

**Project FOCUS
Best Lessons
SECOND GRADE**

Title of Lesson: Water Cycle Wheel

Theme: Physical Science

Unit Number: 1 **Unit Title:** Properties of Matter

Performance Standard(s) Covered (enter codes):

S2P1

S2CS4

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

- Essential addressed: What are the properties of matter?
- Enduring understandings and key terms: The properties of matter are observable and usually exist in one of three forms: solid, liquid, or gas.
- Key terms: water, cycle, evaporation, condensation, precipitation, infiltration, and run-off

Learning Activity (Description in Steps)

Abstract (limit 100 characters): The purpose of this lesson is to learn how water is recycled and importance of the water cycle.

Details:

Preparation:

I had two paper plates prepared for each student. Half of the paper plates were divided into 5 wedges and the other half had a wedge the size of 1/5 of the plate cut out. I also prepared a sample water cycle wheel. I had a basket of crayons and pencils for each group of students and enough brass clips so each student could have one.

Actual Procedure:

I began by asking the students where they thought water went to when you pour it on the ground. Some said it disappeared, while others said it ran into lakes. I explained that this was called the water cycle. We reviewed the different steps of the water cycle (evaporation, condensation, precipitation, infiltration, and run-off). I also helped them better relate to each step by relating it to

everyday life. For example, I explained condensation by telling them that is why a cup becomes moist on the outside if it is filled with water.

Finally, I handed each student a paper plate that was divided into five sections. We began with one section and together wrote the word evaporation. Then, I had them draw a picture that could help them remember evaporation. We continued this process in each wedge with condensation, precipitation, infiltration, and run-off. Then, as each student finished, I connected their plate to another plate with a brass pin. The second plate was the one with the wedge already cut out of it. I connected the plates for them so they would not hurt themselves or rip their plate. Be sure to place the plate on which they colored on the bottom. They should write their name and The Water Cycle on the front of the plate. The wheel is complete! Make sure to show them that as they spin the top plate, a different step of the water cycle appears. Also explain that it does not matter where they begin in the cycle because it is continuous and you can start at any point.

Possible Assessment Questions:

Show them pictures of the different steps of the water cycle and ask them what the name of each step is. Ask:

- (1) Why does a cup of water leave a water ring on the table?
- (2) Where does water go after it falls to the ground?

Materials Needed (Type and Quantity):

- 2 white paper plates for each student
- Crayons
- Pencils
- Brass paper fasteners (one for each student)

Notes and Tips (suggested changes, alternative methods, cautions):

This activity works best with the students in small groups. I only work with them for about 30-45 minutes. I find it easier to teach this lesson in small groups because then you do not always have the same students answering and can better suit the lesson for each groups' previous knowledge of the water cycle. However, if you are doing this lesson with the entire class at once, then you could probably expand on it.

Sources/References:

- 1) Rubicon Atlas
(<http://clarke.rubiconatlas.org/c/pi/v.php/Atlas/Develop/UnitMap/View/Default?UnitID=12438&TeacherID=19990>)
- 2) Water cycle Animation (http://www.internet4classrooms.com/skills_2nd_science_tx.htm)
- 3)