# The Cedar River Watershed Water Cycle Game Directions



- 1. Set up the game inside or outside. The water cycle sites (large cards) are spaced a good distance apart. Place the cloud site far away from the ocean site. Stack the smaller sets of cards at each location.
- 2. Divide the class into groups of three. Each person represents one atom in an  $H_2O$  molecule! Inform them that the water molecule bond is one of the strongest bonds on earth, very difficult to break, so they must remain together at all times.
- 3. Demonstrate the activity. Each group ( $H_2O$  molecule) will start at a different site, taking a card from the top of the stack. Next, they read and record the action that is written on the card on their water cycle score card and return the card **the bottom of the stack**. The  $H_2O$  molecule then moves to the next location with their clipboard and repeats the process.
- 4. After the demo, give each  $H_2O$  group a clipboard with a copy of the water cycle score card and assign them to a site. Have each group record their starting location on the clipboards. The groups spread out and... Go!
- 5. Each H<sub>2</sub>O molecule will quickly notice that they spend a great deal of time going from the ocean to the clouds and straight back to the ocean again. That is okay, that is what most water molecules do.
- 6. Wrap-up with a discussion about the water cycle and/or have them write stories about the life of a water molecule.

Have Fun!
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## Water Cycle Game Inventory

- 1 Instruction Card
- 1 Score card

Animal - 1 large card

10 small cards

- 4 Exhaled from lungs evaporate to clouds
- 2 Brushing teeth go to ocean
- 4 Animal urinates go to mountains

### Clouds -1 large card

12 small cards

- 2 Fall as snow on to the ocean
- 2 Fall as rain on to the ocean
- 2 Fall as rain on to mountains
- 2 Fall as snow on to mountains
- 2 Fall as rain on to parking lot go to river
- 2 Fall as rain into the Cedar River

#### Mountains -1 large card

12 small cards

- 2 Get frozen in ice stay at mountains
- 4 Roll downhill become Cedar River
- 2 Evaporate go to Clouds
- 2 Soak into ground become groundwater
- 2 Soak into ground get absorbed by plant

#### Ocean -1 large card

10 small cards

- 4 One of countless molecules stay in ocean
- 4 Evaporate go to clouds
- 2 Kelp plant transpires you into air

#### Plants -1 large card

10 small cards

- 6 Plant transpires evaporate to clouds
- 2 Plant uses you to grow stay in plant
- 2 Plant stores you as fruit go to animal

#### River -1 large card

10 small cards

- 4 Roll downhill go to oceans
- 4 Evaporate go to clouds
- 2 Animals lick you up animals

#### Groundwater - 1 large card

12 small cards

- 2 Pumped from underground become plants
- 4 Underground stream becomes river
- 2 Go through roots to plants
- 4 Underground stream goes to ocean

# Water Cycle Score Card

Location What Happens to You?