

# Amplify - 7th Grade Science Curriculum Map

LAUSD Teaching and Learning Framework Focus Elements
<b>3b2:</b> Teacher uses intentional, differentiated strategies to engage all students in discussion, attempting gradual release from teacher-directed to student-initiated conversation. Students participate in intellectually challenging discussions.
<b>3c1:</b> Instructional projects, activities, and assignments are aligned to the instructional standards, require higher levels of thinking, are culturally relevant, and may include real-world application. Most students are cognitively engaged constructing their own understanding and exploring content. The learning activities are differentiated, as necessary, to meet the learning needs of student subgroups.
<b>3d3:</b> Teacher's feedback to students is timely, frequent, relevant, accurate, and aligned to the instructional outcome. Specific feedback guides students to revise and improve their work.

\*\*LAUSD offers one semester of Health Education of Integrated Science in grade 7. Therefore, the Division of Instruction, in consultation with NGSS experts and the science leadership team, has prioritized a number of units (with Asterisks) for the one-semester of science. **To be clear, units with ASTERISKS are recommended to be PRIORITY.** The main goal of the prioritization is to ensure that students are learning the foundational science needed to succeed in high school science courses.

[Unit: Geology on Mars](#)\*\*

[Unit: Plate Motion](#)

[Unit: Plate Motion Engineering Internship](#)

[Unit: Rock Transformations](#)\*\*

[Unit: Phase Change](#)\*\*

[Unit: Phase Change Engineering Internship](#)

[Unit: Chemical Reactions](#)\*\*



[Unit: Populations and Resources](#)

[Unit: Matter and Energy in Ecosystems](#)\*\*

Resources from the publisher's textbook



Resources from outside sources

\*Need help reading the curriculum maps? Click [here](#) for a breakdown of the map format. Updated 5/21/22

SCIENCE		AMPLIFY SEVENTH GRADE		
Unit: Geology on Mars				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 2 days  Chapter 2 2 days  Chapter 3 2 days	<a href="#">MS-ESS2-2</a>  <a href="#">MS-ESS1-3</a>    <a href="#">ELA/ELD Framework</a>    <a href="#">ISTE Standards</a>	<p>I can construct explanations supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p> <p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p>	<p><b><u>Formative Assessments</u></b> Lesson 1.1, Act 5 Lesson 1.3, Act 4 Lesson 2.1, Act 3 Lesson 2.1, Act 4 Lesson 2.2, Act 1 Lesson 2.3, Act 1 Lesson 3.1, Act 2 Lesson 3.3, Act 2 Lesson 3.4, Act 1</p> <p><b><u>Summative Assessments</u></b> Lesson 3.5, Act 1</p>	<p><b><u>Anchor Phenomenon</u></b> There is evidence that explains how a long channel on the surface of Mars has formed.</p> <p><b><u>Unit Question:</u></b> How can we search for evidence that other planets were once habitable?</p> <p><b><u>Unit (Guiding) Questions</u></b></p> <ul style="list-style-type: none"><li>• <b>Chapter 1 (3 lessons):</b><ul style="list-style-type: none"><li>◦ Chapter Question: What geologic process could have formed the channel on Mars?</li></ul></li><li>• <b>Chapter 2 (3 lessons):</b><ul style="list-style-type: none"><li>◦ Chapter Question: How can we gather more evidence about whether lava or water</li></ul></li><li>• <b>Chapter 3 (5 lessons):</b><ul style="list-style-type: none"><li>◦ Chapter Question: How can we decide which geologic process formed the channel on Mars?</li></ul></li></ul> <p><b><u>Simulations</u></b></p> <ul style="list-style-type: none"><li>• <a href="#">Google Mars</a></li></ul>
			<p><b><u>Supplemental Assessments</u></b></p> <p><a href="#">CAST Practice Test</a></p>	<p><b><u>Supplemental Resources</u></b></p> <p><b><u>Supplemental Simulations and Videos</u></b> <b><u>Gizmos (Access via Schoology)</u></b></p> <ul style="list-style-type: none"><li>• <a href="#">Comparing Earth and Venus</a></li><li>• <a href="#">Solar System</a></li></ul>



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			<a href="#">Concord NGSS Assessments</a>	<ul style="list-style-type: none"> <li>• <a href="#">Erosion Rates</a></li> <li>• <a href="#">River Erosion</a></li> <li>• <a href="#">Weathering</a></li> </ul> <p><b>Discovery Education (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Geology on Mars Resources (PDF)</a></li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b></p> <p>MS-ESS1-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Background Information on distribution of groundwater Resources</a></li> <li>• <a href="#">Environment Diagrams</a></li> <li>• <a href="#">Ocean Acidification Process</a></li> <li>• <a href="#">Ocean Acidification PMEL/NOAA</a></li> <li>• <a href="#">Tantalum Extraction Articles</a></li> <li>• <a href="#">Tantalum Mining in Congo</a></li> <li>• <a href="#">Effects of Volcanoes Affecting Health Article</a></li> </ul> <p>MS-ESS2-2</p> <ul style="list-style-type: none"> <li>• <a href="#">Exploring Change</a> with GIS</li> <li>• <a href="#">Mountain Building</a></li> <li>• <a href="#">Geologic Maps and Earthquakes</a></li> </ul>

