

Lab: Inclined to Roll

Purpose: How does the steepness of a ramp affect how fast an object moves across the floor?

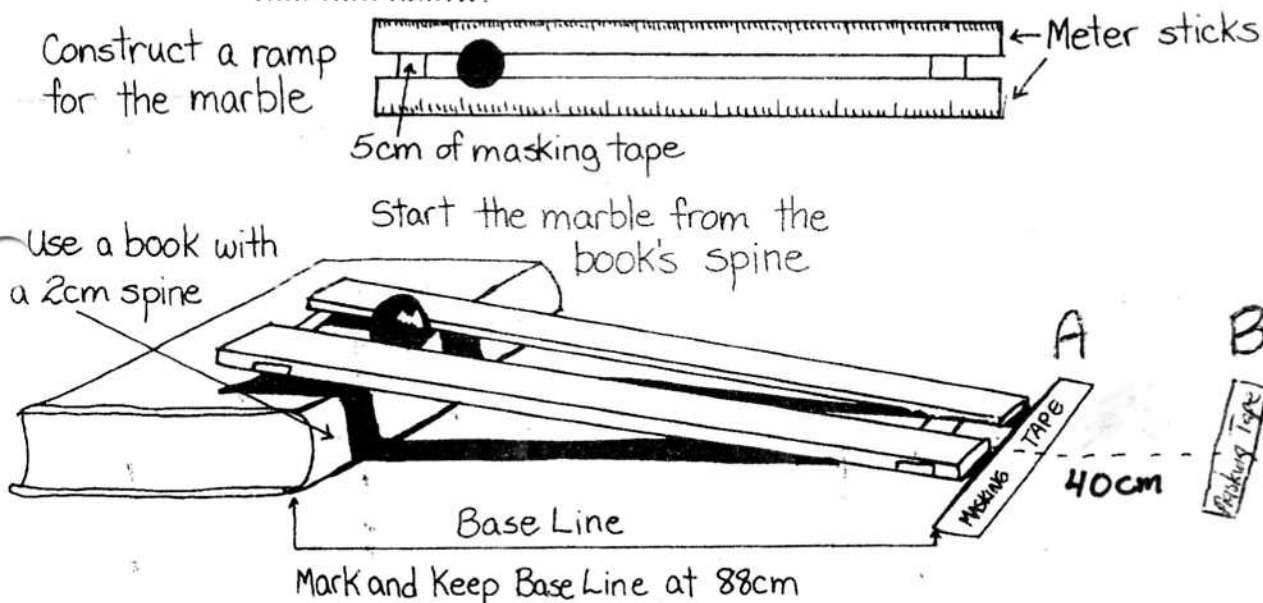
Gather Information:

Hypothesis: _____

Materials: 1 marble 2 meter sticks 4 textbooks
1 stopwatch masking tape

Procedure:

- 1) Construct the ramp using one textbook exactly as described in the diagram below:



- 2) Record the height of the ramp in cm
- 3) Place the marble at the top of the ramp and release it.
- 4) Using the stopwatch, record the time it takes for the marble to go from point A to point B
- 5) Do a second trial with the same ramp.
- 6) Raise the ramp by adding a 2nd book and repeat steps 2 through 5
- 7) Raise the ramp by adding a 3rd book and repeat steps 2 through 5
- 8) Raise the ramp by adding a 4th book and repeat steps 2 through 5