

**ED 101 Educational Technology Lab – Spring 13
Boston University – School of Education**

LESSON PLAN

Requirement	<i>Explanation/Example</i>
Grade(s) Content Area(s) Topic of Lesson	<i>Fifth Grade Science: The Water Cycle</i>
Objective	Students will be able to draw a diagram of the water cycle and label 3 stages (evaporation, condensation, and precipitation) with correct spelling, also being able to write one sentence for each stage that explains what happens during that process.
Technology standard	Standard 1. Demonstrate proficiency in the use of computers and applications, as well as an understanding of the concepts underlying hardware, software, and connectivity. Basic Operations G3-5: 1.2 Select a printer, use print preview, and print a document with the appropriate page setup and orientation.
Curriculum Framework	Massachusetts Science and Engineering Standards Earth and Space Science, Grades 3-5 The Water Cycle 10. Describe how water on earth cycles in different forms and in different locations, including underground and in the atmosphere.
Materials, Resources, Technology, Personnel	one plastic cup for each student, saran wrap, permanent markers, water, a computer for each student, internet access, printer access, paper, pencils
Lesson Introduction (5 minutes)	A week or so before you are planning on doing the water cycle lesson, have each student prepare his/her own model. Distribute a clear plastic cup to each student. He/she can place a small object in the cup, but the most important thing is that they each contain a layer of water on the bottom. Have the students cover each cup so that it is airtight with saran wrap and label it with their name. They can place them in varying places around the classroom, perhaps near a window or in a colder/warmer area of the room. Then have them observe the cups over the next few days, taking down notes about what they see. The day of the water cycle lesson, have the kids discuss what they saw going on in their cups. Is there still water in the bottom of them? Does the saran wrap have bubbles on it? Is there a mist visible on the inside of the cup?
Guided Activity	Use the students' observations from the lesson introduction to introduce the terms evaporation, condensation, and precipitation and write them on the board. Then ask the students for examples of them. I will then tell them

<p>(10 – 15 minutes)</p>	<p>about how the water cycle can be different in different locations, including underground and in the atmosphere. Finally, I will describe how the water cycle can have an affect on climate.</p> <p>After I explain to the students how they will use the web site to practice their water cycle vocabulary, I will show them how to print an activity sheet from the website and select a printer, use print preview, and print a document with the appropriate page setup and orientation. I will have two students come to the teacher computer to demonstrate this skill for the class, and then each student will print the activity sheet from their own computer in order to show mastery of the skill.</p>
<p>Independent Student Activity</p> <p>(10-15 minutes)</p>	<p>Have the students review the information they just learned by going through the website. Once they read through some pages of information, they can complete a quiz to check how much they retained, then move on to some linked websites which include various games and activities to further reinforce their knowledge, such as the printable activity sheets. After they have completed the quiz and have moved on to the additional activities, the students may work in pairs.</p>
<p>Wrap-Up of Lesson (Closure)</p> <p>(5 minutes)</p>	<p>To conclude the learning, I will ask the students about what they have learned or what they found particularly interesting, creating a word cloud from their input which I will then display in the classroom.</p>
<p>How will students be assessed to make sure they are able to perform the objective?</p>	<p><u>Objective</u>: Students will be able to draw a diagram of the water cycle and label 3 stages (evaporation, condensation, and precipitation) with correct spelling, also being able to explain what happens during each process.</p> <p><u>Assessment</u>: Students will be provided with the web site URL and asked to study it for homework for the next 3 nights. At the end of the week, students will be given a blank sheet of paper and 30 minutes to draw and label the water cycle, writing a short paragraph on the back of the paper about what happens during each step of the process.</p>