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<b>Unit: Plate Motion</b> Mystery of the Mesosaurus Fossils				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 4 days  Chapter 2 7 days  Chapter 3 4 days  Chapter 4 4 days	<a href="#">MS-ESS1-3</a>  <a href="#">MS-ESS2-2</a>  <a href="#">MS-ESS2-3</a>    <a href="#">ELA/ELD Framework</a>    <a href="#">ISTE Standards</a>	<p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p> <p>I can construct explanations supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p>	<p><b><u>Formative Assessments</u></b>  Lesson 1.3, Act 3  Lesson 1.4, Act 3  Lesson 2.2, Act 2  Lesson 2.2, Act 3  Lesson 2.4, Act 4  Lesson 2.5, Act 2  Lesson 3.1, Act 2  Lesson 3.1, Act 3  Lesson 3.2, Act 3  Lesson 3.2, Act 4  Lesson 3.3, Act 3  Lesson 4.2, Act 2  Lesson 4.3, Act 3</p> <p><b><u>Summative Assessment</u></b>  Lesson 4.4</p>	<p><b><u>Anchor Phenomenon</u></b>  The fossils of Mesosaurus are separated by thousands of kilometers of ocean even though the species once all lived together.</p> <p><b><u>Unit (Guiding) Questions</u></b></p> <ul style="list-style-type: none"> <li>● Chapter 1 (4 lessons): <ul style="list-style-type: none"> <li>○ Chapter Question: What is the land like where Mesosaurus fossils are found?</li> </ul> </li> <li>● Chapter 2 (7 lessons): <ul style="list-style-type: none"> <li>○ How did the South American Plate and African Plate move?</li> </ul> </li> <li>● Chapter 3 (4 lessons): <ul style="list-style-type: none"> <li>○ How did the Mesosaurus fossils on the South American Plate and African Plate get so far apart?</li> </ul> </li> <li>● Chapter 4 (4 lessons): <ul style="list-style-type: none"> <li>○ What best explains the pattern of volcanic activity and earthquakes on the Jalisco Block</li> </ul> </li> </ul> <p><b><u>Design Problem</u></b>  <i>(See Plate Motion Engineering Internship: Tsunami Warning Systems)</i></p>



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			<b><u>Supplemental Assessments</u></b>  <a href="#">CAST Practice Test</a>  <a href="#">Concord NGSS Assessments</a>	<b><u>Supplemental Resources</u></b>  <b><u>Supplemental Simulations and Videos</u></b> <b>Gizmos (<a href="#">Access via Schoology</a>)</b> <ul style="list-style-type: none"> <li>• <a href="#">Building Pangaea</a></li> <li>• <a href="#">Plate Tectonics</a></li> <li>• <a href="#">Convection Cells</a></li> </ul> <b><u>Discovery Education (<a href="#">Access via Schoology</a>)</u></b> <ul style="list-style-type: none"> <li>• <a href="#">Plate Motion Resources and Plate Motion Engineering Internship Resources (PDF)</a></li> </ul> <b><u>Supplemental Lessons &amp; Labs</u></b> MS-ESS2-1 <ul style="list-style-type: none"> <li>• <a href="#">Rock Cycle</a> (Reading)</li> </ul> MS-ESS2-2 <ul style="list-style-type: none"> <li>• <a href="#">Exploring Change</a> with GIS</li> <li>• <a href="#">Mountain Building</a></li> </ul> MS-ESS2-3 <ul style="list-style-type: none"> <li>• <a href="#">Nannofossils Reveal Seafloor Spreading Truth</a></li> <li>• <a href="#">Plate Tectonics Puzzle</a></li> </ul>

