



Changes of State of Matter¹

Elementary: Grade 5

<p>Concepts Taught:</p>	<p>The students have been introduced to a unit involving States of Matter. In order to have a more in depth understanding of the states of matter, they need to know how matter changes, and what causes matter to change. In the students' daily lives, they encounter a variety of matter in the different states. This lesson will allow them to conceptualize these common occurrences in their daily lives.</p>
<p>Objectives:</p>	<p>Using computers and other resources students will be able to...</p> <ol style="list-style-type: none"> (1) Initially download and implement SMUB.IT bookmarking technology. (2) classify the changes of state matter undergoes when give a description of the shape and volume. (3) describe the change of state matter undergoes when given the name. (4) identify examples of each change of state when given either a description or the name of a change of state... <p>With intended 100% accuracy.</p>
<p>Materials:</p>	<p>Computer lab One computer per student projector projector screen</p>
<p>Standards²:</p>	<p><u>Standard 3: The Physical Setting</u> - explore, describe, and classify materials, <u>motion</u>, and <u>energy</u>.</p> <ul style="list-style-type: none"> • 5.3.4: Earth and the Processes- Investigate that when liquid water disappears it turns into a <u>gas</u> (vapor) mixed into the air and can reappear as a <u>liquid</u> when cooled or as a <u>solid</u> if cooled below the freezing point of water. • 5.3.8: Matter and Energy- Investigate, observe, and describe that heating and cooling cause changes in the properties of materials, such as water turning into steam by boiling and water turning into ice by freezing. Notice that many kinds of changes occur faster at higher <u>temperatures</u>.
<p>Procedures:</p>	<p>*Before Official lab presentation ...Teacher must:</p> <ol style="list-style-type: none"> (1) SMUB 4 videos displaying changes in matter. (2) Send the SMUBed links to students email addresses.

¹ Adopted from: www.lessonplans.com

² Adopted from: www.indianastandards.org

	<p>... Students must: Create a free email account.</p> <p>A. Presentation: A1. Teacher demonstrates on projector how the students will open the SMUBed videos. A2. Students watch all the demonstrations and answer the questions that correspond.</p> <ul style="list-style-type: none">• They will be able to pause when necessary to jot down the answers.
Evaluation:	There should be 8-10 questions per video. They will be graded for accuracy.