

Grade 8 Science **Water Unit Review**

Name: _____ Class: _____ Date: _____

1. What proportion of water is available for human use on Earth?

1 percent.

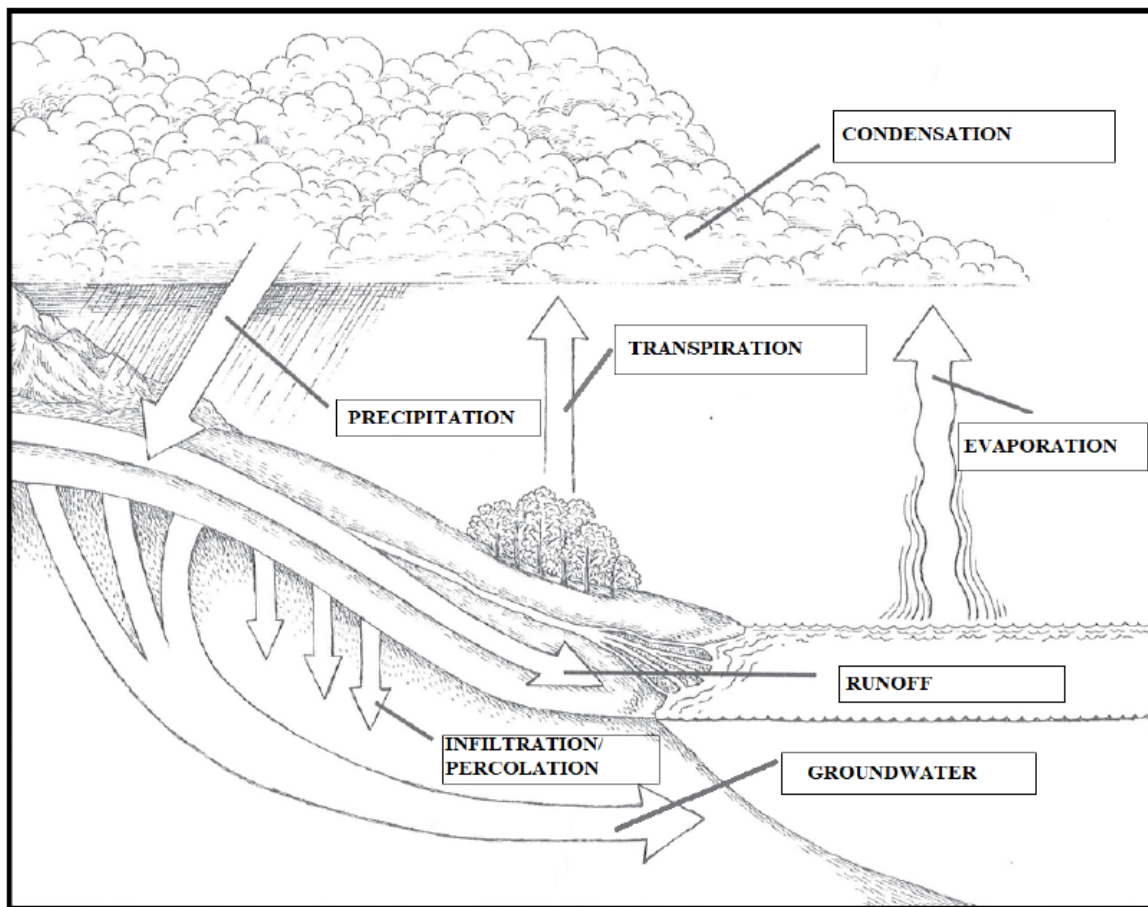
2. Describe three ways that we can conserve water.

Don't water your lawn as much (or at all), turn water off when brushing your teeth, Low -Flow faucets and toilets, shorter showers...

3. How long has water been on Earth?

Over 3 Billion years (most about 4.6 Billion)

4. Complete the following diagram:



5. How do we, in Ancaster get water in our homes? Where does it come from and where does it go?

Municipal or City water for Ancaster comes from Lake Ontario and treated before it goes to our homes and schools.

6. What are 2 or 3 interesting properties of water that you learned (or were supposed to learn) from the Water Quiz?

Water expands when it freezes, water is a polar molecule which explains why it can dissolve so many other substances, Water droplets are not tear shaped but more like a hamburger bun shape. Rain is not always fresh since it can contain viruses or dust and even be acidic.

7. Using buoyancy and the special property of water, explain why ice floats.

Since ice expands when it freezes. Because it expands, the density decreases. Because the density is lower than the water it came from, it has an upward buoyant force acting on it that is greater than the amount of water that it displaces and therefore, floats.

**8. Name three different types of wetlands.
Marsh, bog, swamp, estuary, fen...**

9. Why are wetlands important to protect (at least three reasons).

They provide habitat for a lot of species. They clean water that filters through it. They slow floods and soak up water when it rains a lot.

10. What are constructed wetlands and why are they valuable?

Constructed wetlands are areas that have plants and soils that are used to process wastewater on a small scale or even a large scale that helps to clean water so that it is not harmful to the environment.

11. How much water falls on Hamilton, Ontario each year in kilograms?

Over a trillion Kilograms!

12. What are some of the pollutants that get into water? How do they get there and how are they removed?

Sand and silt can go in water by runoff and not enough plants to slow water down
Phosphates from detergents from washing your car in your driveway
Pesticides and herbicides from home use or agricultural use
Nitrates and Sulphates from mining tailings and even heavy metals can get into the water
Biological microorganisms like E-coli from animal feces from farms
Salt from winter applications for ice control

13. What is a watershed and who takes care of them?

A watershed is an area of land that drains into a specific creek, river, lake or ocean. They are controlled by a local city or municipality (Hamilton Conservation Authority)