


Grade 2 Science (Master)

Author(s): Beth Schreifels, Lisa Sukalski, Amanda Solum

September 2020

Content	Skills	Learning Targets	Standards	Assessment	Resources & Technology
CEQ: <ul style="list-style-type: none"> ● HOW CAN SHAPES AND OBJECTS BE BALANCED? ● HOW DO OBJECTS MOVE? ● HOW CAN WE DESCRIBE AND USE SOLIDS? ● HOW DOES WATER CHANGE FROM ONE STATE TO ANOTHER? ● HOW DO PLANTS GROW AND CHANGE? ● HOW DO WE MEASURE, RECORD, AND DESCRIBE WEATHER CONDITIONS? 	Balance and Motion <ol style="list-style-type: none"> 1. Demonstrate multiple ways to balance shapes using counterweights. 2. Explain the placement of counterweights in comparison to the balance point. 3. Demonstrate how a change in design can change the motion of an object. 4. Manipulate an object to keep it in motion. 5. Identify how push and pull forces affect the motion of an object. 	Balance and Motion <p>T1. I can balance an object in more than one way.</p> <p>T2. I can use counterweights to balance an object.</p> <p>T3. I can use what I know about the balance point and counterweights to balance a pencil on its point.</p> <p>T4. I can explain how changing the design of a top changes the way it rotates.</p> <p>T5. I can change the spinning motion of a zoomer.</p> <p>T6. I can change the spinning motion of a twirler.</p> <p>T7. I can make a wheel system that rolls straight and a wheel system that turns.</p> <p>T8. I can make a</p>	Balance and Motion <p>2.1.1.2.1</p> <p>2.2.2.1.1</p> <p>2.2.2.1.2</p> <p>2.2.2.2.1</p> <p>2.2.2.2.2</p>	Balance and Motion <p>CA = Balance and Motion Assessment</p>	Balance and Motion <p>This unit will span the months of September, October, and November.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> ● balance ● balance point ● counterweights ● stable ● motion ● push/pull force ● spin ● rotate ● axis ● gravity <p>Literature</p> <p>The Man Who Walked Between the Towers E Ger Gerstein, Mordicai (Albertville Primary, St. Michael Elementary)</p> <p>Mirette on the High Wire</p>

<p><i>UEQ:</i></p> <ul style="list-style-type: none"> • <i>How many ways can shapes and objects be balanced?</i> • <i>How can counterweights help us balance shapes and objects?</i> • <i>How can an object be put into motion?</i> • <i>How can the motion of an object be changed?</i> <p>Balance and Motion</p> <ol style="list-style-type: none"> 1. Trick Crayfish 2. Triangle and Arch 3. Pencil Trick 4. Tops 5. Zoomers 6. Twirlers 7. Rolling Wheels 8. Rolling Spheres 9. Magnets  		<p>sphere roll from the beginning of the runway to the end.</p>			<p>E MCC McCully, Emily Arnold (Albertville Primary, Fieldstone Elementary, St. Michael Elementary)</p> <p>Video</p> <ul style="list-style-type: none"> -The Man Who Walked Between the Towers, Snowflake Bentley, Miss Rumphius, The Pot That Juan Built: K-5 DVD 800 (St. Michael Elementary) -Mirette on the High Wire VC 800 (St. Michael Elementary) -Motion DVD 531.11 MOT (Fieldstone Elementary) -Spinning Things DVD 500 (St. Michael Elementary) -United Streaming - The Man Who Walked Between the Towers -United Streaming - The Magic School Bus Plays Ball
---	--	---	--	--	--

October 2020


Content	Skills	Learning Targets	Assessment	Resources & Technology
---------	--------	------------------	------------	------------------------

November 2020

Content	Skills	Learning Targets	Assessment	Resources & Technology
---------	--------	------------------	------------	------------------------

December 2020


Content	Skills	Learning Targets	Standards	Assessment	Resources & Technology
CEQ: <ul style="list-style-type: none"> ● HOW CAN SHAPES AND OBJECTS BE BALANCED? ● HOW DO OBJECTS MOVE? ● HOW CAN WE DESCRIBE AND USE SOLIDS? ● HOW DOES WATER CHANGE FROM ONE STATE TO ANOTHER? ● HOW DO PLANTS GROW AND CHANGE? ● HOW DO WE MEASURE, RECORD, AND DESCRIBE 	Solids and Liquids <ol style="list-style-type: none"> 1. Identify properties of solids. 2. Sort solids according to properties. 3. Construct a bridge that is able to support an object. 4. Observe, recognize, and record the stages of the water cycle (solid, liquid, gas). 	Solids and Liquids <p>T1. I can describe solids using properties.</p> <p>T2. I can sort solids using properties.</p> <p>T3. I can use solids to construct a bridge that holds weight.</p> <p>T4. I can name the three states of matter.</p> <p>T5. I can name the stages in the water cycle. (optional lesson)</p> <p>T6. I can name the changes in solids when mixed with water. (optional lesson)</p>	Solids and Liquids <p>2.1.1.2.1</p> <p>2.1.2.2.1</p> <p>2.1.2.2.2</p> <p>2.2.1.1.1</p> <p>2.2.1.2.1</p>	Solids and Liquids <p>CA = Solids and Liquids Assessment</p>	Solids and Liquids <p>This unit will span the months of December, January, and February.</p> <p>Key Vocabulary:</p> <ul style="list-style-type: none"> ● property ● construct ● cylinder ● engineer ● flexible ● liquid ● solid ● rigid ● rough ● smooth ● sort ● texture ● cycle ● gas

