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Name

Amino Acid Chromatography Worksheet

Data Table 1

1									
	Alanine	Arginine	 Aspartic acid	Glycine	Lysine	Methionine	Tyrosine	Unknown	

Data Table 2

For the unknown amino acid sample, measure both spots and calculate the R_f values.

Solvent distance traveled from the origin _____ mm

Amino Acid	Alanine	Arginine	Asparagine	Aspartic acid	Glycine	Lysine	Methionine	Tyrosine	Unknown	
Distance (mm)										
R _f Value										

Post-Lab Questions

- 1. Based on your observations and data, identify the amino acids in the unknown sample.
- 2. Many different organic solvents may be used for paper chromatography. If this experiment were repeated with a different solvent, would you expect the R_f values to change or remain the same? Explain.
- 3. In the *Procedure* section it cautions that fingerprints on the chromatography paper will react with ninhydrin and appear. Explain.
- 4. The chromatography solvent used in this lab is very polar as it contains an alcohol, an acid, and water. Based on this information, which amino acid probably is the least polar of those tested?
- 5. Considering your answer to Question #4, would you expect the R_f value for this amino acid to be large or small in comparison to the other samples used in this experiment?

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