

SNC1L Forensic Chemistry – Lab #3



Name: _____

Ransom Note....

Now you know that the items found are **fake**. However, there has been a ransom note left saying that the real items will be returned in exchange for \$500 000. The note was written in black marker and the police know that the dye solutions used by different brands are made using different combinations of colours which can be used to tell them apart.

The police have some suspects in custody and have found a black marker in each of their bags. Use your knowledge of solubility to help the police determine if any of these markers wrote the ransom note.

Observations	Crime Scene	Suspects			
		1	2	3	4
Chromatography Paper Tape at top List colours & distance each colour travelled underneath	Colour cm	Colour cm	Colour cm	Colour cm	Colour cm

Materials:

- 2 beakers (1 filled with water)
- Popsicle stick/Pencil
- 5 **small** pieces of masking tape
- 5 blank pieces of filter paper



Questions:

1. Did you see the same colours in all the black marker samples? Why or Why not?
2. Why do the colours rise up the paper with the water?
3. Did some ink samples "not work"? Why do you think this may be?
4. Whose marker wrote the ransom note? How do you know?