

FRICTION FIASCO

Purpose: Explore how the force of friction affects motion

Question: Which of the following surfaces have the most and least friction: Sandpaper, Paper, Wax Paper, Aluminum Foil, Shower Board, and Plastic Wrap?

Hypothesis: Predict the order of surfaces from least friction to most friction and Explain your reasoning

LEAST Friction	Reasoning
1.	
2.	
3.	
4.	
5.	
6.	
MOST Friction	

Procedure : Place the Sled near the top of the ramp then lift the ramp until the sled begins to slide. As soon as the sled begins to slide, measure the height of the ramp and record your data. Repeat this process three times and find and average height for slipping for each surface.

Surface	Observations	Height 1	Height 2	Height 3	Avg. Height
Wax Paper					
Plastic Wrap					
Shower Board					
Paper					
Aluminum Foil					
Sand Paper					

In the Table compare your Hypothesis to the results of the sled experiment.

Hypothesis	Experimental Data
LEAST Friction	LEAST Friction
1.	
2.	
3.	
4.	
5.	
6.	
MOST Friction	MOST Friction

Conclusion: Answer the Following Questions

1. Explain why your Hypothesis was confirmed or rejected?

2. These sleds are an example of sliding friction. Explain an example of sliding friction from your daily life.

3. Give an example of how people use sliding friction to their advantage and explain how different surfaces might affect how effective sliding friction is for that example.

4. Why is friction important to our lives?