

Water Weather Loop

Track water as it moves through air, clouds, and Earth.

SC.6.E.7.2 "Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate."

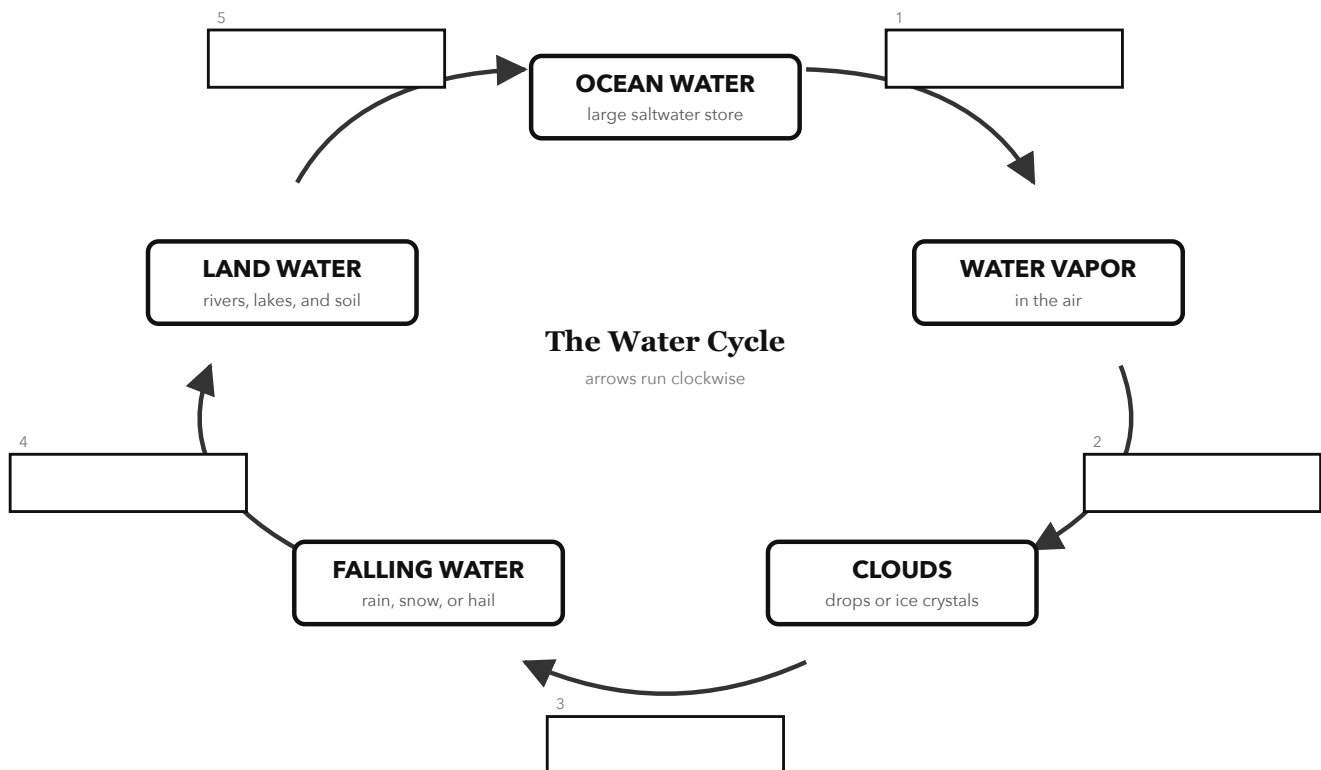
NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Use the word bank to write one process in each numbered box. Each process shows how water moves from one stage to the next.

WORD BANK	Collection	Condensation	Evaporation	Precipitation	Runoff
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2 RUN THE MODEL Use your finished diagram

1 Which process moves water from the ocean into the atmosphere?

2 A warm ocean causes faster evaporation. Use the model to explain how this can lead to rainy weather.

3 Over many years, how could repeated evaporation from a warm ocean affect the climate of nearby land?

3 CHECK IT Before you turn it in

☐ I filled in every numbered box.

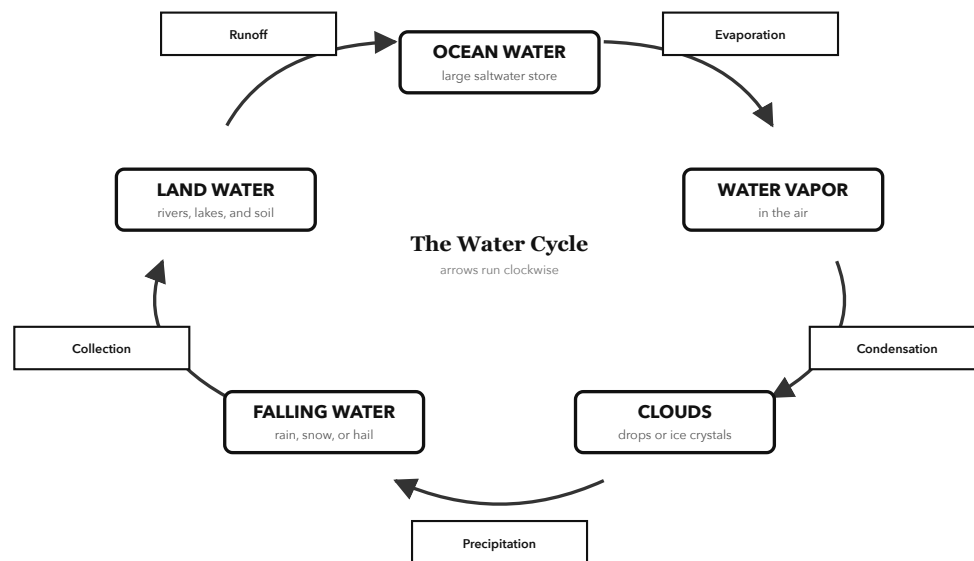
☐ I checked that each process follows the arrows.

☐ I can connect evaporation to weather or climate.

TEST THE MODEL

What is one part of the real water system that this model leaves out?

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **Evaporation.** (Which process moves water from the ocean into the atmosphere?)
2. **More evaporation adds water vapor. Condensation forms clouds, and precipitation can produce rain.** (A warm ocean causes faster evaporation. Use the model to explain how this can lead to rainy weather.)
3. **It can make nearby land more humid and can contribute to a wetter climate because more moisture is available for clouds and precipitation.** (Over many years, how could repeated evaporation from a warm ocean affect the climate of nearby land?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out transpiration from plants.
- It does not show wind moving clouds.

Place the processes in this order around the loop: Evaporation, Condensation, Precipitation, Collection, Runoff. Accept equivalent climate explanations that correctly connect increased evaporation to more atmospheric moisture and possible clouds or precipitation.