MSAD # 54 - 5th Grade Science Curriculum			
Standard 1: Developing and Using Models **Students will be able to develop and use different types of models to represent a system, to aid in the development of questions and explanations, to generate data, and/or to communicate ideas to others.**			
Performance Indicators	**Report Card Indicators**	**Learning Targets**	**Assessment and Teacher Resources**
Student will be able to develop a model to describe that matter is made up of particles too small to be seen. 5-PS1-1	**SCI.MOD.MATTER5** Student will develop a model to describe that matter is made up of particles too small to be seen. (5)	• Identify that matter is made of solids and liquids. • Introduce students that matter also included gas. • Define the characteristics of each state of matter (solid, liquid, gas). • Discover the difference between open and closed systems. • Experiment with physical changes in matter. • Experiment with chemical changes in matter. • Observe and understand the concept of Conservation of Matter through labs. • Construct an experiment that describe that matter is made of particles too small to be seen. • Make a model that shows matter is made of particles too small to be seen. •	

Student will be able to develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. **5-ESS2-1**	**SCI.MOD.SPHERE5** Student will develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. (5)	● Create a drawing of the water cycle. ● Recognize that all the waters on the earth's surface, such as lakes and seas, and sometimes including water over the earth's surface, such as clouds are part of the hydrosphere. ● Recognize that the atmosphere is an envelope of gases surrounding the earth or another planet. ● Recognize that the biosphere is the region of the surface, atmosphere, and hydrosphere of the earth occupied by living organisms. ● Recognize that any of the almost spherical concentric regions of matter that make up the earth and its atmosphere, as the lithosphere and hydrosphere are the geosphere. ● Create a classroom terrarium.* 4th grade kit? ● Illustrate how two or more systems go together.	

Student will be able to represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. 5-ESS1-2	**SCI.MOD.SEASON5** Student will be able to represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	• Understand that the earth is constantly moving in space and that that causes the night sky to appear differently. • Create and use a sundial. • Collect data on the length of a shade throughout different times of the day. • Observe and record how the Sun, Earth's star, rises in the east and sets in the west in a predictable pattern. • Observe and record how the Moon changes its appearance or phase in a regular pattern over 4 weeks. • Conduct the Shadow Lab. • Describe how night and day are caused by Earth's rotation. • Collect data on sunrise and sunset times.	

Standard 2: Using Mathematics, Data Analysis and Computational Thinking Students will be able to use mathematics to represent physical variables and their relationships, to make predictions, to organize data, and/or to develop and use models of systems.			
Performance Indicators	**Report Card Indicators**	**Learning Targets**	**Assessment and Teacher Resources**
There are no Grade 5 indicators for this standard.			

Standard 3: Using Mathematics, Data Analysis and Computational Thinking Students will be able to use mathematics to represent physical variables and their relationships, to make predictions, to organize data, and/or to develop and use models of systems.			
Performance Indicators	**Report Card Indicators**	**Learning Targets**	**Assessment and Teacher Resources**
There are no Grade 5 indicators for this standard.			

Standard 4: Constructing Explanations and Designing Solutions			
Performance Indicators	**Report Card Indicators**	**Learning Targets**	**Assessment and Teacher Resources**
There are no Grade 5 indicators for this standard.			

Standard 5: Engaging in Argument from Evidence			
Performance Indicators	**Report Card Indicators**	**Learning Targets**	**Assessment and Teacher Resources**
Students will describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. 5-ESS2-2	**SCI.ARG.WATER5** Students will describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth. (5)	•	