

## U. C. Schools Curriculum Map

Subject: Science

Grade Level: 7th

<b>Time Period</b>	<b>August</b>	<b>September</b>	<b>October</b>	<b>November</b>
<b>Essential Questions</b>	<ul style="list-style-type: none"> <li>* How do we create a safe classroom?</li> <li>* Class expectations/ grades and projects</li> </ul> <p><b>Astronomy –</b></p> <ul style="list-style-type: none"> <li>* How do the rotation, revolution, and orbit of objects in space affect your life?</li> </ul>	<p><b>Astronomy -</b></p> <ul style="list-style-type: none"> <li>• In what ways does the phases of the moon, Solar and lunar eclipse, and the locations of the Constellations effect life here on Earth?</li> </ul>	<p><b>Cells –</b></p> <ul style="list-style-type: none"> <li>* If understand small details represent understanding of the whole, How does that concept relate to cells and function of the body?</li> </ul>	<p><b>Heredity –</b></p> <ul style="list-style-type: none"> <li>• How does the genetic make up of the cell determine the appearance, health, and well being of your family?</li> <li>• When is genetically moral to clone and genetic engineering?</li> </ul>
<b>Content</b>	<ul style="list-style-type: none"> <li>– – Norms</li> <li>– – Earth and other objects movements in space.</li> </ul>	<ul style="list-style-type: none"> <li>- <i>Moon phases</i></li> <li>- <i>Solar and Lunar eclipse</i></li> <li>- <i>Location of major constellations</i></li> </ul>	<ul style="list-style-type: none"> <li>– - Specialized cells</li> <li>– - Body systems</li> </ul>	<ul style="list-style-type: none"> <li>– Genetics</li> <li>– Genes and Traits</li> <li>– Chromosomes</li> <li>* Focus on inherited and acquired traits!!</li> </ul>
<b>Benchmarks and Skills</b>	Strand 5	Strand 5	Strand 3/Standard 1,2, &3	Strand 3/Standard 3
<b>Teaching Strategies</b>	<ul style="list-style-type: none"> <li>• Whole group</li> <li>• Jigsaw</li> <li>• Partner read</li> </ul>	<ul style="list-style-type: none"> <li>• Venn Diagram</li> <li>• Power Point</li> <li>• MI for project</li> </ul>	<ul style="list-style-type: none"> <li>• Whole Group</li> <li>• Pair Share</li> <li>• Small group</li> <li>• Individual</li> </ul>	<ul style="list-style-type: none"> <li>• Diagrams</li> <li>• Partner Share</li> <li>• Cooperative Groups</li> <li>• Experiment</li> </ul>
<b>Assessments/ Technology</b>	<ul style="list-style-type: none"> <li>• Writing prompts</li> <li>• Experiments</li> <li>• ABC Walk</li> <li>• Moon Project</li> </ul>	<ul style="list-style-type: none"> <li>• Labs</li> <li>• Diagrams of phases and eclipse.</li> <li>• Presentation/star gazer –Power Point</li> <li>• Prompts</li> <li>• Quiz</li> <li>• Stations</li> </ul>	<ul style="list-style-type: none"> <li>• Experiments</li> <li>• Diagrams</li> <li>• Graphs</li> <li>• Interactive web pages</li> <li>• Power Points</li> </ul>	<ul style="list-style-type: none"> <li>• Prompts</li> <li>• Diagrams</li> <li>• Graphs</li> <li>• Experiments</li> <li>• Quiz</li> <li>• Pet Projects</li> </ul>

