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COMPANY**

Protecting the Piscataqua region's
maritime heritage and environment
through education and action

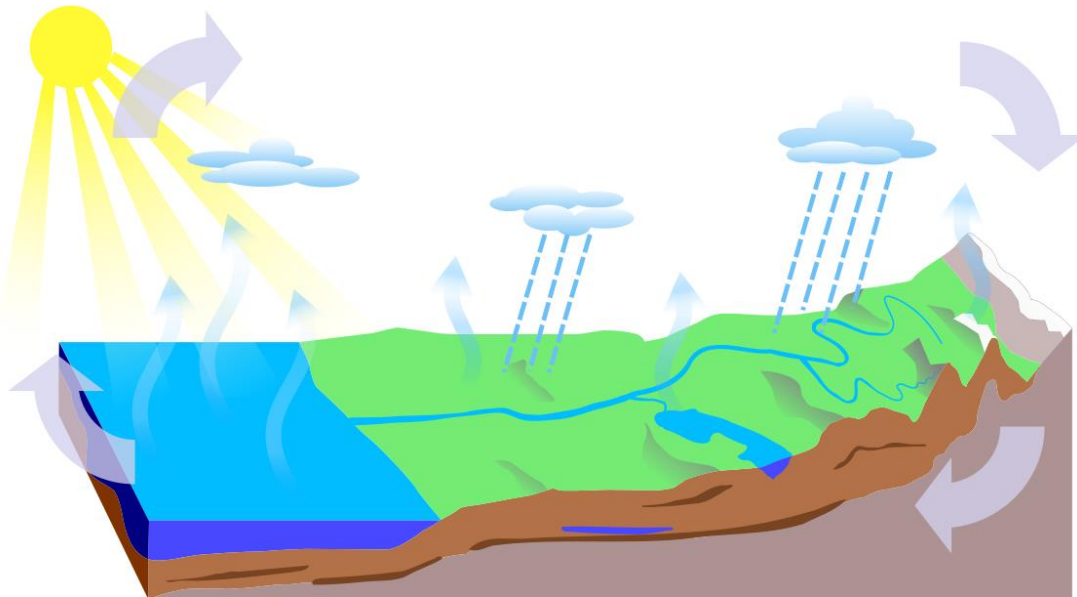
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Water Cycle Scavenger Hunt

Instructions:

In this scavenger hunt, you will be looking for water in as many forms as you can find it around your house and outside. To do this, we will review the water cycle. Then use the checklist below to find as many forms of water as possible!

The Water Cycle:



Evaporation: The arrows going up from the land and water area show evaporation. This is when water heats up and rises from the earth's surface – from plants, soil, or surface water like lakes and the ocean. It then goes into the atmosphere.

Condensation: When the water in the atmosphere cools it condenses (meaning moving together) and turns into clouds. This is the condensation stage.

Precipitation: Precipitation is any form of water coming down to the earth from the clouds, including rain, snow, hail, and sleet. This water falls back to the earth, watering plants and absorbing into the soil.

Runoff: Any water that is not absorbed into the ground runs off into streams and rivers, becoming part of the surface water.

States of Matter in the Water Cycle:

Water can exist in different states of matter: solid, liquid, or gas. When water evaporates, it turns into gas as water vapor. In the condensation phase water is a liquid, but when it falls during precipitation, it could be a liquid or a solid, like hail or snow.

Scavenger Hunt:

Using the checklist below, try to find water in different states of matter (solid, liquid, or gas), and in different parts of the water cycle. This might be a long scavenger hunt, because you are also waiting on the weather! You can always add to the list if you find more forms of water.

Can you find these things inside your house?

☐

Water in a liquid state? Where?

☐

Water in a solid state? Where?

Now let's go outside. Can you find:

☐

Water in the condensation phase? Where?

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Water in the runoff or surface water phase? Where?

☐

If it's below freezing, can you find any solid water outside? Where?

Evaporation: To find water in a gaseous state and to show evaporation, we will need to do a little experiment.

1. Fill a glass or container with water and mark the water level on the outside of the container (with tape, or something that will wash off).
2. Place the container of water outside in the sun, or the warmest place you can find. Make sure it's not going to rain in the next few hours!
3. Set a timer for 2-3 hours and then come back and check on your water. Did the water level go down? If so, that's water evaporating into the air!

If not, it might not be warm enough, or long enough to show the evaporation process. Try this on a warmer day or leave it for longer.

Reflection:

Great job with the scavenger hunt! Now that you know about the water cycle and water in the different states of matter in your house and yard, let's think about water in different areas around us, and on different days.

1. When there's a heavy rain (precipitation), where does the runoff go in your neighborhood?
2. Think back to a heavy precipitation day during the winter, what states of matter would you find water in on those days?
3. On a hot day during the summer, how fast do you think water would evaporate?