

Going with the Flow in Niagara Falls

Name: _____ **KEY** _____ Class: _____ Date: _____

This exercise is about finding out how much Water flows over Niagara Falls 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 flows over the horseshoe Falls 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: _____ **Answers will vary** _____ kg

The next step will be to find out how much water actually flows over Niagara Falls in a year. Search 'how many litres per second Niagara Falls' to get the answer.

2. Number of Litres per Second that flow: _____ **2,800,000** _____ L/s

3. Convert that into L/min (x60s/min): _____ **168,000,000** _____ L/min

4. Convert that into L/h (x60min/h): _____ **10,080,000,000** _____ L/h

5. Convert this into L/day (x24h/day): _____ **241,920,000,000** _____ L/day

6. Convert this into L/year (x365.25day/year):

_____ **88,361,280,000,000** _____ L/year

Remember that each Litre is 1kg. Therefore the amount of water flowing over Niagara Falls each year is:

_____ **88,361,280,000,000** _____ kg/year (Over 88 trillion kilograms!!)

Does this surprise you?

Where does all this water come from?