

Measuring Acceleration

1. Place books under the legs of one end of a long table to make a slant. Allow a marble to roll down the table top. If the marble takes less than 3 seconds to roll the length of the table, adjust the slant so that it is less steep.
2. Using bits of masking tape, mark the starting position of the marble and its position after 1, 2, and 3 seconds. Measure the distance between marks. Enter your data in the table below. Use the information to find the acceleration of the marble. Show your calculations in the space provided.

Time (sec)	1	2	3	4	5
Distance (cm)					

3. How could you predict how far the marble would roll in 4 seconds? In 5 seconds?

Calculations

Acceleration of marble _____