

Grade 5	Science	Week 6
Lesson Title: States of Matter		
Weekly Learning Targets: Students can observe and measure properties of states of matter and will identify phase changes.		
Next Generation Science Standards 5.PS1.1 – Develop a model to describe that matter is made of particles too small to be seen. 5.PS1.3 – Make observations and measurements to identify materials based on their properties.		
MONDAY		
Daily Learning Target: Students can identify states of matter.		
Learning Tasks: After reviewing the lessons from the previous week, the teacher can preview the upcoming week’s lessons about the states of matter. To begin, the teacher can create anchor charts with the different states of matter and ask what the students already know. (SM A) After discussing, the class can look at the picture on page 22 and identify what solids, liquids, and gases they see. Next, the students can read page 23 about the different states of matter and compare oil and butter using a Venn diagram. Next, the students can read about the different states of matter on page 24 and answer the questions. After reading, the class can refer back to the anchor charts and make any updates or changes as needed.		
Daily Formative Assessment: The teacher can check the answers in the students’ textbooks.		
TUESDAY		
Daily Learning Target: Students can use observation, measurement, and communication skills to describe changes of matter.		
Learning Tasks: To begin the class, the teacher can review the anchor charts with the students. Then, the class can read page 25 about freezing and melting and answer the questions on the page. After, the students will be put into groups and be given an ice cube in a bag. The students will then write the physical properties of the ice cube including, length, mass, and temperature. Following, that the students will wait or expedite the process for the ice cube to melt. Then, students will measure the water one more time. Then, the students will discuss and reach conclusions about how matter changes when it changes from a solid to liquid. The students can also measure to find the melting and freezing point. For additional review, the students can watch this video about the melting, freezing, and boiling point. (SM B)		
Daily Formative Assessment: The teacher can check the students’ conclusions.		
WEDNESDAY		
Daily Learning Target: Students can identify what happens when a liquid is heated.		
Learning Tasks: To begin the class, the teacher can review the findings from yesterday and can demonstrate that mass remains the same when solid changes to a liquid by demonstrating with another material. After, the teacher will ask students what they think will happen when a liquid is heated. After sharing their predictions, the class will read about evaporation and boiling point on page 26 in the textbook and answer the questions. The class can also watch this video (SM B) about the melting, freezing, and boiling point. Then, the class can set up a demonstration for the rest of the week. The teacher can prepare three containers with equal amounts of water. The first container can be put in a cool, dark area, one in a sunny area, and one under something hot like a heat lamp. Furthermore, another three jars can be placed in the same area but contain different liquids, like water, soap, and juice. The jars can be measured or weighed once every day and the results compared. (SM C) Based on what they know already, the students can make predictions about what will happen to each liquid.		
Daily Formative Assessment: The teacher can check the students work in their textbook.		
THURSDAY		
Daily Learning Target: Students can identify what happens if a liquid is cooled.		

Learning Tasks: To begin class, the teacher can review the previous lesson and check the liquids in the jar. Then, the teacher will review with students what they already know about matter changing states. Then, the teacher can ask students what would happen if a gas is cooled. After taking predictions, the class can read page 27 and answer the questions about condensation in the textbook. Then, students can perform the inquiry on page 22. The students will stick a straw halfway inside a bag, seal the bag, and exhale through the straw. They will then seal the bag, place it under a bright light, and observe. The students can record their observations in their book.

Daily Formative Assessment: The teacher can give feedback on page 27.

FRIDAY

Daily Learning Target: Students can observe and measure properties of states of matter and will identify phase changes.

Learning Tasks: After reviewing the previous lesson and checking the liquid levels in the jars, the students will get ready to perform centers where they observe the changes in matter. There will be five stations: chocolate, butter, penny, ice cube, and crayon. The students will record their observations about the objects before and after heat is applied or taken away. (SM E) Then, the students can write about what they learned during the week's lessons and relate that back to the lab activity.

Daily Formative Assessment: The teacher can check the students' writing in their lab notebook.

Grade 4– Science – Week 6	MATERIALS / RESOURCES
	<p>pencil, science notebooks, ice, bags, scale balance, materials for melting, straw, materials for stations</p> <p>A – States of Matter Anchor Chart - https://i.pinimg.com/originals/69/98/62/6998622119450cd8a5a10006b672bf87.jpg</p> <p>B – Freezing, Melting, and Boiling Point Video - https://www.brainpop.com/science/matterandchemistry/matterchangingstates/</p> <p>C – Evaporation Investigation - https://education.seattlepi.com/fifth-grade-science-experiments-h2o-evaporation-6830.html</p> <p>D – Matter Changes - https://betterlesson.com/lesson/636180/day-1-what-happens-to-some-forms-of-matter-when-temperatures-increase-and-decrease-cornerstone</p> <p>E – Data Table - https://betterlesson.com/lesson/resource/3200977/data-table</p> <p>Additional Resources</p> <p>5th Grade Structure and Properties of Matter - https://ngss.nsta.org/Resource.aspx?ResourceID=154</p> <p>Lesson Plans Matter - https://docplayer.net/55840136-Lesson-plan-models-matter-by-darby-feldwinn.html</p> <p>What is Matter Lesson Plan - http://seplessons.ucsf.edu/node/351</p> <p>Physical Properties of Matter Anchor Chart - https://betterlesson.com/lesson/resource/3254995/physical-properties-poster-jpg</p> <p>Chemical Properties of Matter Anchor Chart - https://betterlesson.com/lesson/resource/3254996/chemical-properties-poster-jpg</p> <p>Structures and Properties of Matter - http://www.mccracken.kyschools.us/Downloads/5th%20Grade%20Structures%20and%20Properties%20of%20Matter.pdf</p>