

Name: _____ Date: _____

Collision Force

1. Do Steps 1–4 of the Task Card. Record the distance the cup moved in the chart below.
2. **Predict:** How will placing the marble at the top of the ramp affect how far the paper cup will move?

3. Do Steps 5 and 6 of the Task Card. How far did the paper cup move this time?
Record the distance below.

	Small marble (lighter)	Large marble (heavier)
From middle of ramp (slower)		
From top of ramp (faster)		

4. Does a faster speed change how much force a marble hits with? How can you tell?
5. **Predict:** What do you think will happen if you repeat the experiment with a larger, heavier marble?

6. Test your prediction and record your results in the chart above.
7. How do an object's speed and weight affect how much force it hits with?