

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

## Sliders Worksheet

Group Members:

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1. Record the weight of your empty box in grams in the table below.
2. Add 500 grams to your box and record the total weight of the box and weight.
3. Gently add weight to your basket until the box starts sliding. Remember, do not add too much weight at a time you will not get an accurate measurement.
4. Record the weight of your filled basket in the table below.
5. Calculate and record your coefficient of static friction,  $\mu_s$ , using the equation:  
$$\mu_s = W_{\text{basket}} \div W_{\text{box}}$$
where **W** stands for weight.
6. Repeat these steps for 1,000g, 1,500g and 2,000g weights in the box.
7. Average your coefficient of static friction,  $\mu$ .

Empty Box (g)	Weight in Box (g)	Total Weight of Box (g)	Weight of Filled Basket (g)	$\mu$
	500			
	1,000			
	1,500			
	2,000			

$\mu_{\text{average}}$  = \_\_\_\_\_