Ms. Glynn
8th Grade Science

Name:_____
Date:_____

1) For your first and last trial runs, what were the actual distances that the balls traveled?

2) For you first and last trial run, what were the times it took for the balls to hit the ground?

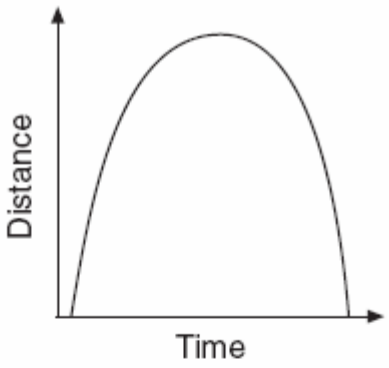
3) Calculate the velocity of the ball of both your first trial run and your last trial run.

4) Calculate the acceleration of the ball based on your calculations above.

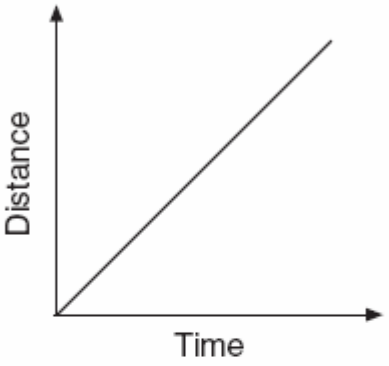
5) Assuming that all the balls had an equal mass of 20 kg, what was the amount of force exerted on the ball?

6) Which graph accurately represents the balls speed? Explain why to the right of your selected answer.

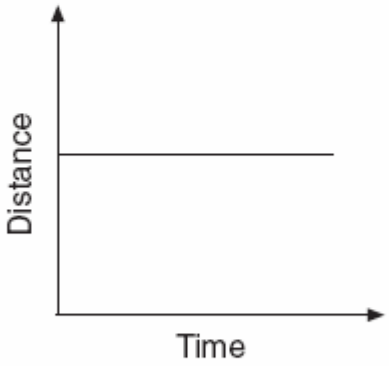
A.



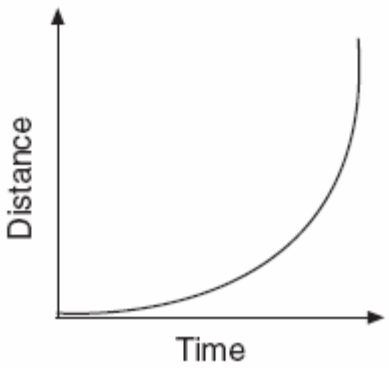
B.



C.



D.



7) What is the pull of gravity on Earth a direct result of?

8) Why do you think that it takes a tremendous booster rocket to accelerate a space craft off Earth, but a much smaller booster rocket to produce the acceleration to get it off the moon (3-5 sentences)? Hint: (Use Newton's Second Law in your explanation)