

Episode 2

Strand 6.3	Standard 6.3.1	Big Idea Water is cycled through Earth's systems.
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Title Episode 2	Time 30 min	CCCs Patterns	Practices Use models to construct explanations.
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Phenomenon: *Water is transferred and stored in reservoirs as it moves through Earth's systems.*

Gathering

Use Models to Gather Data and Information

Students will observe a model of water cycling through Earth's systems by viewing a diagram of the water cycle. To analyze the model, students will discuss the different parts of the model, specifically what the arrows mean. Teachers will explain that scientists call this movement a *transfer*. Students will discuss where the water is moving to and from. Students will discuss what is happening between the movements indicated by the arrows, specifically where water is being held. Scientists call this a *reservoir*.

Reasoning

Construct Explanations

Students will identify all of the energy and matter within the model. Using patterns they have observed, students will classify the function of different components in the model as either a reservoir or a transfer in the water cycle.

Teacher support: Water is either being stored (reservoir) or is moving (transfer). This language will help students make sense of Earth's systems and develop a deeper model of the water cycle.

Reservoir: Lakes, glaciers, clouds, ponds, aquifers, plants, etc.

Transfer: Precipitation, rivers, streams, evaporation, runoff, etc.

Argue From Evidence

Students will discuss their classifications for each component and justify why they determined the component was a transfer or a reservoir.

Communicating

Construct an Explanation

Students will quiz each other. One student will state a source of water and the other student will identify it as a reservoir or transfer. Students must justify their answers with evidence.

Proficiency Indicators:

As students quiz each other, the teacher will walk through and observe for understanding.

Materials, resources, handouts, etc.

[Resource 6312.a - USGS Water Cycle](#)