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Unit: Plate Motion Engineering Internship Tsunami Warning Systems				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 9 days	<a href="#">MS-ETS1-1</a> <a href="#">MS-ETS1-2</a> <a href="#">MS-ETS1-3</a> <a href="#">MS-ETS1-4</a> <a href="#">MS-ESS2-3</a> <a href="#">MS-ESS3-2</a>  <a href="#">ELA/ELD Framework</a>  <a href="#">ISTE Standards</a>	I can define problems that can be solved with scientific knowledge. <a href="#">Proficiency Scale</a>  I can engage in argumentation to construct convincing arguments that support or refute claims about the natural or created world with relevant and sufficient evidence. <a href="#">Proficiency Scale</a>  I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a>  I can develop models to explain phenomena. <a href="#">Proficiency Scale</a>		<b><u>Anchor Phenomenon</u></b> Some earthquakes cause the displacement of ocean water above due to the sudden vertical motion of the plates. The displaced water creates a wave known as a tsunami.  <b><u>Unit (Guiding) Questions</u></b> How can we design an effective tsunami warning system? <ul style="list-style-type: none"><li>• Chapter 1 (10 days)</li></ul> <b><u>Design Problem</u></b> Students design a better tsunami warning system that limits damage from natural disasters, and define criteria for solutions.
			<b><u>Supplemental Assessments</u></b>  <a href="#">CAST Practice Test</a> <a href="#">SNAP: Natural Hazards Assessment (ESS3-2)</a>  <a href="#">Concord NGSS Assessments</a>  <a href="#">LA County of</a>	<b><u>Supplemental Resources</u></b>  <b><u>Supplemental Simulations and Videos</u></b> <b><u>Discovery Education (<a href="#">Access via Schoology</a>)</u></b> <ul style="list-style-type: none"><li>• <a href="#">Plate Motion Engineering Internship (PDF)</a></li></ul> <b><u>Supplemental Lessons &amp; Labs</u></b> Currently no suggested supplemental materials.

SCIENCE			AMPLIFY SEVENTH GRADE	
			<a href="#">Education Performance Assessment: Natural Hazards</a>	

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<b>Unit: Rock Transformations**</b> Geological Puzzle of the Rockies and Great Plains				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 5 days  Chapter 2 6 days  Chapter 3 4 days  Chapter 4 5 days	<a href="#">MS-ESS1-3</a>  <a href="#">MS-ESS2-1</a>  <a href="#">MS-ESS2-2</a>  <a href="#">MS-ESS2-3</a>  <a href="#">MS-ESS3-1</a>    <a href="#">ELA/ELD Framework</a>    <a href="#">ISTE Standards</a>	<p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p> <p>I can develop, use, and evaluate models to explain phenomena. <a href="#">Proficiency Scale</a></p> <p>I can construct explanations supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p>	<p><b>Formative Assessments</b>            Lesson 1.3, Act 3            Lesson 1.5, Act 2            Lesson 2.2, Act 2            Lesson 2.2, Act 3            Lesson 2.4, Act 3            Lesson 2.4, Act 2            Lesson 2.4, Act 3            Lesson 3.1, Act 2            Lesson 3.1, Act 3            Lesson 3.4, Act 2            Lesson 3.4, Act 3            Lesson 4.2, Act 3</p> <p><b>Summative Assessment</b>            Lesson 4.4</p>	<p><b>Anchor Phenomenon</b>            The Rocky Mountains and Great Plains are two iconic locations in the United States that have a shared geologic history.</p> <p><b>Unit (Guiding) Questions</b>            Why are rock samples from the Great Plain and from the Rocky mountains composed of such similar minerals, when they look so different and come from different areas?</p> <ul style="list-style-type: none"> <li>● <b>Chapter 1 (5 lessons):</b> <ul style="list-style-type: none"> <li>○ How did the rock of the Great Plains and the rock of the Rocky Mountains form?</li> </ul> </li> <li>● <b>Chapter 2 (6 lessons):</b> <ul style="list-style-type: none"> <li>○ Where did the magma and sediment that formed the rock of the Great Plains and the rock of the Rocky Mountains come from?</li> </ul> </li> <li>● <b>Chapter 3 (4 lessons):</b> <ul style="list-style-type: none"> <li>○ How could rock form one of the regions have transformed into a different type of rock in the other region?</li> </ul> </li> <li>● <b>Chapter 4 (4 lessons):</b> <ul style="list-style-type: none"> <li>○ What rock transformation processes are happening on Venus?</li> </ul> </li> </ul>
			<b>Supplemental</b>	<b>Supplemental Resources</b>

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			<p><b><u>Assessments</u></b></p> <p><a href="#">CAST Practice Test</a></p> <p><a href="#">SNAP</a>: New York: A View From Below Assessment (ESS2-1)</p> <p><a href="#">Concord NGSS Assessments</a></p> <p>Interim Assessment (Title is Instructional Segment Three) Access via the MS Schoology Group</p>	<p><b><u>Supplemental Simulations and Videos</u></b></p> <p><b>Gizmos</b> (<a href="#">Access via Schoology</a>)</p> <ul style="list-style-type: none"> <li>• <a href="#">Rock Classification</a></li> <li>• <a href="#">Rock Cycle</a></li> <li>• <a href="#">Erosion Rates</a></li> <li>• <a href="#">Periodic Trends</a></li> <li>• <a href="#">Weathering</a></li> </ul> <p><b>Discovery Education</b> (<a href="#">Access via Schoology</a>)</p> <ul style="list-style-type: none"> <li>• <a href="#">Rock Transformations (PDF)</a></li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b></p> <p>MS-ESS2-1</p> <ul style="list-style-type: none"> <li>• <a href="#">Rock Cycle</a> (Reading)</li> </ul> <p>MS-ESS2-2</p> <ul style="list-style-type: none"> <li>• <a href="#">Exploring Change</a> with GIS</li> <li>• <a href="#">Mountain Building</a></li> </ul> <p>MS-ESS2-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Nannofossils Reveal Seafloor Spreading Truth</a></li> <li>• <a href="#">Plate Tectonics Puzzle</a></li> </ul>



