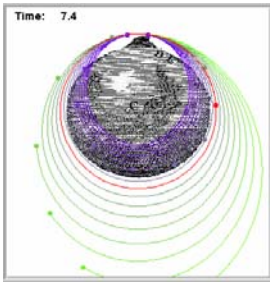


## Worksheet for Exploration 1.2: Input Data, Numbers



This Exploration shows 10 identical balls about to be thrown off a mountain top (**position is given in arbitrary units and time is given in arbitrary units**). The initial positions of the balls are identical but they have different initial velocities. The difference in orbital trajectory, therefore, is due to the balls' initial velocities. [Restart](#). We will explore how we can get numerical values into an animation and therefore change the animation depicted on the screen.

Click the "set value and play" button. Now change the value of the initial position,  $y_0$ , by typing in the text box and then click the set value and play button again.

i. Text box:

$y_0 =$

Your value:

$y_0 =$

a. Find the limits of the values you can type in the text box.

Minimum  $y_0 =$  \_\_\_\_\_

Maximum  $y_0 =$  \_\_\_\_\_

b. Why do you think these values have been chosen?

c. Now try typing in "abcd". What happens?