Forgery & Chromatography

- People commit forgery & fraud by falsifying contracts or using pens to change amounts on chucks or credit card receipts.
- CSI's can use ink chromatography to distinguish the type/brand of ink suspected of being used in the forgery.

- Ink chromatography separates the ink mixture into its component ink colors (each brand uses different colors) The lightest weight color will move the farthest along the chromatography paper.

Procedure

1) Fill the cup with a small amount of water.
2) Place strips in the cup, dot side in the cup. (Dot should NOT be under water!)
3) wait/observe until the water line gets close to the top of the strip. Record the colors present & measure: the distance the H_2O travelled & the distances each color travelled (in centimeters)
4) Calculate the Rf value for each color in the strip

$$Rf = \frac{\text{distance color travelled}}{\text{distance } H_2O \text{ travelled}}$$

5) which suspect committed forgery? Support your answer w/ evidence.

Data/Analysis (for each strip:)

#1

				Rf values
distance water travelled:			____ cm	
distance color #1	_____	travelled:	____ cm	_____
distance color #2	_____	travelled:	____ cm	_____
distance color #3	_____	travelled:	____ cm	_____
distance color #4	_____	travelled:	____ cm	_____
distance color #5	_____	travelled:	____ cm	_____

↑ write color here!