

Ms. Glynn
8th Grade Science

Name: _____
Date: _____

a) What is acceleration?

b) How is the acceleration on the Earth different from the other planets?

c) Given that the final distance during the time of fall is equal to :

$$d = \frac{1}{2}at^2$$

calculate the distance that the object fell (knowing that acceleration due to gravity on the Earth is 9.8 m/s^2)

d) Does the above calculation match your measured distances?

e) While exploring the moon, it was found that a rock dropped from 3.4m above the planet's surface took 2sec. to fall to the ground. What is the acceleration due to gravity on the moon? (Hint: use given information in part c)

f) Would the Red Sox rather play on the moon than on Earth? Explain why.