

The observation of water condensing on the inner surface of the lid is evidence that water is being cycled within the model. Overall, the observation of water condensing on the lid demonstrates that the model is effectively simulating key processes of the water cycle, providing evidence that water is indeed cycling within the system.

Condensation: When the warm water vapor comes into contact with the cooler surface of the lid, which is chilled by the ice cubes on top, it condenses back into liquid water droplets. This evaporation process mimics what happens in nature when water bodies, like lakes and oceans, are heated by the sun and water evaporates into the atmosphere. This dripping represents precipitation, similar to rain or dew in the natural water cycle, where condensed water droplets fall back to Earth's surface.

Water Vapor: As the water evaporates, it turns into water vapor, which rises and accumulates in the airspace of the container. This accumulation of water vapor simulates how water vapor rises into the atmosphere during the natural water cycle. This condensation process replicates what happens in the atmosphere when water vapor cools and forms clouds.

Precipitation: Eventually, the condensed water droplets on the lid may become heavy enough to drip back into the container. Here's why:

Evaporation: The lamp provides heat to the water in the container, causing it to evaporate.