

SCIENCE GRADE LEVEL 1	YEAR AT A GLANCE Student Learning Outcomes by Unit 2016-2017
----------------------------------	---

UNIT: Solids and Liquids Dates:	Overarching/general themes: Properties of matter (solids and liquids); similarities and differences; conducting tests on materials				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Networks A & B - 12/7 to 3/14</td></tr> <tr><td style="padding: 2px;">Networks C & F - 9/8 to 11/30</td></tr> <tr><td style="padding: 2px;">Networks D & E - 3/21 to 6/13</td></tr> </table>	Networks A & B - 12/7 to 3/14	Networks C & F - 9/8 to 11/30	Networks D & E - 3/21 to 6/13	Textual References: Solids and Liquids Teacher's Guide (STC)	To Demonstrate Proficiency by the End of the Unit Students Will:
Networks A & B - 12/7 to 3/14					
Networks C & F - 9/8 to 11/30					
Networks D & E - 3/21 to 6/13					
5 Sessions, 2-3 weeks	Investigations 1-5 Identify properties of solids and liquids through observation	<ul style="list-style-type: none"> • Observe and describe the properties of solids and liquids. (PS-1) • Record observations with drawings, writing as appropriate. 			
4 Sessions, 2-3 weeks	Investigations 6-9 Identify properties of solids by testing	<ul style="list-style-type: none"> • Conduct tests to investigate the properties of solids and liquids. Talk about their experiment and results. (PS-3) • Sort solids into groups on the basis of their properties. Explain how/why they made each group. (PS-2) • Compare similarities and differences among solids. Make a drawing and/or write a sentence about each. (PS-2) • Close Reading: STC Teacher Resource Guide text, <i>Changing Solids</i> 			
6 Session, 2-3 weeks	Investigations 10-15 Unique properties of liquids by observation and testing	<ul style="list-style-type: none"> • Compare similarities and differences among liquids. Make a drawing and/or write a sentence about each. (PS-2) • Apply tests to investigate new solids and liquids. Make a claim about a property of a solid or a liquid that they inferred from the test that could not otherwise be observed. (PS-2) 			
2 Sessions, 1 week	Investigations 16-17 Solids and liquids have both similarities and differences.	<ul style="list-style-type: none"> • Compare the properties of solids with the properties of liquids. (PS-2) • Communicate ideas, observations, and experiences through writing, drawing, and discussion. (routine talk/writing) 			

YEAR AT A GLANCE
Student Learning Outcomes by Unit
2016-2017

SCIENCE
 GRADE LEVEL 1

UNIT: Organisms	Overarching/general themes: Observation with senses; organisms; basic needs of living things; plant and animal similarities and differences; characteristics; diversity of life; humans as animals; woodland and freshwater habitats				
Dates:	Textual References Organisms Teacher's Guide (STC)	To Demonstrate Proficiency by the End of the Unit Students Will:			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Networks A & B - 9/8 to 11/30</td> </tr> <tr> <td style="padding: 2px;">Networks C & F - 3/21 to 6/13</td> </tr> <tr> <td style="padding: 2px;">Networks D & E - 12/7 to 3/14</td> </tr> </table>	Networks A & B - 9/8 to 11/30	Networks C & F - 3/21 to 6/13	Networks D & E - 12/7 to 3/14		
Networks A & B - 9/8 to 11/30					
Networks C & F - 3/21 to 6/13					
Networks D & E - 12/7 to 3/14					
1-2 Sessions, 1 week	Investigation 1 Comparing Plants and Animals	<ul style="list-style-type: none"> • Make comparisons among a variety of plants and animals. Make a claim about a similarity and a difference. Use observations to explain their reasoning, through science talk or writing. (LS-1) 			
3-6 Sessions, 2-3 weeks	Investigations 2,3,6 Seeds and Life Cycles	<ul style="list-style-type: none"> • Observe and describe the characteristics of seeds and plants in notebooks. (LS-1) • Plant seeds and observe and record their growth with drawings and in writing in notebooks. (LS-1) 			
8-10 Sessions, 3-5 weeks	Investigations 4-5, 7-12 Modeling Interactions with Terraria and Aquaria	<ul style="list-style-type: none"> • Record observations for investigations in words and drawings in a notebook. • Communicate ideas through writing, drawing, and discussion. • Care for plants and animals outside their natural environments to develop a positive attitude toward living things. • Read to enhance understanding of the basic needs of organisms and the diversity of life. Talk and write, as appropriate, about the main idea of the text. • Close Reading: STC Teacher Resource Guide, <i>Four Amazing Plants</i>. 			
4-5 Sessions, 2-3 weeks	Investigations 13-15, 17 Investigating Systems through Water and Terrestrial Environments	<ul style="list-style-type: none"> • Observe/describe the characteristics of plants and animals in woodland and freshwater environments. (LS-8) • Describe/explain observations and inferences made from the investigations, orally and in writing, e.g., we learn by using senses; basic needs of organisms; specific needs of organisms; wide diversity of life; organisms grow, change and die over time; similarities within and across animal and plant groups; humans are similar to other organisms. (LS-8) 			
1-2 Sessions, 1 week	Investigation 16 Understanding Themselves in Relation to Plants and Animals	<ul style="list-style-type: none"> • Apply knowledge about plants and animals to what they know about themselves. Make a drawing and/or write a sentence about a similarity and a difference between themselves and a plant and themselves and an animal. (LS-6) 			

