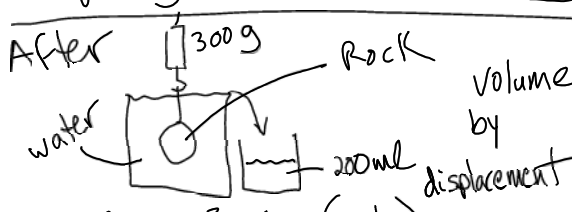


Before
 Rock "weighs" 500g
 Spring scale shows 300N

After



300g Rock
 water 200ml displacement
 Volume by displacement


1ml = 1cm³ = 1g (water)
 200g of water
 Density of the Rock = 2.5 $\frac{g}{cm}$

Situation

- Rock "weighs" 500g dry
- Rock "weighs" 300g in water
- Rock has a volume of 200cm³
- The water displaced by the rock was 200ml
- The "weight" of the water displaced by the rock was 200g

Buoyancy the amount of buoyant force (upward) equals the weight of material displaced.

Density of the Dead Sea
 density = 1.24 $\frac{g}{ml}$



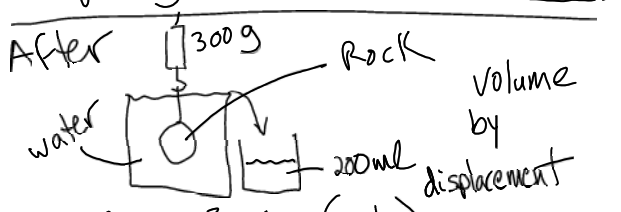
200ml what does the scale say?
 $200ml \times 1.24 \frac{g}{ml} = 248g$

Scale reads 252g



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 200ml displacement
 $1\text{ml} = 1\text{cm}^3 = 1\text{g (water)}$
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