

THE APES WATER TRIVIA CHALLENGE

(some of these facts will be addressed on other notes pages;
some facts are only located here!)

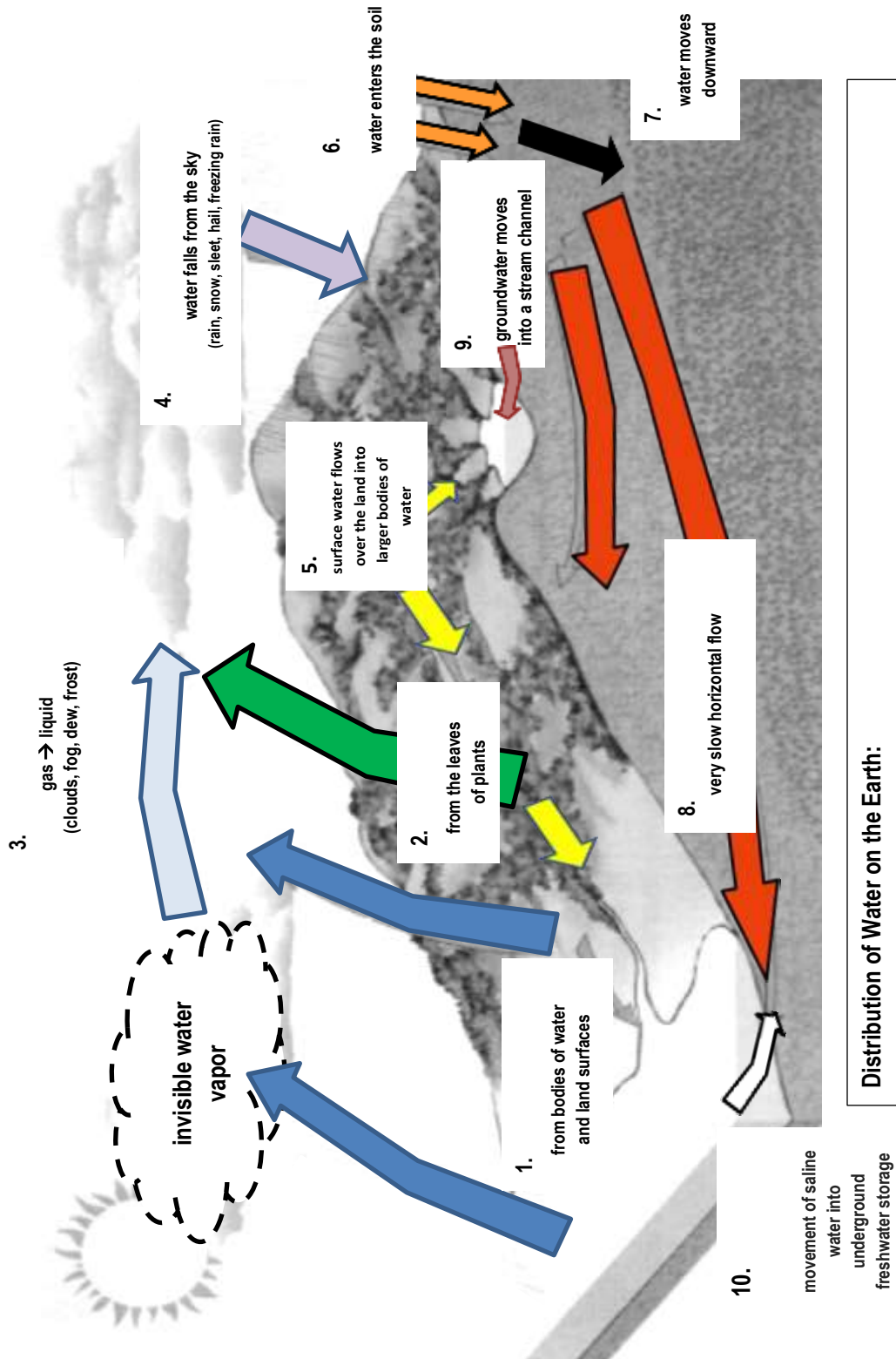


1. 71% of Earth's surface is covered with water
2. Less than 1% of Earth's water is usable freshwater
3. Infiltration is the process by which water seeps into the ground.
4. Today's new toilets are a maximum of 1.6 GPF (gallons per flush) as set by federal plumbing standards.
5. Flushing toilets account for the greatest daily household water use.
6. Hard water contains a high amount of naturally occurring minerals and dissolved solids (mainly calcium and magnesium)
7. Brushing your teeth while the faucet is running for 2 minutes wastes an average of 4 gallons.
8. 1 gallon of water is 8.35 pounds
9. The first water pipes were made out of hollowed logs.
10. Lead was banned as a plumbing material (pipes and soldering) in the mid-1980's because of its toxicity.
11. Desalinization/desalination is an expensive process that extracts salt from seawater to make it usable freshwater.
12. Aquafina and Dasani are bottled waters that are just treated tap water.
13. 26 gallons of water is needed to irrigate 1 calorie of food.
14. The average American uses 100 gallons of water each day.
15. The average person in Sub-Saharan Africa uses 3 gallons of water each day.

