

## 8.2 Density and Buoyancy



### Across

5. If the density of a substance is less than the density of the fluid into which it is placed then the substance will \_\_\_\_\_.
6. \_\_\_\_\_ states that the buoyant force on an object is equal to the weight of the fluid displaced by the object.
10. The \_\_\_\_\_ state of a substance is usually denser than its liquid state.
11. One \_\_\_\_\_ is approximately equal to the force you would exert to hold up a baseball.
12. As a substance warms up its \_\_\_\_\_ increases as its density decreases.
13. A \_\_\_\_\_ is a push or pull that acts on an object.
15. \_\_\_\_\_ is the ratio of mass to volume.
16. The upward force exerted by a fluid is called the \_\_\_\_\_.

### Down

1. The unit for measuring the density of \_\_\_\_\_ is usually grams per millilitre.
2. As a substance warms up the particles move \_\_\_\_\_ and farther apart.
3. A ship's \_\_\_\_\_ shows how heavily it can be safely loaded in different water conditions.
4. Particles in a substance move more quickly when \_\_\_\_\_ is added.
7. \_\_\_\_\_ and the buoyant force act on an object in a fluid.
8. A \_\_\_\_\_ is a device used to measure the density of a liquid.
9. A substance generally has a greater density in its solid state than in its liquid state or gas state. One exception to this rule is \_\_\_\_\_.
10. If the density of a substance is greater than the density of the fluid into which it is placed then the substance will \_\_\_\_\_.
14. The liquid state is denser than the \_\_\_\_\_ state.