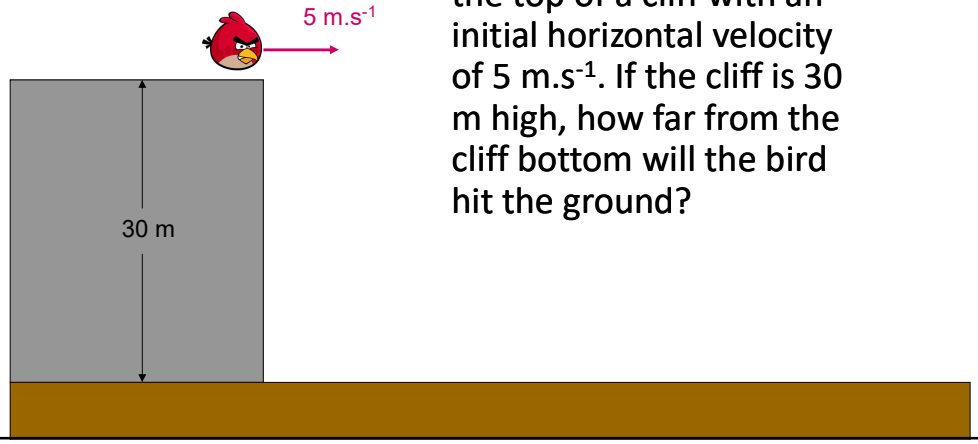
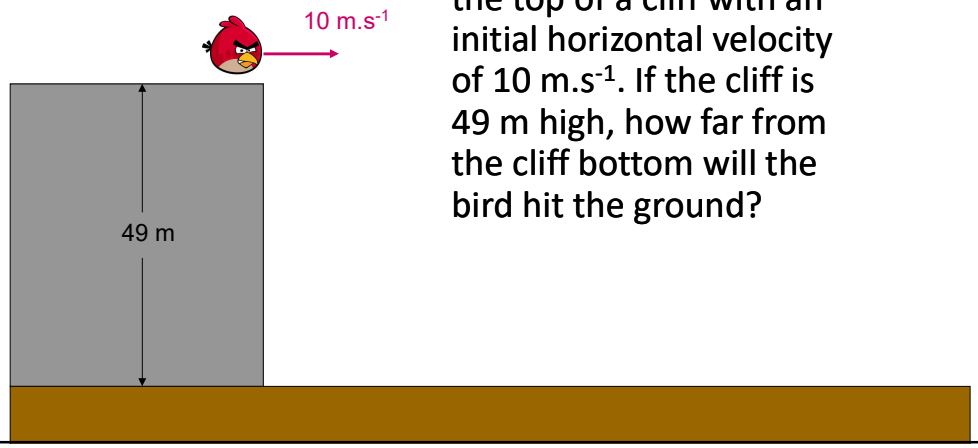
Angry Bird Notes

Example 1



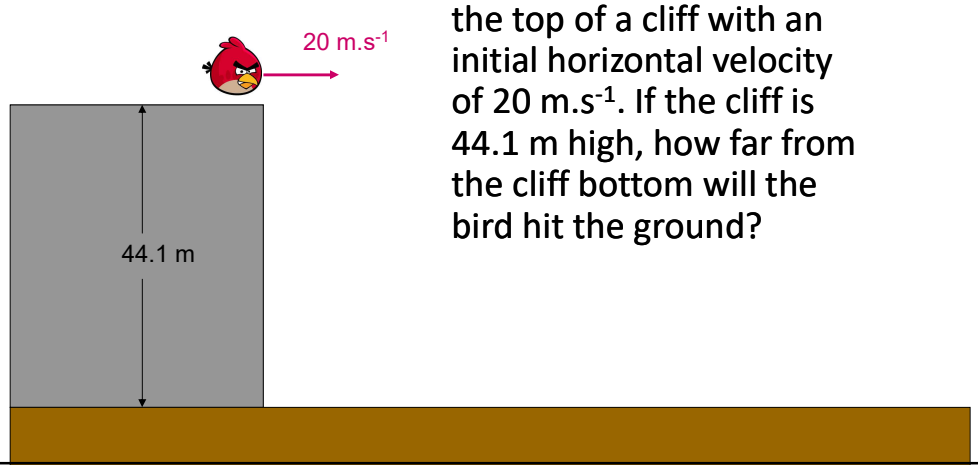
An angry bird is kicked off the top of a cliff with an initial horizontal velocity of 5 $m.s^{-1}$. If the cliff is 30 m high, how far from the cliff bottom will the bird hit the ground?

Example 2



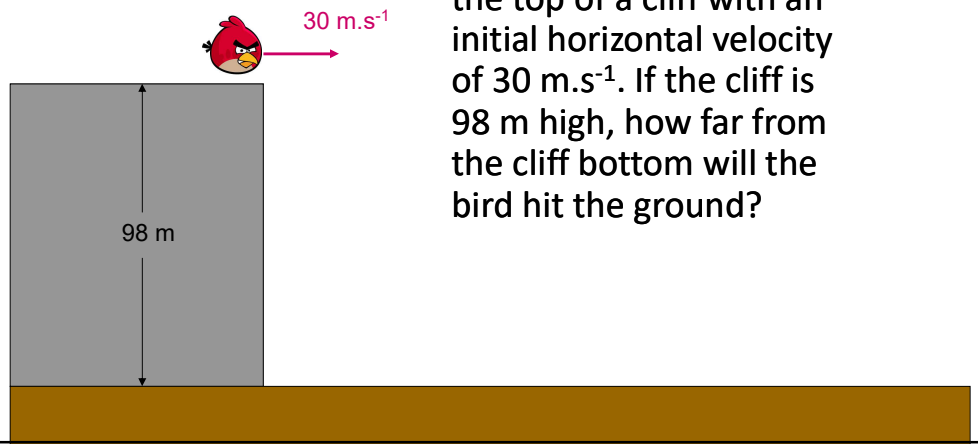
An angry bird is kicked off the top of a cliff with an initial horizontal velocity of 10 $m.s^{-1}$. If the cliff is 49 m high, how far from the cliff bottom will the bird hit the ground?

Example 3



An angry bird is kicked off the top of a cliff with an initial horizontal velocity of 20 $m.s^{-1}$. If the cliff is 44.1 m high, how far from the cliff bottom will the bird hit the ground?

Example 4



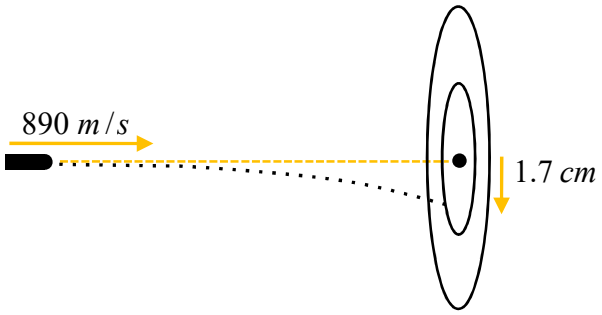
An angry bird is kicked off the top of a cliff with an initial horizontal velocity of 30 $m.s^{-1}$. If the cliff is 98 m high, how far from the cliff bottom will the bird hit the ground?

Ticket to Start the Lab - Whiteboards

A person decides to fire a rifle horizontally at a bull's-eye. The speed of the bullet as it leaves the barrel of the gun is 890 m/s. He's new to the ideas of projectile motion so doesn't aim high and the bullet strikes the target 1.7 cm below the center of the bull's-eye.

What is the horizontal distance between the rifle and the bull' s-eye?

start by drawing a picture:



label the explicit givens