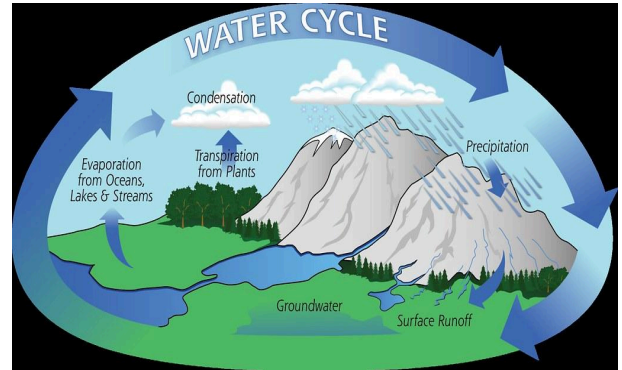


THE CYCLE OF WATER

Subject: Science

Grade Level: 4th Grade

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Educational Standards Met in Lesson:

MS-ESS2-4: Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

ESS2.C: The Roles of Water in Earth's Surface Processes

- Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land.

Overview: Students will be able to learn and understand the water cycle and how water is recycled through processes of condensation, precipitation, runoff, transpiration, and evaporation.

Lesson: Teacher will introduce and explain the cycle of water to students as well as how water is recycled and sprung into the process over and over again.

Objectives of Lesson:

Students will be able to describe and draw a complete cycle of water at the end of the lesson.

Students will be able to explain how water is recycled at the end of the lesson in full.

Materials needed:

1. Fill-in-the-blank Water Cycle worksheets
<https://drive.google.com/file/d/1j1I0RNtIBOxiKVsofHFkRWpkBASqm9PW/view?usp=sharing>
2. Pencils
3. Transparent cups
4. Water
5. Foam shaving cream
6. Food coloring
7. Stickers/candies (as rewards)

Steps:

1. Introduce topic of water cycle
2. Ask students to share their knowledge of water and how it is recycled
3. Transition into an engaging lecture about the water cycle and its specific components: condensation, precipitation, runoff, evaporation, transpiration.
4. Pair students up to work on water cycle worksheet together
5. Once all water cycle worksheets are completed, organize 2-4 pairs into larger groups for precipitation demonstration.
6. Pass out one cup of water to each group. Apply shaving cream on top of the water, and then add several drops of food coloring, which will then fall through the shaving cream (clouds) and into the water below to represent rainfall onto the atmosphere.
7. As students observe the demonstration, ask questions about the role of each component to foster curiosity and check understanding.

Close-up:

Review with students about the cycle of water and how it is recycled by asking related questions (e.g. terms or definitions)

Learning Styles Engaged:

♥ Auditory learners: listening to the processes and definitions of each step of the water cycle

- ♥ Visual learners: seeing the words for each step alongside pictures on worksheet
- ♥ Kinesthetic learners: interacting with live demonstration of precipitation