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Unit: Phase Change** Titan's Disappearing Lakes				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 6 days  Chapter 2 3 days  Chapter 3 5 days  Chapter 4 5 days	<a href="#">MS-PS1-1</a>  <a href="#">MS-PS1-4</a>  <a href="#">MS-PS3-4</a>  <a href="#">MS-PS3-5</a>  <a href="#">MS-ESS1-3</a>  <a href="#">MS-ESS2-4</a>    <a href="#">ELA/ELD Framework</a>    <a href="#">ISTE Standards</a>	<p>I can develop models to explain phenomena. <a href="#">Proficiency Scale</a></p> <p>I can plan and carry out investigations to collect evidence to develop explanations and/or solutions. <a href="#">Proficiency Scale</a></p> <p>I can engage in argumentation to construct convincing arguments that support or refute claims about the natural or created world with relevant and sufficient evidence. <a href="#">Proficiency Scale</a></p> <p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p>	<p><b>Formative Assessments</b> Lesson 1.4, Act 2 Lesson 1.4, Act 3 Lesson 1.5, Act 3 Lesson 1.6, Act 4 Lesson 2.2, Act 4 Lesson 2.3, Act 4 Lesson 3.1, Act 2 Lesson 3.1, Act 3 Lesson 3.2, Act 4 Lesson 3.3, Act 2 Lesson 4.1, Act 2 Lesson 4.2, Act 4 Lesson 4.4, Act 3</p> <p><b>Summative Assessment</b> Lesson 4.5 Act 1 Lesson 4.5 Act 2 Lesson 4.5 Act 3</p>	<p><b>Anchor Phenomenon</b> Students will investigate the mystery of a disappearing lake on Titan.</p> <p><b>Unit (Guiding) Questions</b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 1 (6 lessons):</b> <ul style="list-style-type: none"> <li>◦ What happened to the liquid in Titan's Lake?</li> </ul> </li> <li>• <b>Chapter 2 (3 lessons):</b> <ul style="list-style-type: none"> <li>◦ What could cause liquid methane to change phase?</li> </ul> </li> <li>• <b>Chapter 3 (5 lessons):</b> <ul style="list-style-type: none"> <li>◦ Why didn't the liquid methane change phase before 2007?</li> </ul> </li> <li>• <b>Chapter 4 (5 lessons):</b> <ul style="list-style-type: none"> <li>◦ Students apply what they learn to a new question-Why is a liquid oxygen machine producing less liquid oxygen than normal.</li> </ul> </li> </ul> <p><b>Unit Project</b> (See <i>Phase Change Engineering Internship: Portable Baby Incubators</i>)</p>

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			<p><b><u>Supplemental Assessments</u></b></p> <p><a href="#"><u>CAST Practice Test</u></a></p> <p><a href="#"><u>Concord NGSS Assessments</u></a></p>	<p><b><u>Supplemental Resources</u></b></p> <p><b><u>Supplemental Simulations and Videos</u></b></p> <p><b><u>Gizmos (<a href="#"><u>Access via Schoology</u></a>)</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Phase Changes</u></a></li> <li>• <a href="#"><u>Phases of Water</u></a></li> <li>• <a href="#"><u>Freezing Point of Saltwater</u></a></li> <li>• <a href="#"><u>Temperature and Particle Motion</u></a></li> </ul> <p><b><u>Discovery Education (<a href="#"><u>Access via Schoology</u></a>)</u></b></p> <p><a href="#"><u>Phase Change (PDF)</u></a></p> <p>MS-PS1-1</p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Waves</u></a> (PhET)</li> </ul> <p>MS-PS1-4</p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Build an Atom</u></a> (PhET)</li> <li>• <a href="#"><u>Build a Molecule</u></a> (PhET)</li> </ul> <p>MS-ESS2-4</p> <ul style="list-style-type: none"> <li>• <a href="#"><u>States of Matter</u></a> (PhET)</li> <li>• <a href="#"><u>Water Cycle</u></a></li> <li>• <a href="#"><u>A Trip Through the Water Cycle</u></a></li> <li>• <a href="#"><u>Water Cycle Simulations</u></a></li> <li>• <a href="#"><u>PBS Convective Cloud Systems Video</u></a></li> <li>• <a href="#"><u>Rain in a Pot/Rain in a Cup</u></a></li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b></p> <p>MS-PS1-1</p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Making Molecular Models</u></a> - (omit discussion of bonding)</li> </ul> <p>MS-PS3-4</p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Melting Ice</u></a></li> </ul>


