

# What effects the bounce of a dropped ball



**Aim** The aim of this experiment is to investigate the efficiency of a bouncing ball, and the factors which affect its efficiency.

## Hypothesis

If I increase the height from which a ball is dropped, then the bounce height will increase because it will increase the speed and create a larger impact, causing the ball to bounce higher then dropping it from a lower height.

### 1. Materials

2. High bounce ball

3. Measuring tape

4. Tape

5. Wall Risk Assessment

- H- Cutting yourself with the measuring tape C- Handle with care and ensure that it is locked Method
- Hold the measuring tape with the 0 centimeter end on the floor. Then tape the measuring tape to a wall.
- Hold the bottom of the high bounce ball in place with the 100 centimeter mark on the measuring tape.

Drop the ball and determine the total bounce height of the ball, which would be the distance from the surface to the bottom of the ball at the top of its bounce.

Continue till you have data for 3 tests.

Repeat steps 2-5 for drop heights 80 cm 60 cm 40 cm 6. Average all the data. Variables Independent variable = drop height Dependent variable = bounce height Controlled variables = ball, surface, measuring tool.