

**Southern Cayuga Central School District – Curriculum Map**

**Subject:** 7<sup>th</sup> Grade Science - IQWST (Investigating and Questioning Our World Through Science and Technology)

**School Year:** 2021 -20222

Title or Topics w/ NYS Standards	Essential Questions & Vocabulary	Content Skills (Activities to cover Essential Questions)	Major Assessments (Tests, Project, etc.)	Online Learning	Time Frame
<b>Module 7.1</b> MS-ESS2-1 MS-ESS3-1 MS-PS1-1 MS-PS1-2 MS-PS1-4 MS-PS1-6 MS-ETS1-1 MS-ETS1-2	<b>“What Makes Up Earth’s Natural Resources?”</b> Atom Compression Condensation Consensus Constraints Criteria Crystal Diamonds Engineering Evaporation Expansion Feldspar Granite Graphite Humid Mass Matter Mica Mixture Model Molecules Natural Resources Paraffin Phase of Matter Quartz	<ul style="list-style-type: none"> <li>● What are Natural Resources?</li> <li>● What makes up gases?</li> <li>● What makes paper change color?</li> <li>● What does it mean that odors are “in” the air?</li> <li>● What makes up minerals and rock?</li> <li>● What are all metals made up of?</li> <li>● What happens when substances are heated and cooled?</li> <li>● What happens to molecules as</li> </ul>	<ul style="list-style-type: none"> <li>● Handouts</li> <li>● Group activities</li> <li>● Lab Experiments</li> <li>● Readings</li> <li>● Activities</li> <li>● Quiz</li> <li>● Test</li> </ul>	southerncayuga.iqwst.com	Sept.10 – Nov. 6 <sup>th</sup> ~8 Weeks

	<p>Scale State of Matter Substance Volume Water Vapor</p>	<p>substances melt and freeze?</p> <ul style="list-style-type: none"> <li>• How can we use phase changes to separate materials?</li> <li>• How can our model apply to everyday life?</li> </ul>			
<p><b>Module 7.2</b> MS- PS1-1 MS-PS1-2 MS-PS1-3 MS-PS1-4 MS-PS1-5 MS-PS1-6 MS-ETS1-1 MS-ETS1-2 MS-ETS1-3</p>	<p><b>“How Can I Make New Substances from Old Substances?”</b></p>	<ul style="list-style-type: none"> <li>• How do different substances compare?</li> <li>• Can we make new substances from old substances?</li> <li>• Do different substances dissolve in the same liquid?</li> <li>• Do substances melt at the same temperature?</li> <li>• What other properties can distinguish one substance from</li> </ul>	<ul style="list-style-type: none"> <li>• Handouts</li> <li>• Group activities</li> <li>• Lab Experiments</li> <li>• Readings</li> <li>• Activities</li> <li>• Quiz</li> <li>• Test</li> </ul>	<p>southern cayuga.iqwst.com</p>	<p>Nov. 9 – Jan. 22<sup>nd</sup> ~ 8 weeks</p>

		<p>another substance?</p> <ul style="list-style-type: none"><li>○</li><li>● How are fat and soap different substances?</li><li>● What happens to properties when I combine substances?</li><li>● Is burning a chemical reaction?</li><li>● Is this a new substance?</li><li>● What happens when I see different processes?</li><li>● Can I make soap from fat?</li><li>● Can I make plastic from everyday substances?</li><li>● Does mass change in a chemical reaction?</li></ul> <p>○</p>			
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		<ul style="list-style-type: none"> <li>● Is my soap a new substance? <ul style="list-style-type: none"> <li>○</li> </ul> </li> <li>● How does my soap compare or how can I improve my soap?</li> </ul>			
<b>Module 7.3</b> MS-LS1-6 MS-LS1-7 MS-ESS2-1 MS-ESS2-2 MS-ESS2-3 MS-ESS3-2 MS-PS1-1 MS-PS1-2 MS-ETS1-3 MS-ETS1-4	<b>“What Do I Have in Common with Planet Earth?”</b>	<ul style="list-style-type: none"> <li>● How are food and energy related?</li> <li>● Do all foods provide the same amount of energy?</li> <li>● How does food provide building materials?</li> <li>● How are food molecules built up and stored?</li> <li>● How do plants get energy?</li> <li>● How do burning food inside and outside the body compare?</li> <li>● How do food molecules provide my cells with energy?</li> </ul>	<ul style="list-style-type: none"> <li>● Handouts</li> <li>● Group activities</li> <li>● Lab Experiments</li> <li>● Readings</li> <li>● Activities</li> <li>● Quiz</li> <li>● Test</li> </ul>	southern cayuga.iqwst.com	Jan. 25 – March 26 <sup>th</sup> ~ 8 Weeks

		<ul style="list-style-type: none"><li>• How does the Earth change?</li><li>• Did Earth always look like this?</li><li>• What is the composition of the Earth's surface?</li><li>• What makes Earth's plates move?</li><li>• How do plates interact with each other?</li><li>• What causes volcanoes?</li><li>• How are plates moving?</li><li>• How does new plate material form?</li><li>• What do we know about plate tectonics?</li><li>• Modeling Earthquake-proof structures?</li></ul>			
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<p><b>Module 7.4</b>  MS-LS1-6  MS-LS1-7  MS-LS2-1  MS-LS2-2  MS-LS2-3  MS-LS2-4  MS-LS2-5  MS-ESS2-1  MS-ESS2-1  MS-ETS1-1  MS-ETS1-2  MS-ETS1-4</p>	<p><b>“What Can Cause Population Change?”</b></p>	<p>What causes a population to change?  What’s going on here?  Why do organisms need food?  Where do organisms get their food?  Trout: Predator or Prey?  Why should we care about an invader?  Could the sea lamprey have a major impact as a predator?  Structure and function in all organisms?  How can an invader affect an ecosystem?  How does the sea lamprey affect the trout?  What else can affect a population?  How do abiotic factors affect trout?  Great Lakes Sea Lamprey Control.</p>	<ul style="list-style-type: none"> <li>● Handouts</li> <li>● Group activities</li> <li>● Lab Experiments</li> <li>● Readings</li> <li>● Activities</li> <li>● Quiz</li> <li>● Test</li> </ul>	<p>southerncayuga.iqwst.com</p>	<p>April 5<sup>th</sup> –  June 1<sup>st</sup>  ~ 8 Weeks</p>
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		How can population change be prevented? Trapping water pollution.			
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