**EXPLORE: Part** **2A**

Water Cycle Game Clues

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| **Cloud Station** |
| You fall as rain onto a mountain. Go to mountain. |
| You fall as sleet onto a mountain. Go to mountain. |
| You fall as snow into a river. Go to river. |
| You fall as rain into the ocean. Go to ocean. |
| You fall as rain onto a parking lot. Go to river. |
| You fall as rain onto the leaves of a bush. Go to plant. |
| You fall as snow onto a corn field. Go to plant. |

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| **Mountain Station** |
| You evaporate into the atmosphere. Go to cloud. |
| You soak into the ground. Go to groundwater. |
| You soak into the ground and get absorbed by a tree. Go to plant. |
| You roll downhill and become part of a river. Go to river. |
| You get frozen as ice and stay there. Stay at mountain. |
| You are drunk by a mountain goat. Go to animal. |
| You roll off a cliff into the ocean. Go to ocean. |

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| **River Station** |
| You evaporate into air. Go to cloud. |
| You continue to flow downstream into the ocean. Go to ocean. |
| You are captured by the roots of a tree by the river. Go to plant. |
| You are taken in by a deer drinking at the river. Go to animal. |
| You are taken in by a cow that drinks from the river. Go to animal. |
| You are one of the many molecules that flow in this river. Stay at river. |
| You are captured by grass on the riverbank. Go to plant. |

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| **Ocean Station** |
| You are one of the millions of water molecules in the ocean. Stay at ocean. |
| You evaporate into air. Go to cloud. |
| You are scooped up by a bird. Go to animal. |
| You are taken in by sea weed, released through its leaves and transpired into the air. Go to plant but do not draw a card. After one cycle, go on to cloud. |
| You are evaporated into the atmosphere. Go to cloud. |
| You are taken in by a polar bear. Go to animal. |
| You are one of the molecules that stay in the ocean. Stay at ocean. |

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| **Groundwater Station** |
| You are part of an underground river that flows to the ocean. Go to ocean. |
| You are taken in through the roots of a tree. Go to plant. |
| You are pumped out of the ground to water livestock. Go to animal. |
| You are taken in through the roots of grass. Go to plant. |
| You are part of an underground river that flows to the Yadkin River. Go to river. |
| You are pumped out of the ground to irrigate crops. Go to plant. |
| You remain underground. Stay at groundwater. |

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| **Plant Station** |
| You are transpired by the grass as vapor into the air. Go to cloud. |
| You are used by the plant for photosynthesis. Stay at plant. |
| You are used by the tree. Stay at plant. |
| You are transpired by the rose bush as vapor into the air. Go to cloud. |
| You are used by the tree for photosynthesis. Stay at plant. |
| You are transpired by the corn plant as vapor into the air. Go to cloud. |
| You are transpired by the flower as vapor into the air. Go to cloud. |

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| **Animal Station j0149627** |
| You are released by a dog as pee and then seep into the ground. Go to groundwater. |
| You are vomited by a cat and evaporate into the atmosphere. Go to cloud. |
| You are released via perspiration by a horse into the atmosphere. Go to cloud. |
| You are released by a fish into the ocean. Go to ocean. |
| You are released by a cow who peed in a river. Go to river. |
| You are trapped in the solid waste of a mountain goat. Go to mountain. |
| You are released from a human, flushed down the toilet, treated at the treatment plant and then dumped into a nearby river. Go to river. |

**EXPLORE: Part 2A**

Station Title Strips

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| **Cloud Station** |

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| **Mountain Station** |

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| **Plant Station** |

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| **Animal Station** |

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| **Ocean Station** |

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| **River Station** |

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| **Groundwater Station** |

**Explore,** Part 2A

Transparency

**Journey of a Water Molecule**

# Procedure:

1. There are 7 stations located around the room.
   1. Station 1 = CLOUD
   2. Station 2 = MOUNTAIN
   3. Station 3 = OCEAN
   4. Station 4 = RIVER
   5. Station 5 = GROUNDWATER
   6. Station 6 = ANIMAL
   7. Station 7 = PLANT
2. Count off by 7’s and report to your assigned station.
3. Choose a slip of paper out of the envelope. Read your statement. Record your station, directions, and destination on your Water Cycle Travel Log.
4. Listen for teacher to call “Cycle” and be ready to move to your next station.
5. You will continue for 10 cycles. Return to your seat.

After you have your travel logs completed, write a 1-2 page story (from a water drop’s viewpoint) describing your travels.

**Explore,** Part 2A Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Handout Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Journey of a Water Molecule

# Class Discussion

1. Think about the CLOUD Station. What are the different ways that “water molecules” got to the CLOUD?
2. In your group, discuss each station. How did water get to each station? Make a visual for each station.

MOUNTAIN STREAM

OCEAN

AN02542_ ANILMAL

GROUNDWATER

NA01441_ PLANT

1. Even though individual molecules took different paths, was anything similar about the journeys they took?
2. In the game, which stations seemed to be visited by the most water molecules? What can you infer from this?
3. Can you think of other parts of the water cycle that were not included in the game? How could they be added to the game?
4. What would happen to the water cycle if the sun’s energy were blocked from the Earth?
5. What might happen if all of Earth’s water stayed in the oceans? In the clouds?