

## Buoyancy Foldable

1. Use pg 82

1. Draw the beach ball or the boy with vectors. Why does it/he float? Explain: what is the buoyant force ?

2. Use pg. 84

2. Draw the foam and wood block with vectors. How does the buoyant force "know" how strong to be to float each block?

3. Use pg 85

3. Draw the steel and wood ball under water with vectors. What are the similarities and differences when both are under water? (why one floats and the other doesn't)

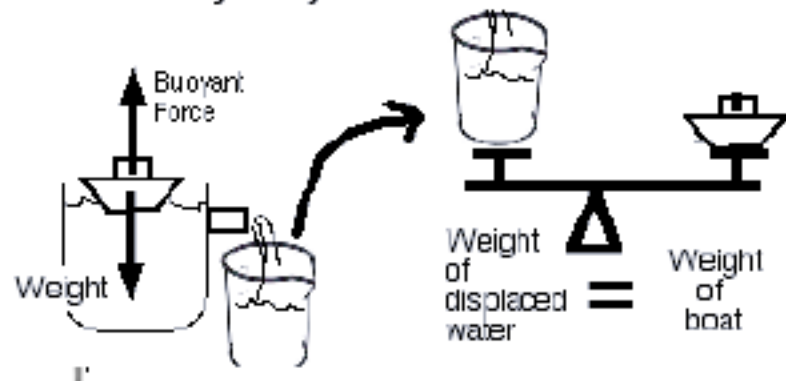
## The Wooden Boat of Science: Archimedes Principle

**The buoyant force is equal to the weight of the displaced water**

Mass of Boat: \_\_\_\_ N

Weight of displaced water: \_\_\_\_ N

Draw the set-up



Answer: Boats float because....

Word bank: buoyant force, sink, float, density, weight, displaced water