## Energy / Set 2 / Animation 2

Name $\qquad$ Class $\qquad$
<Show all work on calculations. Include proper units. Explanations require complete sentences.>

1) Rank the three balls according to which one hits the ground first.
1. $\qquad$ 2. $\qquad$ 3. $\qquad$
2) Determine which of the three balls has the greatest speed upon impact with the ground.
3) Will the green (horizontally thrown) ball always travel the farther than a diagonally thrown ball if they are thrown from the same height with the same speed?

Justify your answer.
4) Which ball hits the ground with the smallest vertical component to its velocity?

Justify your answer.

