

**Vector:** page 50

An arrow that shows the DIRECTION and MAGNITUDE of a force



Small force

Use 4 lines ONLY

Bigger force



Force: A push or A pull shown by a VECTOR:

- Newtons: Unit of weight in metric system (100 pounds = 450 N.)
- Net Force: The result if all forces are added up.

The Soda Can 12/12/12

PREDICTION: What will happen when we place a can of soda in Lake Aguirre?

\_\_\_\_\_ predicted that..... because....

In your answer, include:

density, mass, volume, buoyancy, weight, vector

The Soda Can

Why does the regular soda sink and the diet soda floats?

In your answer, include:

density, mass, volume, buoyancy, weight, vector

Draw a labeled picture- include vectors for buoyant force and weight.

Page 51: Eureka Buoyancy Notes

buoyancy

Sinking

Floating

Archimedes' Principle of Buoyancy

Neutral Buoyancy

Objects are buoyed up by a force equal to the weight of the water displaced.

Buoyant Force = weight of the displaced water