## Chapter 3-3 Notes

### Projectile Motion

- Velocity and displacement can be broken down into x and y components.
- •Imagine a high jumper, he or she has both a horizontal and a vertical velocity.

# Horizontal velocity = vx Vertical velocity = vy

#### Projectile Motion

- Objects that are thrown or launched into the air and are subject to gravity are called projectiles.
- The path of a projectile is a curve called a parabola.
- The horizontal velocity of the projectiles for sample problems will be considered constant -no air resistance

## Equations

$$y = -1/2 g (t^2)$$

$$\mathbf{v}_{\mathsf{X}} = \mathbf{v}_{\mathsf{X}} \left( \mathbf{t} \right)$$

#### Assignment

Unit 3.3 Worksheet