ESS 200 Stapleton Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Practice Quiz: Physical Properties

1. Define mass:

2. Define volume:

3. Define weight:

4. Define density:

5. Identify the objects with the most/least: mass, volume, density, weight

A

B

C

D

E

F

Most mass: Most volume: Most density: Most weight:

Least mass: Least volume: Least density: Least weight:

In each of the following situations, what happens to mass, volume, density and weight?

6. An object has been floating on the surface of a lake. Suddenly the object begins to sink. If the object’s size has not changed, what must have happened to its…

 Mass: Volume: Density: Weight:

7. A student notices that his food sinks when he tosses it in water. He removes the food from the water, and he leaves it on his desk. After a few days, he examines the food again and finds that it has shrunk and that it now floats. Over those few days, what has happened to the food’s…

 Mass: Volume: Density: Weight:

8. A film canister submarine sits on the bottom of a pool. Inside the canister there is Alkaseltzer, water, and pennies. As the Alkaseltzer fizzes, a bubble forms in the top of the canister, and water gets pushed out the bottom. During this process, what is happening to the canister’s overall…

 Mass: Volume: Density: Weight:

9. A nebula (cloud of dust and gas, floating in space) is pulled (squeezed) together by gravity, forming a star…

 Mass: Volume: Density: Weight:

10. An astronaut takes a bowling ball to the moon. How do each of the following properties change when the bowling ball is taken to the moon?

 Mass: Volume: Density: Weight:

11. Nuclear fusion begins in a star’s core, causing the star to heat up and expand…

 Mass: Volume: Density: Weight: