

Summative Assessment Examples

Residence Time

Would average residence time of water in the global hydrologic cycle increase (i.e. water moves slower) or decrease (i.e. water moves faster) if the atmosphere was removed as a reservoir (i.e., water moves around the planet but not through the air). Explain your reasoning.

Effects of Human Abstraction

Draw and label a box diagram of the global hydrologic cycle. Circle (or highlight) the reservoirs where human abstraction has the potential to deplete water stores.

- a. Which reservoirs are most vulnerable to depletion? Explain your reasoning.
- b. Where does the water removed by human abstraction go? Draw a new hydrologic cycle box diagram (or alter your diagram from above) to show the transport pathways and reservoirs that gain water (or increase flux rate) due to human abstraction.