December	January	February	March	April	May
<p><b>Evolution and Changes –</b></p> <ul style="list-style-type: none"> <li>How do changes in an ecosystem affect natural selection?</li> <li>How do living things adapt to survive?</li> </ul> <p>* How do you classify fossils and place them using relative dating?</p> <p><b>Relative Dating-</b></p> <ul style="list-style-type: none"> <li>Which has more of an effect on changes of the Earth's Surface – nature or humans?</li> </ul>	<p><b>Science Fair –</b></p> <ul style="list-style-type: none"> <li>What does it mean to become a Scientist?</li> </ul> <p><b>Weather –</b></p> <ul style="list-style-type: none"> <li>In what ways do our understanding and predicting the weather have a positive effect on our lives?</li> </ul>	<p><b>Weather –</b></p> <p>Finish up unit.</p> <p><b>Water on Earth –</b></p> <ul style="list-style-type: none"> <li>What happens if we fail to protect the water cycle and underground source of water?</li> </ul>	<p><b>Ecosystems –</b></p> <ul style="list-style-type: none"> <li>Which is more important animal conservation or plant conservation? When is it all right to cause habitat destruction?</li> <li>What impact does habitat destruction have on all forms of life?</li> </ul>	<p><b>Science fair –</b></p> <ul style="list-style-type: none"> <li>What is more important what you learned or presenting to others what you learned?</li> </ul> <p><b>Ecosystems-</b></p> <ul style="list-style-type: none"> <li>Continue work</li> </ul>	<p><b>Electricity –</b></p> <p>How has the use of electricity had an impact on our lives positively and negatively?</p> <p><b>Simple Machines –</b></p> <p>How do Simple Machines make our lives easier?</p>
<ul style="list-style-type: none"> <li>Mechanical and chemical weathering</li> <li>Human Impact</li> <li>Relative dating</li> <li>Darwin</li> <li>Natural selection adaptations</li> </ul>	<ul style="list-style-type: none"> <li>Patterns of weather</li> <li>Gases in the atmosphere</li> <li>Forms of precipitation on the ground and in the atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>Water Cycle</li> <li>Groundwater</li> <li>Pollution of and how to clean up the water</li> </ul>	<ul style="list-style-type: none"> <li>Energy flow</li> <li>Secondary and Primary succession</li> <li>Endemic species</li> </ul>	<p>Scientific Method</p> <p>Steps to creating a presentation and board</p>	<ul style="list-style-type: none"> <li>Source, path, and use of electricity</li> <li>Parallel and series circuits</li> <li>Electromagnets</li> <li>Magnetic field</li> </ul> <p>Simple Machines</p> <ul style="list-style-type: none"> <li>Types of simple machines</li> <li>Direction changes</li> </ul>
<p>Standard 5/Standard 2</p> <p>Standard 3/Standard 3</p> <ul style="list-style-type: none"> <li>Comparison Chart</li> <li>Cause and Effect</li> </ul>	<p>Strand 5/ Standard 1&amp; 2</p> <ul style="list-style-type: none"> <li>Give One Get One</li> <li>Whole Group Project</li> <li>Partner Share</li> <li>Summarizes</li> <li>Double entry Journal</li> <li>Movie</li> </ul>	<p>Stand 3/ Standard 1&amp; 2</p> <ul style="list-style-type: none"> <li>Individual Project</li> <li>Venn Diagram</li> <li>Partner Share</li> <li>Movie</li> </ul>	<p>Strand 3/Standard 3</p> <ul style="list-style-type: none"> <li>Ecology Bingo</li> <li>Whole Group Games</li> <li>Small Group Games</li> </ul>	<p>Strand 3/Standard 3</p> <ul style="list-style-type: none"> <li>Socratic Seminar</li> <li>Partner Shares</li> <li>Modeling</li> <li>Cooperative groups</li> <li>Stations</li> </ul>	<p>Strand 4/Standard 1 and 5</p> <p>Strand 4/Standard 5</p> <ul style="list-style-type: none"> <li>Give one Get one</li> <li>Hands On Experiments</li> <li>Whole Group</li> <li>Partner Share</li> <li>Teach Outline</li> </ul>
<p><b>Assessments/Technology</b></p> <ul style="list-style-type: none"> <li>Prompts</li> <li>Natural selection activities.</li> </ul>	<ul style="list-style-type: none"> <li>Prompts</li> <li>Weather Charts</li> <li>Graphs</li> <li>Experiments</li> <li>Quiz</li> <li>Computer Stations</li> </ul>	<p>Hydrosphere-</p> <ul style="list-style-type: none"> <li>Lab -water quality</li> <li>Prompts</li> </ul>	<ul style="list-style-type: none"> <li>Experiments</li> <li>Writing prompts</li> <li>Quiz</li> <li>Diagrams</li> <li>Movie</li> <li>Computer Stations</li> </ul>	<ul style="list-style-type: none"> <li>Boards and Projects for Science Fair.</li> <li>Computer Lab/Stations</li> </ul>	<p>Experiments</p> <ul style="list-style-type: none"> <li>Prompts</li> <li>Quiz</li> <li>Interactive web</li> </ul>

- Experiments
- Activities for Fossil Record

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