**GPS– Work and Power practice Quiz**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| I can… |
| *USE MY CHEAT SHEET!!* |

1. What is density?
2. See the image to the right. Object A is sinking and Object B floats, yet they are exactly the same size (volume). How is this possible?

A

B

1. A young boy can do the 60 J of work in 3,600 seconds to mow the lawn, but the riding lawn mower can do 60 J of work in 60 seconds. Which is more powerful?
2. Which of the following is **work** as defined by science?
   1. The president delivering a speech to a crowd. \_\_\_\_\_\_\_\_\_\_
   2. A father pushing a baby in a carriage. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. You pour oil into a bottle of water. The oil has a density of 0.92 g/ml. Describe what will happen and WHY.
4. Calculate the **density** of an aluminum block that has a mass of 270 g and its volume it 100 mL. WRITE UNITS. Then, write whether it will sink or float.

**Final answer**

**units**

**Sink or float?**

1. What is the **distance** traveled by a jet that applies 900 J of work using 100 N of force? WRITE UNITS.

**units**

**Final answer**

1. What is the **force** applied by a bodybuilder that does 20 J of work a distance of 10 meters? WRITE UNITS.

**Final answer**

**units**

1. What is the **time** it takes a van that has a power output of 400 watts to do 500 J of work? WRITE UNITS.

**Final answer**

**units**

1. What is the **work** completed by a lawn mower with a power output of 60 watts after 50 seconds? WRITE UNITS.

**Final answer**

**units**