Vocabulary: Feed the Monkey (Projectile Motion)

🔟 Vocabulary

Gizmos

- <u>Acceleration</u> the change in velocity per unit time.
 - Acceleration is calculated by dividing the change in velocity by the elapsed time: $a = \Delta v / \Delta t$.
 - For example, if an object accelerates from 0 m/s to 10 m/s in 2 seconds, the acceleration is 5 m/s/s, or 5 m/s².
 - Acceleration is considered positive when the velocity is increasing and negative when the velocity is decreasing. For a falling object, velocity is becoming more negative (decreasing), so acceleration is also negative.
- <u>Free fall</u> falling motion caused by the force of gravity.
- <u>Trajectory</u> the path of an object through space.
- <u>Vector</u> a quantity that has both magnitude and direction.
 - Vectors are represented graphically as arrows.
 - The magnitude of the vector is shown by the length of the arrow.
 - The direction of the vector is shown by the direction of the arrow.
 - o Vector quantities include displacement, velocity, acceleration, and force.
- <u>Velocity</u> the speed and direction of a moving object.
 - Rightward displacement is considered positive and leftward motion is negative. Therefore, the velocity of an object moving from left to right is positive.
 - Upward motion is positive and downward motion is negative. The velocity of a rising object is positive and the velocity of a falling object is negative.

