Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part Per Million Mini-Lab

Materials:

* Water
* Graduated Cylinder
* Eyedropper
* Food Coloring

Procedure:

1. Pour 50 mL water into the graduated cylinder. This is equal to approximately 1000 drops of water.

2. Add one drop of food coloring to the water in the cylinder. This represents one drop of food coloring to 1000 drops of water, or one part per thousand. (make sure this mixes thoroughly)

3. Fill the eyedropper from the cylinder.

4. Empty the cylinder and pour 50 mL of new water into the cylinder. Add one drop from the eyedropper to the cylinder. The mixture now contains one part food coloring per thousand thousand parts of water, or one part per million (ppm).

The amount of sodium found in clean spring water is five parts per million. How would you conduct this experiment to make a mixture of food coloring in water of five parts per million?

Use your EPA handout and identify one contaminant that would be the equivalent of one part per thousand thousand thousand or one part per billion! (ppb).

What is the contaminant?

What is the effect of the contaminant on the human body?

And what is the main source of this contaminant/pollutant to our water?