



**Title:** The Water Cycle and Earth’s Spheres  
**Grade(s):** 5th  
**Subject(s):** Science  
**Author:** SVE 5<sup>th</sup> Grade Team  
**Overview:** Students will gain understanding of the Water Cycle using group observations of Water Cycle in a Jar. The culminating activity requires students to create technology presentations explaining their understanding of the Water Cycle.

**Content Standards:** SC (5) 10. Identify spheres of Earth, including the geosphere, atmosphere, and hydrosphere.  
 TC (3-5) 10. Use digital environments to collaborate and communicate.  
 TC (3-5) 12. Create a product using digital tools.

**Local/National Standards:**

**Primary Learning Objectives:**

- Using a Venn diagram, students will compare observations of two “water cycle” jars (one placed in a warm area, the other in a cool area).
- Using a technology program, students will create a product demonstrating their knowledge of the water cycle, including the geosphere, hydrosphere, and atmosphere.

**Additional Learning Objectives:**

**Approximate Duration of Lesson:** 5 – 45 minutes session

**Materials and Equipment:**

- The Magic School Bus Wet All Over: A Book About the Water Cycle* and other books about the water cycle
- A clean jar and lid
- Small rocks such as gravel
- Sand (play sand or aquarium sand)
- Potting soil
- Small plant such as moss, or grass seed or small beans
- Small bottle cap or shell.

**Technology Resources Needed:** Computer, Internet access, printer, presentation programs/software (such as PowerPoint, Glogster, Prezi, Comic Strip Maker; see websites below).

**Background/Preparation:** Students should be familiar with using presentation software/programs.

**Procedures/Activities:**

Day 1 Engage students with a hands-on activity in which students construct two models of a natural system. Place Jar 1 in warm place, Jar 2 in a cool place.

Day 2 Predict outcomes of the investigation from Day 1. Record observations from both jars. Create a Venn Diagram to compare and contrast recorded data.

Day 3 Elicit student response explanations for the outcomes. Guide students in explanation of the water cycle, identifying in each jar the geosphere, hydrosphere, and atmosphere.

Day 4-6 Have student groups design, create, and present a project on the water cycle using various computer programs. Use the RAFT table to guide the projects.

**Attachments:**

- [Software Presentation Rubric](#)
- Directions for Water Cycle Presentations (RAFT table)
- Presentation Programs:  
[edu.glogster.com](http://edu.glogster.com)  
<http://learnenglishkids.britishcouncil.org/en/make-your-own>  
[www.edublogs.org](http://www.edublogs.org)

**Assessment Strategies:**

Rubric (link is above)

**Extension:**

Each group will create a blog entry explaining their Water Cycle observations and presentation. Students must also respond to peers' posts to their group blog.

**Remediation:**

Peer tutoring via RAFT activities/presentations, teacher assistance provided as needed.

### RAFT Assignment

Demonstrate what you have learned by creating a product from a particular point of view for a specific audience. You will need to decide what role you will assume during your presentation. Then, decide to whom you will be writing (audience) and how you will present your knowledge (format).

**All presentations must be about the water cycle and include the terms geosphere, hydrosphere, and atmosphere.**

Role	Audience	Format	Topic
<ul style="list-style-type: none"> <li>• Scientist</li> <li>• Artist</li> <li>• Character in nature</li> <li>• Reporter</li> <li>• Blogger</li> <li>• Alien</li> <li>• A drop of water</li> </ul>	<ul style="list-style-type: none"> <li>• Peer group</li> <li>• Government</li> <li>• Animals</li> <li>• Aliens</li> <li>• World leaders</li> </ul>	<ul style="list-style-type: none"> <li>• Blog</li> <li>• Glogster</li> <li>• Article/brochure</li> <li>• Comic strip</li> <li>• PowerPoint</li> </ul>	The Water Cycle