

WATER CYCLE BRACELET

Learn about the water cycle while making a bracelet to remind them of the process every day.

The Earth's surface is 70% to 75% water. Ninety-six percent of that water is saline (or salt water) and 4% is fresh. Of the total fresh water, 68% is ice. Another 30% of fresh water is underground. So surface water sources, such as rivers and lakes, are about 1/10,000 of 15 of total water.

OBJECTIVE: The student will be able to:

- recall the stages of the water cycle.
- discuss the amount of water on Earth that is available to humans.

RESOURCES: Water cycle poster

MATERIALS: For each student:

- 3 blue beads
- 3 white beads
- 3 clear beads
- 3 green beads
- String or chenille stem

ACTIVITY:

1. Review the stages of the water cycle.
2. Connect the stages of the water cycle to the colored beads as follows:
 - a. Evaporation – **clear** beads represent water vapor
 - b. Condensation – **white** beads for clouds, dew, frost
 - c. Precipitation – **blue** beads for the water that forms rain, snow, hail, sleet
 - d. Ground water and run off – **green** beads for growing
3. Have the students string beads to reflect the steps in the water cycle starting with evaporation. (Ex: clear, white, blue, green.)
4. Continue the pattern until all beads have been used.
5. Fasten the string/chenille stem around the wrist loosely.

ADDITIONAL IDEAS:

Sing the water cycle song to the tune of "My Darling Clementine"

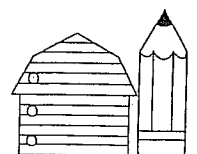
Evaporation, condensation, precipitation,
That's the way.
We call it the water cycle,
And it happens every day.

Here is another version of the water cycle song with motions. (to the tune of "Oh, My Darlin")

Evaporation, (push both palms up, palms parallel to floor.)
Condensation, (Push with arms straight out to the side.)
Precipitation on my head. (Pretend to "sprinkle" rain on head.)
Accumulation, (Make arms sweep back and forth in front.)
Water Cycle, (arms rotate in circle in front.)
And we start all over again. (Turn around in place in a circle.)

EVALUATION:

Have the students recall the stages of the water cycle.



WATER CYCLE BRACELET KIT

This kit has 13 colors of beads that represent the water (hydrologic) cycle. The beads are used to show the paths water takes through its various states as it moves through Earth's systems – oceans, ground water, rain, streams, etc. Students make their bracelet and explain the cycle it represents. There are no wrong answers, just incomplete cycles. Bead colors and what they represent are as follows:

(Yellow) **Sun** – The source of all energy on earth; powers the water cycle.

(Iridescent clear) **Water vapor** – Portion of the water cycle where water is suspended in the air or as steam and humidity.

(Gold or silver) **Clouds** – Water vapor which has condensed into tiny droplets in the air.

(Clear propeller bead) **Rain** – Moisture from clouds that falls to the earth as a liquid.

(White) **Snow** – Moisture falling as a liquid in the frozen state.

(Brown) **Erosion** – Occurs where soil is unprotected by vegetation. Soil particles are suspended in the water runoff.

(Blue) **Oceans** – Earth's weather factory. Moisture evaporates by the sun's heat and is carried around the Earth by winds.

(Turquoise) **Lakes** – Lakes collect water from streams and also evaporate water into the atmosphere.

(Gray) **Puddles** – water collects in low spots, streets, sidewalks and also collects pollutants (dirt, trash, automotive fluids, etc.) Puddles evaporate or run off into storm sewers.

(Green) **Plants** – Plants take in water through roots and evaporate water into the atmosphere through leaves; transpiration.

(Royal Blue) **Rivers** – Rivers collect water and send it to lakes and oceans., This enables river transportation and makes Idaho a "seaport" state.

(Lilac) **People and Other Mammals** – We are made up of about 70% water.

(Tan) **Groundwater** – Water that is hidden in the ground, in aquifers or underground rivers.

Water Cycle in a Bag

1. Place the copy of the water cycle inside the bag and close the bag.
2. Using permanent markers, trace over all black lines including numbers.
3. After completely tracing everything, remove the copy from the bag.
4. Add 2 tablespoons of aquarium rock to the bottom of your bag.
5. Add ¼ cup of water to your bag.
6. Using wide clear packing tape, affix the bag to a window in direct sunlight and watch the water cycle work.

