

*Report Sheet*

**FRICTIONAL FORCES**

Data:

| Total Mass (g) | Normal Force (N) | Static Friction (N) | Kinetic Friction (N) |
|----------------|------------------|---------------------|----------------------|
|                |                  |                     |                      |
|                |                  |                     |                      |
|                |                  |                     |                      |
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|                |                  |                     |                      |

*Include a graph of frictional force as a function of normal force with both data sets on the same graph. Record the slope of each line as the coefficients of friction.*

Coefficient of static friction: \_\_\_\_\_

Coefficient of kinetic friction: \_\_\_\_\_

Questions:

- 1) Why must the coefficient of static friction always be greater than or equal to the coefficient of kinetic friction?
- 2) Why do items begin to slide down an inclined plane as the angle is increased? (A free body diagram may be helpful.)