

Name \_\_\_\_\_ Date \_\_\_\_\_

## Ferrofluid Observations

**Part 1.** Complete the table below as you complete the steps in the ferrofluid investigation. Be sure to include units of measurement. Describe observations as thoroughly as possible. Provide measurements in centimeters of spikes as they begin to appear. Then answer the questions.

Oil Added (mL)	Toner Added (mL)	Observations

### Questions

1. What criteria would you use to identify the “best” results (the best spikes)? \_\_\_\_\_
2. What mixture produced the best results? \_\_\_\_\_

**Part 2.** Hold the magnet directly on the side of the preform and gather the ferrofluids to the magnet. Slowly pull the magnet away from the preform. Measure and record the distance in centimeters in the table below. Then record your observations. Repeat the process 3 or 4 times. Then answer the questions.

Measurements (in centimeters)	Observations

### Draw Conclusions

1. What do you observe happens with the ferrofluids as you move the magnet? \_\_\_\_\_
2. Why do you think that happens? \_\_\_\_\_
3. What evidence or reasoning can you provide to support your conclusion? \_\_\_\_\_