

Part 1: Predicting Outcomes

1. Read the following steps then make a prediction as to which material will allow the block to slide down the inclined plane first. Make your prediction by ranking the materials from 1 to 4, **1** being the first to slide.
2. Re-tape the 50-gram mass to the wooden block and place it on the cardboard.
3. Slowly raise the cardboard until the block and mass slide down the inclined plane.
4. Record the angle at which the block slides.
5. Repeat with each material and with the 100 and 200-gram masses.

	Cardboard		Cork		Rubber		Sandpaper	
	Angle	Prediction	Angle	Prediction	Angle	Prediction	Angle	Prediction
.050 kg								
.100 kg								
.150 kg								
.200 kg								

1. What did you base your predictions on?
2. Were your predictions 100 % correct?
3. Summarize the relationship between mass and the amount of friction between two objects.
4. How does changing the angle of contact between objects affect the amount of friction?
5. Explain why static friction is greater than kinetic friction.