

Buoyancy

Grade 8: Understanding Matter and Energy

1. What is density?
2. Complete the following chart for the objects placed in water:

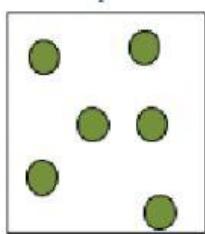
Density of Object	Where will it settle? (Sink to bottom or middle, float)	Buoyancy (positive, negative, neutral)	Example
More than water			
Same as water			
Less than water			

3.
 - a. Draw positive, negative and neutrally buoyant objects into the beaker.
 - b. Label the objects as positive, negative and neutrally buoyant.



4. Why does the Cartesian Diver sink when the bottle is squeezed?
5. Draw in the molecules to show how compressing a gas changes density. Use the word bank to complete the statements about this compression.

Uncompressed



Compressed



Word Bank

Increased Decreased Stayed the same

The volume of the container _____.

The mass of the gas _____.

The density of the gas _____.