## **Measurement Sheet**

Lab #7: Electrophoresis

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## **Experiment #1: Paper Chromatography**

You are given a black marker, paper, and solvent. Please separate the black color using the paper chromatography technique. Describe what you see and compare the performance of different types of paper and solvent.

	Filter paper	Paper towel	Coffee filters	Printer paper
Water				
Alcohol				
Oil				

## **Experiment #2: Color Separation with Agarose Gel**

Pleases follow the instruction to make an Agarose gel used for color separations. Mix four different colors – red, yellow, blue and green and apply voltage to separate the colors. Please record the time that takes for the separation for different voltages.

	Time (mins)
10 V	
20 V	
40 V	

1) Is food coloring positive or negative charged?

2) Which color moves the fastest? And why?

3) What happened near the electrodes?

## **Follow-up Questions:**

- What does strawberry DNA look like?

- Ethanol is important for DNA extraction. Why?

- Is cold water better than warm water for extracting DNA? Why or why not?

- Can I use a microscope to see the DNA that I extract from strawberries? Why or why not?

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