

# Parts Per Million

## Page 49

Definitions:(copy these down- use 2 lines for each)

Solution:

A mixture that is so well mixed the particles (solute) are evenly distributed, or dissolved into the liquid (solvent).

Concentration:

The amount of substance found in a given amount of a solution or mixture. Often written in “parts per....” (parts per hundred, parts per million, etc)

# Parts Per Million

## Page 49

Data:

(tape in handout)

Use colored pencils to match colors in the tray.

CUP #1: 10% red dye (percent)

That means 10 parts per hundred

100 parts per thousand

1000 pp ten thousand

10,000 parts per million (ppm)

CUP #2: 10% X 0.1 =

1% or....

1,000 ppm

# Parts Per Million Page 48

DISCUSSION- **copy and complete**

1. You can tell the \_\_\_\_\_ from how dark the color is.
2. If you add more solvent (water) the concentration becomes \_\_\_\_\_ or \_\_\_\_\_.
3. The solvent was \_\_\_\_\_. The solute was \_\_\_\_\_. Together they made a \_\_\_\_\_.
4. When you add more water you are \_\_\_\_\_ing the solution
5. The cup that first appeared colorless was # \_\_\_\_\_. That cup **DID/DIDN'T** still have food coloring in it.
6. Its concentration was \_\_\_\_\_ % or \_\_\_\_\_ ppm. If the solute was poison, would it be safe to drink from that cup? Explain.