The Earth’s Water Budget
Examine the schematic of the water cycle and answer the following questions. Be sure to show your calculations and units.

1. What percentage of Earth’s water is found in the oceans?

2. What percentage of Earth’s water is found in the atmosphere?

3. What is the total amount of precipitation each year?

4. What is the total amount of evaporation/transpiration each year?

5. Is more water evaporated into the atmosphere from the oceans or land?

6. What percentage of water that is evaporated (and transpired) into the atmosphere comes directly from the oceans?
7. Compare the amount of evaporation from the oceans and precipitation into the oceans. Note that they are not equal. What is an additional source of water that is added to the oceans?

8. Compare the values in 3 and 4. Write a claim regarding the amounts of precipitation and evaporation/transpiration using data as evidence to support your claim.

9. Compare your value for 3 and the total amount of water in the atmosphere. Note that the amount of precipitation is much larger than the amount of water in the atmosphere. How many times per year does all of the water in the atmosphere cycle through as precipitation?

10. What percentage of precipitation that falls on land becomes run off and infiltration?

11. At high elevations and high latitudes, some of the precipitation does not immediately run off, evaporate/transpire or infiltrate. Where is the water temporarily stored?