Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_\_\_\_

MASS AND WEIGHT

1. Use the words mass, weight and volume to complete the following.
2. The force due to gravity on an object is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The quantity of matter in an object is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The amount of space an object occupies is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The force exerted by gravity on 1kg = 9.8 N. Show work for the following.
6. How many newtons are in 2.5 kg?
7. How many kilograms are in 4.4 N?
8. 1kg = 2.2 lb
9. How many lbs are in 183 kg?
10. How many kg are in .5 lbs?
11. 1 lb = 4.45 N
12. How many newtons are in 175 lbs?
13. How many lbs are in 88 newtons?
14. Put the following in order from smallest to largest: 1/16, 1/2, 1/8, 1/4, 1/12
15. If you are pushing a stroller that is 25 kg with a force and then you double that force, will the stroller accelerate or decelerate? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ By how much? \_\_\_\_\_\_\_\_\_\_
16. Complete the following statements.
17. As mass increases, acceleration \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
18. As mass increases, weight \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
19. As net force increases, acceleration \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\*\*\*Bonus: How many grams are in 23 Newtons? Show work to get points.