

# Column Chromatography Worksheet

Extract: \_\_\_\_\_

*Note:* Spinach extract chromatography will separate three pigments and tomato extract chromatography will separate two pigments.

Pigment Number	Observations	Eluent Used (circle one)	Identification
1		Hexane Hexane–acetone mixture	
2		Hexane Hexane–acetone mixture	
3 Spinach group only		Hexane Hexane–acetone mixture	

## Questions

- Use the observations above and the information included in the *Background* section to tentatively identify the pigments that were separated in this lab.
- Given the polarity of each eluting solvent (see Question 3 in the *Pre-Lab*) describe the polarity of each pigment relative to the polarity of the other pigments in the mixture.
- Design an experiment for the separation of pigments in a different colorful vegetable not used in this lab. Outline a procedure and explain your reasoning for each step.