Grade 8 Science Water Unit

Rain Drops Keep Falling in Hamilton

Name: _____ Class: ____ Date: _____

This exercise is about finding out how much rain falls in Hamilton, Ontario and then calculating the mass of that water per year. It might surprise you.

First step is to make a guess as to the mass of water that falls on Hamilton in one year. Try to make a reasonable guess or hypothesis. This is supposed to be a science class after all. Use kilograms as your unit of mass.

1. Your Estimate: _____ kg

The next step will be to find out how much water actually falls in Hamilton in a year. Search 'Annual Precipitation in Hamilton, Ontario' to get the answer.

2. Annual Precipitation in Hamilton, ON: _____mm/year

3. Convert that into metres (÷ 1000) - _____ m/year

Next, try to find the area of Hamilton. Search 'Area of Hamilton, Ontario'

4. Area of Hamilton, Ontario: _____ km^2

5. Convert this into m^2 (÷ 1,000,000) _____m^2

To get the volume of water that this represents per year, you have to multiply the area by the amount of precipitation.

6. Volume of water is (Area x h) _____ m^2 X _____ m/year

that is _____ m^3/year.

Each m^3 of water has a mass of 1000 kg. What is the mass of water that falls from the sky in Hamilton, Ontario per year? (x 1000kg/m^3)_____ kg/year

Does this surprise you? Where does all this water go?