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				<ul style="list-style-type: none"><li>• <a href="#">Radiation and Albedo Experiment</a></li><li>• <a href="#">Heat, Temperature and Conduction</a></li><li>• <a href="#">Thermal Energy Transfer</a></li></ul> <p>MS-ESS2-4</p> <ul style="list-style-type: none"><li>• <a href="#">Clouds In a Bottle</a></li><li>• <a href="#">WaterShed</a></li><li>• <a href="#">Where Did the Water Go? - Watershed Study</a></li><li>• <a href="#">Exploring Our Fluid Earth</a></li></ul>


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Unit: Phase Change Engineering Internship				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 9 days	<a href="#">MS-ETS1-1</a> <a href="#">MS-ETS1-2</a> <a href="#">MS-ETS1-3</a> <a href="#">MS-ETS1-4</a> <a href="#">MS-PS1-4</a> <a href="#">MS-PS3-3</a> <a href="#">MS-PS3-4</a>  <a href="#">ELA/ELD Framework</a>  <a href="#">ISTE Standards</a>	<p>I can define problems that can be solved with scientific knowledge.  <a href="#">Proficiency Scale</a></p> <p>I can engage in argumentation to construct convincing arguments that support or refute claims about the natural or created world with relevant and sufficient evidence.  <a href="#">Proficiency Scale</a></p> <p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p> <p>I can develop models to explain phenomena.  <a href="#">Proficiency Scale</a></p> <p>I can design solutions supported by multiple sources of evidence</p>		<p><b><u>Anchor Phenomenon</u></b>            Every year, there are thousands of premature and low-birthweight babies that struggle to thrive due to lack of access to medical equipment.</p> <p><b><u>Unit (Guiding) Questions</u></b>            Design a portable baby incubator that uses phase change materials.</p> <p><b><u>Unit Project</u></b>            Design an incubator that considers three criteria: Keep the baby's average temperature close to 37 °C, minimize the time outside the healthy temperature range, and keep costs low.</p>
			<p><b><u>Supplemental Assessments</u></b></p> <p><a href="#">CAST Practice Test</a></p> <p><a href="#">Concord NGSS Assessments</a></p>	<p><b><u>Supplemental Resources</u></b></p> <p><b><u>Supplemental Simulations and Videos</u></b>  <b><u>Discovery Education (<a href="#">Access via Schoology</a>)</u></b></p> <ul style="list-style-type: none"> <li><a href="#">Phase Change and Phase Change Engineering Internship</a></li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b>            Currently no suggested supplemental materials.</p>

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		<p>consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p> <p>I can plan and carry out investigations to collect evidence to develop explanations and/or solutions. <a href="#">Proficiency Scale</a></p>		

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<b>Unit: Chemical Reactions**</b> Mysterious Substances in Westfield's Water				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 6 days  Chapter 2 3 days  Chapter 3 5 days  Chapter 4 5 days	<a href="#">MS-PS1-1</a>  <a href="#">MS-PS1-2</a>  <a href="#">MS-PS1-3</a>  <a href="#">MS-PS1-5</a>  <a href="#">MS-PS1-6</a>  <a href="#">MS-LS1-6</a>  <a href="#">MS-LS1-7</a>  <a href="#">MS-ESS3-1</a>  <a href="#">MS-ESS3-3</a>  <a href="#">MS-ESS3-5</a>    <a href="#">ELA/ELD Framework</a>	<p>I can develop models to explain phenomena. <a href="#">Proficiency Scale</a></p> <p>I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a></p> <p>I can obtain, evaluate and communicate info that critiques and evaluates the merit, accuracy, and validity of ideas and methods. <a href="#">Proficiency Scale</a></p> <p>I can construct explanations and design solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p>	<p><b>Formative Assessments</b>  Lesson 1.3, Act 4  Lesson 1.4, Act 2  Lesson 1.4, Act 3  Lesson 1.6, Act 3  Lesson 2.1, Act 4  Lesson 2.2, Act 3  Lesson 2.3, Act 3  Lesson 3.1, Act 3  Lesson 3.1, Act 4  Lesson 3.2, Act 4  Lesson 3.3, Act 3</p> <p><b>Summative Assessment</b>  Lesson 4.4</p>	<p><b>Anchor Phenomenon</b>  A reddish-brown substance is coming out of the water pipes in the neighborhood of Westfield.</p> <p><b>Unit (Guiding) Questions</b>  Why is there a mysterious reddish-brown substance in the tap water of Westfield?</p> <ul style="list-style-type: none"> <li>• <b>Chapter 1 (6 lessons):</b> <ul style="list-style-type: none"> <li>◦ What is the reddish-brown substance in the water?</li> </ul> </li> <li>• <b>Chapter 2 (5 lessons):</b> <ul style="list-style-type: none"> <li>◦ How did the rust form?</li> </ul> </li> <li>• <b>Chapter 3 (4 lessons):</b> <ul style="list-style-type: none"> <li>◦ What was produced during the reaction between the iron pipes and the fertilizer?</li> </ul> </li> <li>• <b>Chapter 4 (4 lessons):</b> <ul style="list-style-type: none"> <li>◦ Who might have used the unknown substance to steal a diamond?</li> </ul> </li> </ul>
			<p><b>Supplemental Assessments</b></p> <p><a href="#">CAST Practice Test</a></p> <p><a href="#">Concord NGSS Assessments</a></p>	<p><b>Supplemental Resources</b></p> <p><b>Supplemental Simulations and Videos</b>  <b>Gizmos (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Chemical Changes</a></li> <li>• <a href="#">Chemical and Physical Changes – STEM Case</a></li> <li>• <a href="#">Mystery Powder Analysis</a></li> <li>• <a href="#">Chemical Equations</a></li> </ul>

