Ch 12-2: What is gravity? Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch 12-6: What is air resistance?

Basic Physical Science Notes 2018

Key Terms:

1. Gravity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a. Gravity depends on \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_.

b. The greater an object’s mass, the \_\_\_\_\_\_\_\_\_\_\_\_ gravitational pull.
Sketch:

c. The greater the distance between the objects, the \_\_\_\_\_\_\_\_\_\_\_\_\_ the gravitational pull.
Sketch:

1. Air resistance: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Terminal Velocity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Vacuum: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Mass: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Short Answer:

1. If an object is falling, what two forces are acting on the object? Draw a picture.
2. Which will hit the ground first, a hammer or a feather? Explain.
3. Which will hit the ground first, a marble or a bowling ball? Explain.
4. An object reaches terminal velocity when the downward force of gravity equals the upward force of air resistance. Why does the object stop accelerating? What does this mean about the object’s velocity?
5. A vacuum is empty space. That is pretty much like how it is on the moon. Why do a hammer and a feather hit the ground at the same time?
6. How are mass and weight different? Which one changes when you go to the moon? Why?
7. What are the scientific units for weight? Why? How can you calculate your weight?