



Using MINDSTORMS LEGO to find the acceleration due to gravity

$$a = \frac{\Delta v}{\Delta t} = \frac{v_f - v_i}{t}$$

where v_i and v_f are the initial and final velocities, respectively. The ball is dropped from height h , so $v_i = 0$.

$$\text{Hence } g = \frac{2v_{avg}}{t}$$

$$\therefore v_{avg} = \frac{v_i + v_f}{2} = \frac{h}{t}$$

From this experiment we got

$$g = 10.48 \frac{\text{m}}{\text{s}^2}$$



Cushions we used (Hard sponge, bubble wrap, styrofoam, and crumpled paper)

[NEED TO FILL THIS VOID]