SCIENCE		AMPLIFY SEVENTH GRADE		
	 <a href="#">ISTE Standards</a>	<p>I can ask questions to understand better and/or investigate scientific phenomena. <a href="#">Proficiency Scale</a></p>	<a href="#">LA County of Education Performance Assessment: Chemical Reactions</a>	<p><b>Discovery Education (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Chemical Reactions (PDF)</a></li> </ul> <p>MS-PS1-1</p> <ul style="list-style-type: none"> <li>• <a href="#">Waves</a> (PhET)</li> </ul> <p>MS-ESS3-5</p> <ul style="list-style-type: none"> <li>• <a href="#">The Greenhouse Effect</a> (PhET)</li> </ul> <p>MS- ESS3-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Bioenergy Farm Game</a></li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b></p> <p>MS-PS1-1</p> <ul style="list-style-type: none"> <li>• <a href="#">Making Molecular Models</a> - (omit discussion of bonding)</li> </ul> <p>MS-PS1-2</p> <ul style="list-style-type: none"> <li>• <a href="#">Energy Changes in Chemical Reactions</a></li> <li>• <a href="#">Fireworks Chemistry MS</a></li> </ul> <p>MS-PS1-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Natural Resources &amp; Synthetic Materials - ACS</a></li> </ul> <p>MS-PS1-5</p> <ul style="list-style-type: none"> <li>• <a href="#">Balancing Chemical Equations</a></li> <li>• <a href="#">Maintaining Mass</a></li> </ul> <p>MS-PS1-6</p> <ul style="list-style-type: none"> <li>• <a href="#">Portable Incubator Design Challenge</a></li> </ul> <p>MS-LS1-6</p> <ul style="list-style-type: none"> <li>• <a href="#">Explaining How Plants Make Food, Move and Function</a></li> </ul>




SCIENCE			AMPLIFY SEVENTH GRADE	
				<ul style="list-style-type: none"><li>• <a href="#">Investigating Photosynthesis: Discovering What Plants Need for Photosynthesis</a></li></ul> <p>MS-LS1-7</p> <ul style="list-style-type: none"><li>• <a href="#">Understanding the Flow of Carbon in an Ecosystem</a></li></ul> <p>MS-ESS3-3</p> <ul style="list-style-type: none"><li>• <a href="#">Earth and Human Activity</a></li><li>• <a href="#">Climate Bathtub Simulation</a></li><li>• <a href="#">Next Generation Climate</a></li><li>• <a href="#">Evidence Common of Ancestry and Diversity</a></li></ul>


