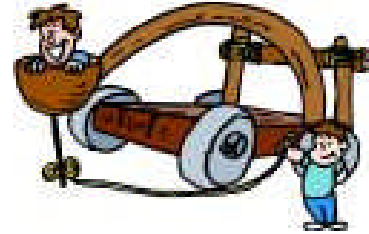


# Catapult/Trebuchet Project

The presentation should have the following parts:

- title
- purpose
- materials
- design blueprint (CAD or graph paper)
- vector diagram
- procedure
- results
  - data tables
  - graph (distance vs. time)
  - calculations (show your work)
- conclusion



Trial	tennis ball mass (kg)	distance (m)	time (s)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Using the data collected above, calculate the following:

- the maximum height
- the velocity at impact
- the velocity components

## Formulas

$$v_x = v \cos \theta$$

$$v_y = v \sin \theta$$

$$\Delta x = v_x t$$

$$\Delta y = v_y t + \frac{1}{2} g t^2$$