

Third Grade Science Curriculum Map

Quarter 1

NGSSS Body of Knowledge	<i>Nature of Science</i>	<i>Nature of Science</i>	<i>Nature of Science</i>	<i>Nature of Science</i>	<i>Nature of Science/Earth and Space Science</i>	<i>Nature of Science/Earth and Space Science</i>	<i>Nature of Science/Earth and Space Science</i>
Unit of Study	Introduction to Practice of Science	Introduction to Practice of Science	Introduction to Practice of Science	Introduction to Practice of Science	Stars and Gravity	Stars and Gravity	Stars and Gravity
Target Standards	SC.3.N.1.6 : Infer based on observation.	SC.3.N.1.1 : Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	SC.3.N.3.2 : Recognize that scientists use models to help understand and explain how things work. SC.3.N.3.3 : Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	SC.3.N.1.7 : Explain that empirical evidence is information, such as observations or measurements that is used to help validate explanations of natural phenomena. SC.3.N.1.3 : Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted. SC.3.N.1.5 : Recognize that scientists question, discuss, and check each other's evidence and explanations. SC.3.N.1.4 : Recognize the importance of communication among scientists.	SC.3.E.5.3 : Recognize that the sun appears large and bright because it is the closest star to the Earth. SC.3.E.5.2 : Identify the sun as a star that emits energy; some of it in the form of light. SC.3.E.5.1 : Explain that the stars can be different; some are smaller, some are larger, and some appear brighter than others; all except the Sun are so far away that they look like points of light.	SC.3.E.6.1 : Demonstrate that radiant energy from the sun can heat objects and when the sun is not present, heat may be lost. SC.3.E.5.5 : Investigate that the number of stars that can be seen through telescopes is dramatically greater than those seen by the unaided eye.	SC.3.E.5.4 : Explore the Law of Gravity by demonstrating that gravity is a force that can be overcome.
Pacing	Weeks 1-2	Weeks 3-5	Weeks 3-5	Week 6	Weeks 7-8	Weeks 7-8	Week 9
Objective/ Learning Goal/SWBT	<ul style="list-style-type: none"> *Explore answers to questions such as "What is science?", "What do scientists study?", and "What does a scientist look like?". *Make observations and inferences of a mystery event/object/substance. *Justify inferences made. *Discuss the importance of observations when making inferences. *Match each tool to its function or purpose. *Use scientific tools during an investigation. *Record, summarize, and compare observations. *Explain why there may be differences in observations between groups. 	<ul style="list-style-type: none"> *Generate testable questions about the world around them. *Form a hypothesis before investigating a student-generated question. *Investigate testable, student-generated questions *Compare free-exploration investigations to more formal explorations. *Use the steps of the scientific method. *Generate appropriate explanations based on observations (data) collected. *Explain why scientists perform multiple trials to gather evidence to support conclusions. 	<ul style="list-style-type: none"> *Explain that models can be three dimensional, two dimensional, a visualization in your mind, or a computer model. *Explain that not all models account perfectly for all attributes of real objects. *Use and/or construct different kinds of models when investigating. *Discuss why scientists use models (to help understand and explain how things work). 	<ul style="list-style-type: none"> *Construct an appropriate data collection tool (e.g., chart, table) that could be used during an investigation. *Record data collected during an investigation. *Analyze and interpret data collected during an investigation to formulate an explanation of the results. *Identify ways that scientists share their knowledge and results with one another. *Describe why and how scientists collaborate together to gain new knowledge or refine ideas *Explain that explanations of results can vary even when scientists are analyzing the same evidence. 	<ul style="list-style-type: none"> *Identify the sun as a star in our solar system that emits its own energy. *Compare the size of the sun to that of the other stars. *Explain that the sun is a medium-size star, but it appears to be the largest, brightest star in the sky because it is closest to Earth. *Explain how stars can be different. *Compare the appearance of the sun's size, brightness, and its distance from Earth compared to all the other stars. *Explain that stars are in the day sky but cannot be seen because of the sun's glare. 	<ul style="list-style-type: none"> *Predict how the sun's presence, visible or not visible, will impact objects. *Investigate the effects of the sun's heat on objects. *Explain that heat is lost when the sun is not visible. *Explain the changes that may occur when the sun is visible and not visible. *Describe the purpose of a telescope as a tool to magnify objects that are far away. *Compare images of the night sky taken with and without a telescope to demonstrate how this tool dramatically increases the number of stars that can be seen. 	<ul style="list-style-type: none"> *Explain the effect gravity has on objects. *Investigate ways to overcome the force of gravity. *Explain how gravity can be overcome.
Inquiry Flipcharts/Labs	*Mystery Box p.2	*Safety in Science p.1 *How Can You Use a Model? p.3	*Safety in Science p.1 *How Can You Use a Model? p.3	*I Can See Clearly Now p.4 *Talenteds Tools p.4 *How...Measure Length? p.5 *Data Two Ways p.6 *Raise the Bar p.6 *How Do...Results Compare? p.7	*Starry Lights/Let's Cook p.8 *How Many Stars Do You See? p.9 How Does the Sun Heat Earth? p.10	*Starry Lights/Let's Cook p.8 *How Many Stars Do You See? p.9 How Does the Sun Heat Earth? p.10	*Measure the Force p.9
Fusion Textbook	TE p.1-7	TE p.8-32	TE p.8-32	TE p.33-44	TE p.49-68	TE p.49-68	TE p.69-76

