

## Principles of Projectile Motion – Student Worksheet

**Use the vocabulary below to fill in the blanks throughout this worksheet.**

You may use each of the words or phrases as many or as few times as you need.

horizontal	higher	initial vertical velocity	rough
height	length	speed of release	gravity
parabolic	projectile	height of release	trajectory
less	distance	initial horizontal velocity	vertical
length	air resistance	angle of release	increases
decreases	topspin	surface to volume ratio	backspin
Air pressure	poorer		

**Exercise A: Projectile Motion** (Fill in the blanks).

A \_\_\_\_\_ is considered to be any object or body released into the air.  
 All projectiles have a \_\_\_\_\_ flight path. The flight path of a projectile is known as the \_\_\_\_\_. The \_\_\_\_\_ of a projectile consists of a \_\_\_\_\_ and \_\_\_\_\_ component. The \_\_\_\_\_ component gives the projectile \_\_\_\_\_. The \_\_\_\_\_ component gives the projectile \_\_\_\_\_. For example, if you throw a ball straight up into the air the trajectory has only a \_\_\_\_\_ component. When you throw a ball to a friend that is standing 20 metres away from you the trajectory has a \_\_\_\_\_ component as well.

**Exercise B: Projectile Motion** (Label the diagram below).