SCIENCE	AMPLIFY SEVENTH GRADE
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Unit: Populations and Resources Too Many Moon Jellies				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 4 days	<a href="#">MS-LS1-7</a>	I can develop models to explain phenomena. <a href="#">Proficiency Scale</a>	<b>Formative Assessments</b> Lesson 1.3, Act 2 Lesson 1.4, Act 3 Lesson 2.1, Act 2 Lesson 2.1, Act 3 Lesson 2.3, Act 3 Lesson 2.4, Act 3 Lesson 3.1, Act 2 Lesson 3.2, Act 3 Lesson 3.3, Act 3 Lesson 4.3, Act 3  <b>Summative Assessment</b> Lesson 4.4	<b>Anchor Phenomenon</b> There has been a puzzling increase in the size of the moon jelly population at Glacier Sea.  <b>Unit (Guiding) Questions</b> What caused the size of the moon jelly population in Glacier Sea to increase? <ul style="list-style-type: none"> <li>● <b>Chapter 1 (4 lessons):</b> <ul style="list-style-type: none"> <li>○ What caused the size of the moon jelly population in Glacier Sea to increase?</li> </ul> </li> <li>● <b>Chapter 2 (7 lessons):</b> <ul style="list-style-type: none"> <li>○ What could have caused the births to increase or the deaths to decrease in the moon jelly population?</li> </ul> </li> <li>● <b>Chapter 3 (4 lessons):</b> <ul style="list-style-type: none"> <li>○ How could a population besides the zooplankton or sea turtles have caused the moon jelly population to increase?</li> </ul> </li> <li>● <b>Chapter 4 (4 lessons):</b> <ul style="list-style-type: none"> <li>○ What was the main cause of the decrease in the size of the orange-bellied parrot population?</li> </ul> </li> </ul>
Chapter 2 7 days	<a href="#">MS-LS2-1</a>			
Chapter 3 4 days	<a href="#">MS-LS2-2</a>	I can analyze and interpret data, both qualitative and quantitative, from various sources. <a href="#">Proficiency Scale</a>		
Chapter 4 4 days	<a href="#">MS-LS2-3</a>			
	<a href="#">MS-LS2-4</a>	I can construct explanations supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a>		
	<a href="#">MS-LS2-5</a>			
	<a href="#">MS-ESS3-3</a>	I can engage in argumentation to construct convincing arguments that support or refute claims about the natural or created world with relevant and sufficient evidence. <a href="#">Proficiency Scale</a>		
				
	<a href="#">ELA/ELD Framework</a>			
				
	<a href="#">ISTE Standards</a>		<b>Supplemental Assessments</b>  <a href="#">CAST Practice Test</a>  <a href="#">Concord NGSS</a>	<b>Supplemental Resources</b>  <b>Supplemental Simulations and Videos</b> <b>Gizmos (<a href="#">Access via Schoology</a>)</b> <ul style="list-style-type: none"> <li>● <a href="#">Rabbit Population by Season</a></li> <li>● <a href="#">Ecosystems – STEM Case</a></li> <li>● <a href="#">Food Chain</a></li> </ul>

SCIENCE			AMPLIFY SEVENTH GRADE	
		<p>I can design solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p>	<p><a href="#">Assessments</a></p> <p><a href="#">7th Grade Interim Assessment 1</a> (assessment covers PEs addressed in IS1 and IS2). Assessment is also available as a Schoology Quiz. The access code for the <a href="#">LAUSD Middle School Science</a> group is SPG7G-K7BT9.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Prairie Ecosystem</a></li> <li>• <a href="#">Forest Ecosystem</a></li> </ul> <p><b>Discovery Education (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Population and Resources (PDF)</a></li> </ul> <p>MS-LS1-7</p> <ul style="list-style-type: none"> <li>• <a href="#">Understanding the Flow of Carbon in an Ecosystem</a></li> </ul> <p>MS-LS2-1</p> <ul style="list-style-type: none"> <li>• <a href="#">Habitable Planet Population Simulator</a></li> </ul> <p>MS-LS2-4</p> <ul style="list-style-type: none"> <li>• <a href="#">Healthy Oceans</a></li> <li>• <a href="#">Water Cycle</a></li> </ul> <p>MS-ESS3-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Earth and Human Activity</a></li> <li>• <a href="#">Climate Bathtub Simulation</a></li> <li>• <a href="#">Next Generation Climate</a></li> <li>• <a href="#">Evidence Common of Ancestry and Diversity</a></li> </ul> <p>MS- ESS3-3</p> <ul style="list-style-type: none"> <li>• <a href="#">Bioenergy Farm Game</a></li> </ul> <p><b>Supplemental Lessons &amp; Labs</b> Currently no suggested supplemental materials.</p>