SCIENCE GRADE LEVEL 1	YEAR AT A GLANCE Student Learning Outcomes by Unit 2016-2017
--------------------------	---

UNIT: Air and Weather Dates:	Overarching/general themes: Air is matter, a gas, & can be compressed; change over time; weather; meteorological instruments; sun and moon position; moon phases				
<table border="1" style="width: 100%;"> <tr><td style="background-color: #cccccc;">Networks A & B - 3/21 to 6/13</td></tr> <tr><td style="background-color: #cccccc;">Networks C & F - 12/7 to 3/14</td></tr> <tr><td style="background-color: #cccccc;">Networks D & E - 9/8 to 11/30</td></tr> </table>	Networks A & B - 3/21 to 6/13	Networks C & F - 12/7 to 3/14	Networks D & E - 9/8 to 11/30	Textual References Air and Weather Teacher's Guide (FOSS)	To Demonstrate Proficiency by the End of the Unit Students Will:
Networks A & B - 3/21 to 6/13					
Networks C & F - 12/7 to 3/14					
Networks D & E - 9/8 to 11/30					
7 Sessions, 3-4 weeks	Investigation 1 Exploring Air	<ul style="list-style-type: none"> • Observe the properties of air as it interacts with other materials, e.g., it is matter, takes up space; interacts with objects; is all around us; can be compressed; it is a gas. (ES-2) • Observe the properties of air when it is put under pressure, recognizing it can move things. Give an example of what happens to air under pressure. (ES-2) • Compare the path a balloon rocket travels along a flight line to that of an air-filled plastic bag. Draw and write a sentence that explains the difference in the flight line. 			
6 Sessions, 3 weeks	Investigation 2 Observing Weather	<ul style="list-style-type: none"> • Observe and record daily weather on a class calendar and in individual notebooks. (ES-3) • Observe and compare cloud types. Draw and describe two different types. • Measure temperature and rainfall. Record data in a notebook. (ES-3) • Describe/explain observations and inferences made from the investigations, orally and in writing, e.g., weather is the condition of the atmosphere (air) and changes over time; temperature, precipitation, and cloud types are components of the weather that can be described; there are different kinds of clouds; rain is water that comes from clouds. (ES-5) • Close Reading: FOSS Science Stories, <i>Understanding the Weather</i> (ES-3) 			
4 Sessions, 2 weeks	Investigation 3 Wind Exploration	<ul style="list-style-type: none"> • Observe and compare the action of moving air and its effects on pinwheels, bubbles, and kites. Write a description about how the air moved the object. (ES-2) • Observe and describe the direction of the wind using wind vanes. Write observations in a notebook. (ES-2) • Observe and describe the speed of the wind using an anemometer. Record data in a notebook. (ES-2) • Describe/explain observations and inferences made from the investigations, orally and in writing, e.g., wind is moving air; wind speed and wind direction can be described using anemometers and wind vanes; wind scales are tools used to describe the speed of the wind. (ES-2) 			
5 Sessions, 2-3 weeks	Investigation 4 Looking for Change	<ul style="list-style-type: none"> • Organize and graph class weather data recorded for a month. (ES-3) • Record weather data throughout the year and compare seasonal weather conditions. (ES-3) • Observe the changing location of the Sun during a day and connect it to the idea that the sun heats the Earth during the day. Write/draw a description of the Sun's movement over time. (ES-4) • Observe and record nightly weather and the changing appearance of the Moon. (ES-5) • Describe/explain observations and inferences made from the investigations, orally and in writing, e.g., weather conditions change over time, the pattern of the Moon's appearance can be organized, compared, and predicted; the Sun and Moon appear to move across the sky. (ES-5) 			