

**West Carroll Special School District
Instructional Plan/Pacing Guide, 2016-2017**

Teacher: Brandi Tolley		Co-Teacher:			
Subject: Science		Grade Level: 6 th			
Unit Title	TN Standard # ACT Standard # (When Applicable)	Major Topics and Concepts Addressed	Major Activities Assignments Field Trips	Assessing Student Mastery	Pacing (Beginning and ending dates of instruction)
				What student generated product will demonstrate that he/she has met the learning expectation?	
Scientific Method	0607.Inq.1 0607.Inq.2 0607.Inq.3 0607.Inq.4 0607.Inq.5 0607.T/E.1 0607.T/E.2 0607.T/E.3 0607.T/E.4	Design a simple experimental procedure with an identified control and appropriate variables. Select tools and procedures needed to conduct a moderately complex experiment. Interpret and translate data in a table, graph, or diagram. Draw a conclusion that establishes a cause and effect relationship supported by evidence. Identify a faulty interpretation of data that is due to bias or experimental error. Identify the tools and procedures needed to test the design features of a prototype. Evaluate a protocol to determine if the engineering design	Design and conduct an open-ended scientific investigation to answer a question that includes a control and appropriate variables. Identify tools and techniques needed to gather, organize, analyze, and interpret data collected from a moderately complex scientific investigation. Use evidence from a dataset to determine cause and effect relationships that explain a phenomenon. Review an experimental design to determine possible sources of bias or error, state alternative explanations, and identify questions for further investigation. Design a method to explain the results of an investigation using descriptions, explanations, or models. Use appropriate tools to test for strength, hardness, and flexibility of materials. Apply the	Understand how to conduct an experiment. Know which tools to use for each experiment. How to understand data from a table and be able to write about the outcome. How to spot bias in an experiment or in everyday life. To watch for unintended consequences for each experiment or activity. Know how to spot the difference between adaptive and assistive bioengineered products.	August 4 – August 26

		<p>process was successfully applied.</p> <p>Distinguish between the intended benefits and the unintended consequences of a new technology.</p> <p>Differentiate between adaptive and assistive engineered products (e.g., food, biofuels, medicines, integrated pest management).</p>	<p>engineering design process to construct a prototype that meets certain specifications. Explore how the unintended consequences of new technologies can impact society.</p> <p>Research bioengineering technologies that advance health and contribute to improvements in our daily lives.</p>		
Organisms and Interdependence	<p>0607.2.1</p> <p>0607.2.2</p> <p>0607.2.3</p> <p>0607.2.4</p>	<p>Classify organisms as producers, consumers, scavengers, or decomposers according to their role in a food chain or food web.</p> <p>Interpret how materials and energy are transferred through an ecosystem.</p> <p>Identify the biotic and abiotic elements of the major biomes.</p> <p>Identify the environmental conditions and interdependencies among organisms found in the major biomes.</p>	<p>Compare and contrast the different methods used by organisms to obtain nutrition in a biological community.</p> <p>Create a graphic organizer that illustrates how biotic and abiotic elements of an environment interact.</p> <p>Use a food web or energy pyramid to demonstrate the interdependence of organisms within a specific environment.</p> <p>Create poster presentations to illustrate differences among the world's major biomes.</p>	<p>Know the roles of all parts of food chains and food webs.</p> <p>Understand how animals and resources cycle throughout an ecosystem.</p> <p>Know the difference between biotic and abiotic.</p> <p>Know the biomes based on their plants, animals, and abiotic factors.</p>	August 29 – September 23
The Universe/Tides	<p>0607.6.1</p> <p>0607.6.2</p> <p>0607.6.3</p> <p>0607.6.4</p>	<p>Use data to draw conclusions about the major components of the universe.</p>	<p>Use data to draw conclusions about the major components of the universe. Construct a model</p>	<p>The major components of the universe.</p> <p>How distance affects the way we see objects.</p>	September 26 – December 20

	0607.6.5 0607.6.6 0607.6.7	<p>Explain how the relative distance of objects from the earth affects how they appear.</p> <p>Distinguish among a day, lunar cycle, and year based on the movements of the earth, sun, and moon.</p> <p>Explain the different phases of the moon using a model of the earth, moon, and sun.</p> <p>Predict the types of tides that occur when the earth and moon occupy various positions.</p> <p>Use a diagram that shows the positions of the earth and sun to explain the four seasons.</p> <p>Explain the difference between a solar and a lunar eclipse.</p>	<p>of the solar system showing accurate positional relationships and relative distances. Investigate how the earth, sun, and moon are responsible for a day, lunar cycle, and year.</p> <p>Explain why the positions of the earth, moon, and sun were used to develop calendars and clocks.</p> <p>Illustrate the positions of the earth, moon, and sun during specific tidal conditions.</p> <p>Diagram the relationship of the earth and sun that accounts for the seasons.</p> <p>Model the positions of the earth, moon, and sun during solar and lunar eclipses.</p>	<p>The difference between day, year, month, using the sun, moon, and Earth.</p> <p>Which tide is occurring based on where the sun, moon, and Earth are located.</p> <p>Which season is happening due to the location of the Earth and sun.</p> <p>The difference between the solar and lunar eclipse.</p>	
Weather and Climate	0607.8.1 0607.8.2 0607.8.3 0607.8.4	<p>Analyze data to identify events associated with heat convection in the atmosphere.</p> <p>Recognize the connection between the sun's energy and the wind.</p> <p>Describe how temperature differences in the ocean account for currents.</p> <p>Interpret meteorological data</p>	<p>Design an experiment to investigate differences in the amount of the sun's energy absorbed by a variety of surface materials. Design an experiment to demonstrate how ocean currents are associated with the sun's energy. Analyze ocean temperature data to demonstrate how these conditions affect the weather in nearby land masses.</p>	<p>How the atmosphere cycles throughout the Earth.</p> <p>Air and water goes from cold to hot and circulates like this everywhere.</p> <p>How to look at a weather map and predict the weather moving from place to place.</p> <p>How to know which weather is moving in a particular place, given a few factors.</p>	January 4 – February 24

		to make predictions about the weather.	Interpret data found on ocean current maps. Use data collected from instruments such as a barometer, thermometer, psychrometer, and anemometer to describe local weather conditions.		
Energy	0607.10.1 0607.10.2 0607.10.3 0607.13.4	Distinguish among gravitational potential energy, elastic potential energy, and chemical potential energy. Interpret the relationship between potential and kinetic energy. Recognize that energy can be transformed from one type to another. Explain the Law of Conservation of Energy using data from a variety of energy transformations.	Compare potential and kinetic energy. Create a poster that illustrates different forms of potential energy. Design a model that demonstrates a specific energy transformation. Explain why a variety of energy transformations illustrate the Law of Conservation of Energy.	Know the difference between potential and kinetic energy. Create a poster that illustrates different forms of potential energy. Design a model that demonstrates a specific energy transformation. Explain why a variety of energy transformations illustrate the Law of Conservation of Energy	February 27 – April 12
Review	0607.6.1 0607.6.2 0607.6.3 0607.6.4 0607.6.5 0607.6.6 0607.6.7 0607.2.1 0607.2.2 0607.2.3 0607.2.4 0607.8.1 0607.8.2 0607.8.3 0607.8.4	All standards previously listed will be reviewed and retaught.	The students will play games, new foldables, and will complete group activities to review all the standards previously taught.	All standards previously listed will be reviewed and retaught.	April 17 – May 19