SCIENCE	AMPLIFY SEVENTH GRADE
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Unit: Matter and Energy in Ecosystems** Biodome Collapse				
Time	Content, Language, and ISTE Standards	Learning Targets	Assessments	Curriculum and Unit Resource Connections
Chapter 1 6 days  Chapter 2 5 days  Chapter 3 4 days  Chapter 4 4 days	<a href="#">MS-LS1-2</a>  <a href="#">MS-LS1-6</a>  <a href="#">MS-LS1-7</a>  <a href="#">MS-LS2-2</a>  <a href="#">MS-LS2-3</a>  <a href="#">MS-LS2-4</a>  <a href="#">MS-PS1-1</a>  <a href="#">MS-PS1-6</a>  <a href="#">MS-ESS2-1</a>  <a href="#">MS-ESS3-5</a>    <a href="#">ELA/ELD Framework</a>	<p>I can develop, use, and evaluate models to explain phenomena. <a href="#">Proficiency Scale</a></p> <p>I can construct explanations and design solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories. <a href="#">Proficiency Scale</a></p> <p>I can engage in argumentation to construct convincing arguments that support or refute claims about the natural or created world with relevant and sufficient evidence. <a href="#">Proficiency Scale</a></p> <p>I can ask questions to understand better and/or investigate scientific</p>	<p><b>Formative Assessments</b> Lesson 1.3, Act 2 Lesson 1.3, Act 3 Lesson 1.5, Act 2 Lesson 1.6, Act 4 Lesson 2.1, Act 4 Lesson 2.2, Act 3 Lesson 2.3, Act 4 Lesson 3.1, Act 3 Lesson 3.1, Act 4 Lesson 3.2, Act 2 Lesson 3.4, Act 3 Lesson 4.3, Act 3</p> <p><b>Summative Assessment</b> Lesson 4.4</p>	<p><b>Anchor Phenomenon</b> The plants and animals in the biodome were not getting the resources they needed to release energy, and the ecosystem appeared to be failing.</p> <p><b>Unit (Guiding) Questions</b> Why did the biodome ecosystem collapse?</p> <ul style="list-style-type: none"> <li>• <b>Chapter 1 (6 lessons):</b> <ul style="list-style-type: none"> <li>◦ Why didn't the plants and animals in the biodome have enough energy storage molecules?</li> </ul> </li> <li>• <b>Chapter 2 (5 lessons):</b> <ul style="list-style-type: none"> <li>◦ What caused carbon dioxide to decrease in the air (abiotic matter) of the biodome?</li> </ul> </li> <li>• <b>Chapter 3 (4 lessons):</b> <ul style="list-style-type: none"> <li>◦ What happened to the carbon that used to be in the air (abiotic matter) of the biodome?</li> </ul> </li> <li>• <b>Chapter 4 (4 lessons):</b> <ul style="list-style-type: none"> <li>◦ Why does deforestation lead to increased carbon dioxide in the air?</li> </ul> </li> </ul>
			<p><b>Supplemental Assessments</b></p> <p><a href="#">CAST Practice Test</a></p> <p><a href="#">Concord NGSS</a></p>	<p><b>Supplemental Resources</b></p> <p><b>Supplemental Simulations and Videos:</b> <b>Gizmos (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Cell Energy Cycle</a></li> <li>• <a href="#">Photosynthesis Lab</a></li> <li>• <a href="#">Plants and Snails</a></li> </ul>

SCIENCE		AMPLIFY SEVENTH GRADE	
	 <a href="#">ISTE Standards</a>	<p>phenomena. <a href="#">Proficiency Scale</a></p> <p><a href="#">Assessments</a></p> <p><a href="#">LA County of Education Performance Assessment: Flow of Matter</a></p> <p><a href="#">7th Grade Interim Assessment 2</a> (assessment covers PEs addressed in IS3 and IS4). Assessment is also available as a Schoology Quiz. The access code for the <a href="#">LAUSD Middle School Science</a> group is SPG7G-K7BT9.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Carbon Cycle</a></li> </ul> <p><b>Discovery Education (<a href="#">Access via Schoology</a>)</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Matter and Energy in Ecosystems (PDF)</a></li> </ul> <p>MS-ESS2-3 Resources</p> <ul style="list-style-type: none"> <li>• <a href="#">Earth's Minerals and Rocks - eTextbook</a></li> <li>• <a href="#">Fossils</a></li> <li>• <a href="#">Earth History and Clues from Fossils</a></li> </ul> <p>CK-12 MS-PS 1-1</p> <ul style="list-style-type: none"> <li>• <a href="#">Lewis Electron-Dot Structures</a></li> </ul> <p>CK-12 MS-PS1-6</p> <ul style="list-style-type: none"> <li>• <a href="#">Calorimeter</a></li> <li>• <a href="#">Hot and Cold Packs - Chemical Reaction</a></li> </ul> <p>MS-ESS3-5</p> <ul style="list-style-type: none"> <li>• <a href="#">The Greenhouse Effect</a> (PhET)</li> </ul> <p><b><u>Supplemental Lessons &amp; Labs</u></b></p> <p>MS-LS1-6</p> <ul style="list-style-type: none"> <li>• <a href="#">Explaining How Plants Make Food, Move and Function</a></li> <li>• <a href="#">Investigating Photosynthesis: Discovering What Plants Need for Photosynthesis</a> (also MS-PS1-1)</li> <li>• <a href="#">Making Molecular Models</a> - (omit discussion of bonding)</li> </ul> <p>MS-LS1-7</p> <ul style="list-style-type: none"> <li>• <a href="#">Understanding the Flow of Carbon in an Ecosystem</a></li> </ul>

SCIENCE			AMPLIFY SEVENTH GRADE	
				<div>MS-LS2-4<ul style="list-style-type: none"><li><a href="#">Water Cycle</a></li><li><a href="#">Healthy Oceans</a></li></ul></div> <div>MS-PS1-6<ul style="list-style-type: none"><li><a href="#">Portable Incubator Design Challenge</a></li></ul></div> <div>MS-ESS2-1<ul style="list-style-type: none"><li><a href="#">Rock Cycle</a> (Reading)</li></ul></div>