Aim:

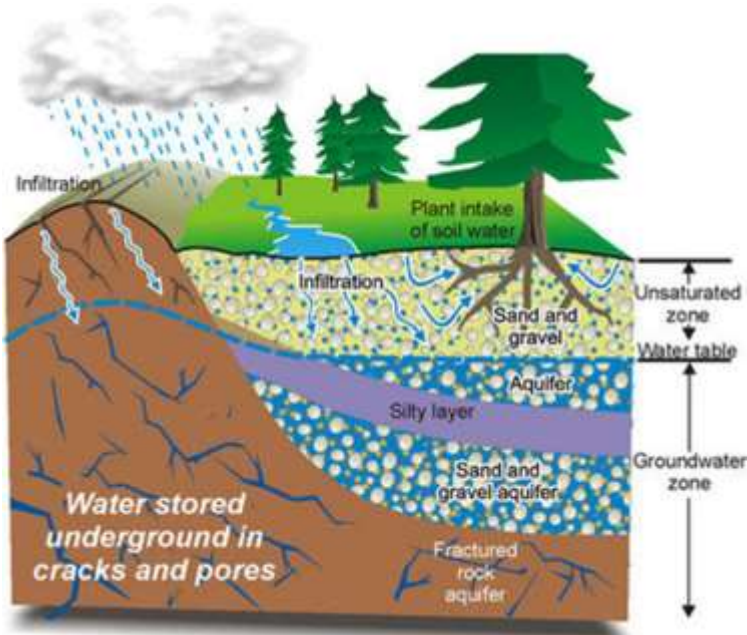
The hydrologic cycle is driven by:

- a.
- b.

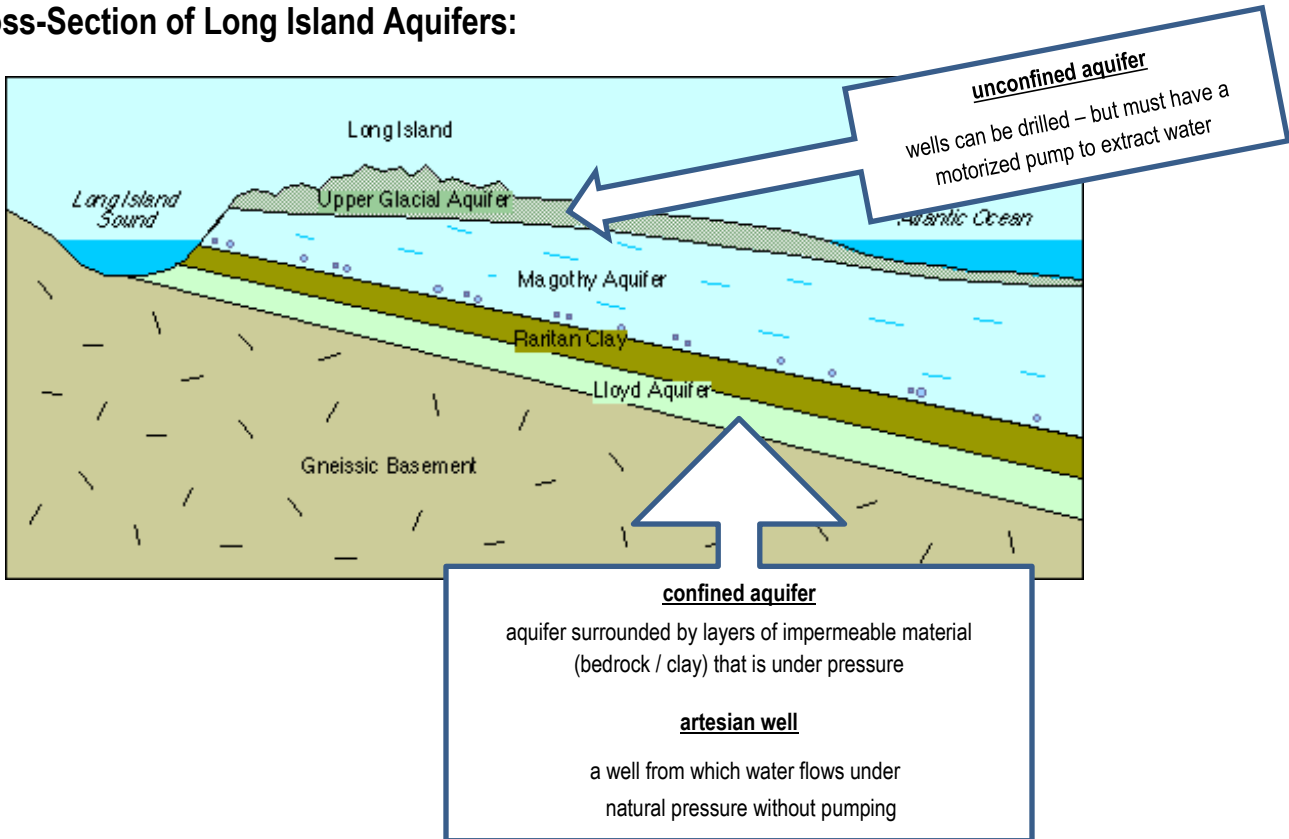


Distribution of Water on the Earth:

