Kinematics Example & Activity

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Callum throws an egg from the top of a building with an upward initial speed of 23 m/s. The egg takes 15 seconds to reach the ground. Make a diagram of the situation.

Calculate the height of the building.

Calculate the maximum height above the building that the egg reaches.

Calculate the impact speed.

Activity

Calculate the height of the Bearpit using “physics cat” as the projectile. Drop the cat and time how long it takes to hit the ground. Video tape it as well to get the time if you can. Check your calculation using a tape measure and calculate the experimental error.