<p>WEATHER CONDITIONS?</p> <p><i>UEQ:</i></p> <ul style="list-style-type: none"> ● <i>How can solids be described?</i> ● <i>In what ways are some solids the same?</i> ● <i>How can properties of solids be used to construct a bridge?</i> ● <i>What is the water cycle?</i> <p>Solids and Liquids</p> <ol style="list-style-type: none"> 1. Introduce Solids 2. Sort Solids 3. Construct With Solids (Engineering) 4. Water Cycle (Optional: do in Weather Unit)  				<p>Video</p> <ul style="list-style-type: none"> -United Streaming - Magic School Bus Wet All Over -United Streaming - A First Look: Liquids, Solids, and Gases -United Streaming - Magic School Bus Under Construction -YouTube- Science Max Solids, Liquids, and Gases for Kids https://www.youtube.com/watch?v=LqCsYwz8Q7s&t=3s -YouTube - What Makes Bridges So Strong? https://www.youtube.com/watch?v=oVOnRPefcno&t=115s -YouTube - Science Max Pasta Bridge https://www.youtube.com/watch?v=xN0poIrm0q8 <p>Optional Activity - Dissolve/soak solid objects in water. Evaporate water</p>
--	--	--	--	--

					and observe the changes in the property of the solid.
--	--	--	--	--	---

March 2021


Content	Skills	Learning Targets	Standards	Assessment	Resources & Technology
CEQ: <ul style="list-style-type: none"> ● HOW CAN SHAPES AND OBJECTS BE BALANCED? ● HOW DO OBJECTS MOVE? ● HOW CAN WE DESCRIBE AND USE SOLIDS? ● HOW DOES WATER CHANGE FROM ONE STATE TO ANOTHER? ● HOW DO PLANTS GROW AND CHANGE? ● HOW DO WE MEASURE, RECORD, AND DESCRIBE WEATHER CONDITIONS? 	New Plants <ol style="list-style-type: none"> 1. Observe and describe the characteristics of plants as they grow and change through drawing and writing. 2. Recognize that plants need space, water, food, and air. 3. Compare and sort plants based on their characteristics. 	New Plants <p>T1. I can name the stages of a plant life cycle.</p> <p>T2. I can name what plants need to live.</p> <p>T3. I can describe different types of grasses.</p> <p>T4. I can describe different plants.</p> <p>T5. I can sort plants into groups.</p>	New Plants <p>2.1.1.2.1</p> <p>2.4.1.1.1</p> <p>2.4.2.1.1</p> <p>2.4.3.1.1</p>	New Plants <p>CA = New Plants Assessment</p>	New Plants <p>This unit will span the months of March and April.</p> <p>Key Vocabulary:</p> <ul style="list-style-type: none"> ● seed ● life cycle ● pollen/pollinate ● roots ● seedpod ● leaves ● stem ● flower ● bud ● brassica ● grass ● alfalfa <p>Outdoor Lesson: Observe plants around the school.</p> <p>Video -United Streaming - The</p>

<p><i>UEQ:</i></p> <ul style="list-style-type: none"> • <i>What are the stages of a plant's life cycle?</i> • <i>What do plants need?</i> • <i>How can plants be sorted into groups?</i> <p>New Plants</p> <ol style="list-style-type: none"> 1. Brassica 2. Lawns 3. Sorting Plants (Outdoor Lesson) 					<p>Magic School Bus Gets Planted -United Streaming - The Magic School Bus Goes To Seed</p> <p>Literature -From Seed to Plant by Gail Gibbons</p>
--	--	--	--	--	--

May 2021

Content	Skills	Learning Targets	Weather	Assessment	Resources & Technology
<p>CEQ:</p> <ul style="list-style-type: none"> • HOW CAN SHAPES AND OBJECTS BE BALANCED? • HOW DO OBJECTS MOVE? 	<p>Weather</p> <ol style="list-style-type: none"> 1. Observe and record weather patterns. 2. Recognize changes in weather throughout the seasons. 	<p>Weather</p> <p>T1. I can measure wind speed. T2. I can measure and record the daily temperature, rain, and wind.</p>	<p>Weather</p> <p>2.1.1.2.1 2.3.2.2.1</p>	<p>Weather</p> <p>CA = Weather PowerPoint rubric</p>	<p>Weather</p> <p>Key Vocabulary:</p> <ul style="list-style-type: none"> • temperature • wind speed • precipitation • overcast • thermometer

<ul style="list-style-type: none"> ● HOW CAN WE DESCRIBE AND USE SOLIDS? ● HOW DOES WATER CHANGE FROM ONE STATE TO ANOTHER? ● HOW DO PLANTS GROW AND CHANGE? ● HOW DO WE MEASURE, RECORD, AND DESCRIBE WEATHER CONDITIONS? <p><i>UEQ:</i></p> <ul style="list-style-type: none"> ● <i>How do you describe weather conditions?</i> ● <i>How does weather change?</i> ● <i>How do you use common tools to measure weather conditions?</i> <p>Weather</p>	<p>3. Utilize tools to record changes in weather.</p>				<ul style="list-style-type: none"> ● rain gauge ● pinwheel <p>Tech Integration: Weather Observations PowerPoint</p> <p>Outdoor Lesson: Weather Observations Journal</p> <p>Literature -Cloudy With A Chance of Meatballs</p> <p>Website www.eo.ucar.edu/webweather http://www.weatherwizkids.com/</p> <p>Video -United Streaming - The Magic School Bus Kicks Up A Storm</p>
--	---	--	--	--	---

<ol style="list-style-type: none">1. Weather Calendars (Outdoor Lesson)2. Pinwheels3. Measuring Temperature4. Measuring Rain 					
---	--	--	--	--	--