb5nDXz_HtCcWEmLGrOn9SEUNxfzvhwfZln-wGMfE/template/preview</p> <p style="text-align: center;">Zebra Mussels</p> <p>https://docs.google.com/document/d/1dUKvfEzgE41Q3hhzUXygykThoK8XxOnpl9NuYo3sfzU/template/preview</p>
Week 13	12/6/24	<p>Growth, Development, and Reproduction</p> <p>MS-LS1-4: Animal Behaviors and Plant Structures- Reproductive Success</p>	<p style="text-align: center;">Colony Collapse Disorder</p> <p>https://newsela.com/view/clyn9rsyv000p3b6fc61vzI94/?levelId=clynbd3ew3w0008oshp309fsw</p> <p>https://docs.google.com/document/d/16ZgNRQXePfVr7RkTgV4j0VIX8OMMCWVhGXLGCprgh34/template/preview</p> <p style="text-align: center;">Corn Cob Sprouting in Water</p> <p>https://thewonderofscience.com/phenomenon/2018/7/9/corn-cob-sprouting-in-water</p>

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Week 14	12/13/24	MS-LS1-5: Environmental and Genetic Growth Factors	https://newsela.com/subject/other/2000159101/resources/text-set/2000159101/lesson-sparks/2000111899 (phototropism – demo)
Week 15	12/20/24	MS-LS1-5: Environmental and Genetic Growth Factors	https://extension.oregonstate.edu/gardening/techniques/environmental-factors-affecting-plant-growth (environmental factors affecting plant growth)
Week 16	1/10/25	MS-LS1-5: Create a Creature Project	critterasses.docx 2015 q2 project intro creature.doc 2014 creatacritter rubric.docx
Week 17	1/17/25	MS-LS1-5: Create a Creature Project	2014 creature project brainstorming sheet.docx 2014 createacritter tile sheets.doc
Week 18	1/24/25	Review; Benchmark assessment	
Week 19	1/31/25	Benchmark Assessment Corrections	
Week 20	2/7/25	MS-LS4-5: Artificial Selection	Selective breeding- https://mrkingegsd.weebly.com/uploads/5/4/5/6/54567441/21_evolution_and_selection-s.pdf (natural vs artificial selection Pogil)
Week 21	2/14/25	Natural Selection	Peppered Moth Lab https://labaid.s3.us-east-2.amazonaws.com/sgi-sims/sepup_natural_selection/index.html Bird survival simulation - interactive

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Week 22	2/28/25	Natural Selection MS-LS4-6 Natural Selection and Adaptations	LS4.C Adaptation Nebraska Deer Mouse https://docs.google.com/document/d/1aI0iWTUmOJ9_Ncctw4WNhEg_5gCQOSW5DDIHGnVjjq8/edit?usp=sharing
Week 23	3/7/25	MS-LS4-1: Fossil Evidence of Common Ancestry and Diversity	Making a Fossil Lab MS-LS4-2: Anatomical Evidence of Evolutionary Relationships Bird Evolution https://docs.google.com/document/d/12m6Eyun63fR2b9IW6gc-2-Z6jVKmbGgnXe4pq68bo60/template/preview
Week 24	3/14/25	MS-LS4-2: Anatomical Evidence of Evolutionary Relationships	FARIN FINDS A FOSSIL IN FREDONIA ON A FROSTY FRIDAY IN FEBRUARY https://docs.google.com/document/d/1To4YIZ_1aUR67b8lv7Rj5aRwH4S9xbXER1QmSHXCLJQ/template/preview
Week 25	3/21/25	MS-LS4-2: Anatomical Evidence of Evolutionary Relationships	Evolution Review
Week 26	3/28/25	Review; Benchmark assessment	
Week 27	4/4/25	Returned Benchmark Assessment Corrections	
Week 28	4/11/25	History of Earth-Introduction MS-ESS1-4: Geologic Time	https://docs.google.com/document/d/1RZMIn-OCoskxquM90wYXnlOrvZOdHALvefwFPoOE61s/edit Geologic time

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		Scale	
Week 29	4/25/25	ELA Testing MS-ESS3-5: Causes of Global Warming	MS-ESS3-5 Weather and Climate ESS3.D: Global Climate Change https://docs.google.com/document/d/1RZMIn-OC0skxquM90wYXnlOrvZOdHAlvefwFPoOE61s/edit?usp=sharing
Week 30	5/2/25	MS-ESS3-2: Natural Hazards	ESS3.B: Natural Hazards Which City is Safest? Which is the Riskiest? https://docs.google.com/document/d/1IOs6xzcEcdYB-roys0gsxug7oJunu7EglaEkmKyOcb/edit?usp=sharing
Week 31	5/9/25	MS-ESS3-3: Human Impact on the Environment	The effects of Excess Heat in the Atmosphere Increase in Hurricanes https://newsela.com/view/ck9nookm206sn0iqjuwkxbyj5 (the river is dying)
Week 32	5/16/25	MS-ESS3-3: Human Impact on the Environment	The Effects of Air Pollution in Living and Non Living Systems Ocean acidification Acid Rain and Fish Egg Hatching Rates https://link.springer.com/article/10.1007/s13280-020-01408-7 Wildfires
Week 33	5/23/25	MS-ESS3-4: Human Consumption of Natural Resources	Renewable Resources Las Vegas and Lake Mead https://docs.google.com/document/d/1hICCY_RUoUYABR2S1Y8_nn4Re_Y5fB1QIYifE8B4HVc/template/preview

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Week 34	5/30/25	MS-ESS3-4: Human Consumption of Natural Resources	Non- Renewable Resources
Week 35	6/6/25	Review	
Week 36	6/13/25	Review	
Week 37	6/20/25	Finals	
Week 38			
Week 39			
Week 40			