Height and Speed: Student Activity Sheet
Name: $\qquad$ Date: $\qquad$

## Part 1: Effect of Height on Speed - Ramp A

Time the marble rolling over the runway three times. Record your results for all three times below.

| Ramp A | Trial 1 | Trial 2 | Trial 3 | Average |
| :---: | :---: | :---: | :---: | :---: |
| Time |  |  |  |  |

What do you think will happen if you raised the ramp higher and released the marble from a higher place?

What would happen to the average time? Explain your reasoning. $\qquad$

## Part 2: Effect of Height on Speed - Ramp B

Adjust your ramp to $\mathbf{5 0 m m}$. How many seconds (include tenths of seconds) do you predict it will take for the marble to travel the whole runway? $\qquad$ seconds

You will time the marble rollings over the runway three times. Record your results for all three times below.

| Ramp B | Trial 1 | Trial 2 | Trial 3 | Average |
| :---: | :---: | :---: | :---: | :---: |
| Time |  |  |  |  |

What do you think will happen if you lowered the ramp and released the marble from a lower place?

## Part 3: Effect of Height on Speed - Ramp C

Adjust your ramp to $\mathbf{3 0 m m}$. How many seconds (include tenths of seconds) do you predict it will take for the marble to travel the whole runway? $\qquad$ seconds
You will time the marble rollings over the runway three times. Record your results for all three times below.

| Ramp C | Trial 1 | Trial 2 | Trial 3 | Average |
| :---: | :---: | :---: | :---: | :---: |
| Time |  |  |  |  |

Compare your results to your prediction. What did you notice? $\qquad$

How does the height of the ramp affect the time it takes for the marble to travel 1 meter? $\qquad$

