

Chromatography

Name _____

What is chromatography?

1. Chromatography is from the Greek word, chroma. What does it mean? _____
2. Chromatography is the physical _____ of a mixture into its individual _____.
3. Chromatography can be used to separate the pigments in _____ and _____. The process can also be used to separate the colored pigments in _____ or used to determine the _____ composition of many substances.

Examples of Chromatography

4. What are the four types of chromatography?
 - 1 - _____ Chromatography
 - 2 - _____ - _____ Chromatography
 - 3 - _____ Chromatography
 - 4 - _____ Chromatography

Mixtures & Compounds

5. A _____ is two or more substances that are mixed together, but not chemically combined.
6. _____ are two or more elements that are chemically combined.

Solutions

7. _____ are mixtures in which one substance is dissolved in another. The _____ is the substance that is dissolved. The _____ is the substance that does the dissolving
8. Identify the solute and solvent in each solution.

Solution	Solute	Solvent
Lemonade		
Soda pop		
Ocean water		

9. _____ is a measure of how much of a given substance will dissolve in a liquid. A substance that does not dissolve in water is called _____. A substance that does dissolve in water is called _____.

Paper Chromatography Lab

Follow your teachers directions to test 4 markers and record your results below.

Marker #				
Colors observed in ink sample				

Questions:

What colors did your group observe in each of the black ink samples?

Do the colors occur in the same order and in the same location on all the samples? Explain.

Did some ink samples not work? Why?

Chromatography Challenge

Work with your group to identify the pens used for each of the “Mystery Marks”.

1st – Test each of the Mystery Mark strips using the procedure from yesterday.

2nd – Compare your strips to the strips hanging in the classroom.

3rd – Write the number of the pen that you think matches each of the mystery marks in the space on your worksheet.

4th – Have your answers checked by the teacher. Keep trying until you are able to identify all 6 pens!

Pen A matches # _____

Pen D matches # _____

Pen B matches # _____

Pen E matches # _____

Pen C matches # _____

Pen F matches # _____