

# Lesson Plan Template

Topic: The three states of water

Date: October 15, 2012

Grade level: Kindergarten

SOL: K.5 The student will investigate and understand that water flows and has properties that can be observed and tested. Key concepts include

a) water occurs in different phase

Daily Question: What are the three states of water?

Subject: water exploration

Procedures for Learning Experience	Guiding Questions	Materials Needed	Evaluation (Assessment)	Approximate Time Needed
<p><b>Engagement:</b> Students will be asked to identify ice, water, and steam (from a safe distance) and asked what they have in common.</p>	<p>What are these? What do they have in common? How are they different?</p>	<p>ice cubes, pitcher of water, bucket, humidifier</p>	<p>Formative - their responses will indicate if they recognize water in its three states</p>	<p>10 min.</p>
<p><b>Exploration:</b> Working in small groups, students will rotate between three stations: 1- Students will be given their own ice cube to explore and describe 2- Students will explore the way solids, liquids, and gases change as they are put in different containers (gas will be represented by a blown-up balloon) . 3- Water changes form when energy is added, usually as heat. Students will race to change their water from solid to liquid as they see if by applying energy they can get their ice to melt faster than an ice cube resting on the table.</p>	<p>How does water change from one form to another? Can water always change shape with its container? What can we learn about water and ice using our senses?</p>	<p>individual ice cubes in baggies balloons different shaped containers water cups, hot plate (used with a safety zone) towels</p>	<p>Formative - students will be monitored as they explore the water to determine if observations are accurate. Students will be asked if they can explain how to make the ice melt faster.</p>	<p>20 min.</p>
<p><b>Explanation:</b> Students will be prompted to return to their seats after they have all had a</p>	<p>What are the different states of water?</p>	<p>Listening ears. A partner.</p>	<p>Formative: Check if students</p>	<p>20 min.</p>

<p>chance to explore the different stations. Once back in on the carpet, students will be asked what the different states of water are. Without be initially directly told what the states are, students will be asked to describe the different types of water they observed. This will allow the students to express what they saw. Explain that the three states of matter are solid, liquid, and gas. Water can be seen in all three states. Water as a solid is an ice cube. Water as a liquid is what we drink. Water as a gas is steam. Matter and water is made up of up of really tiny particles. In a solid the particles are really close to each other. Have the students think about the ice cube and how hard it is. Ask them to make a solid with their body. With a partner, students should stand back to back and not move. Then explain that in a liquid, the particles can move around some but not too much. Ask them to make a liquid with a partner by holding hands and moving around. Finally, explain that the particles in a gas are really spread apart. Ask the students to model a gas with their bodies. Students should freely move around the room.</p>	<p>What is a solid?  What is a liquid?  What is a gas?</p>		<p>understand the three types of matter by participating in making the three states with their body.</p>	
<p><b>Extension:</b> Students will do a sort in which they will sort different images of water into</p>	<p>Where do we see water in our everyday lives? Is</p>	<p>Sorting chart, images of</p>	<p>Summative assessment: do they</p>	<p>10 min.</p>

the categories of solid, liquid, and gas. Images will include clouds, rain, and lakes, as well as ice cubes and a steaming kettle.	it a solid, liquid, or gas?	water. Crayons.	correctly sort the water images?	
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**Notes:**

**Resources:**

<http://www.brainpopjr.com/science/matter/changingstatesofmatter/grownups.weml>

<http://www.onlineschools.org/library/kidsmatter/>

[http://www.doe.virginia.gov/testing/sol/standards\\_docs/science/2010/lesson\\_plans/kindergarten/matter/ess\\_K-5a.pdf](http://www.doe.virginia.gov/testing/sol/standards_docs/science/2010/lesson_plans/kindergarten/matter/ess_K-5a.pdf)