Aquifers: underground rock formations in which groundwater is stored and can be extracted



Cross-Section of Long Island Aquifers:



Human Influence on the Hydrologic (Water) Cycle:

1. _____

2. _____

3. _____

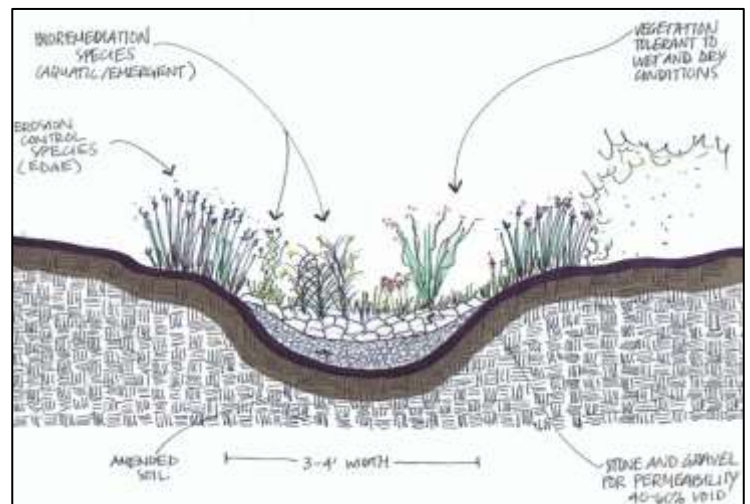
Bioswales:

Bioswales are an aesthetically-pleasing alternative to concrete gutters and storm sewers. They are usually a long, channeled, vegetated trenches that use specialized soil mixes to absorb and treat stormwater runoff. They convey stormwater runoff from a roadway or parking lot into a storm sewer system or other retention area.

Bioswales improve water quality by allowing infiltration of the first flush of storm water runoff and help filter out pollutants.

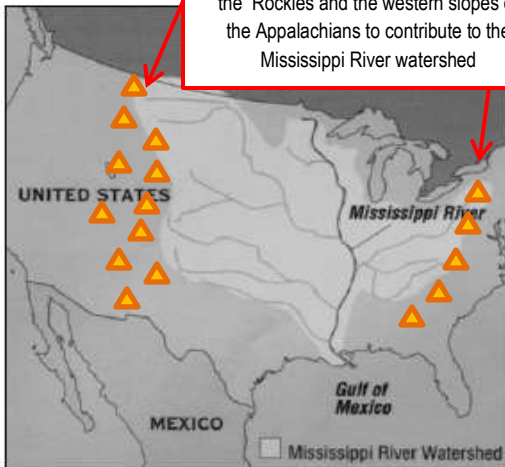
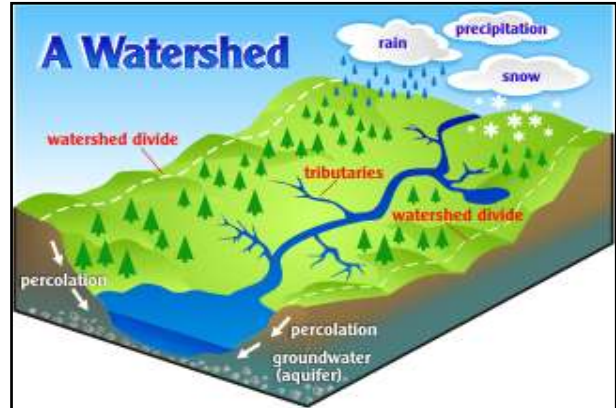
Bioswales may be effective in any region as they can be tailored to the specific installation location by incorporating native plants. They may be designed to convey any size storm but are most effective in dealing with frequent, small rain events.

Bioswales also provide landscaping that, depending on the plant species chosen, may create habitats for birds, butterflies, and local wildlife.



Aim:

Watershed -



Water flows down the eastern slopes of the Rockies and the western slopes of the Appalachians to contribute to the Mississippi River watershed



The Connecticut River flows downhill in a southerly direction contributing water to the Long Island Sound watershed.

The hills on the north shore of Long Island acts as a divide that causes water on the north shore to flow north into the L.I. Sound, and water south of the divide to flow into the Great South Bay/ Atlantic Ocean

3 Major Functions of a Watershed -

- a. _____
- b. _____
- c. _____

Watershed Management: Watersheds are important because the surface water features and stormwater runoff within a watershed ultimately drain to other bodies of water. It is essential to consider these downstream impacts when developing and implementing water quality protection and restoration actions. Everything upstream ends up downstream.