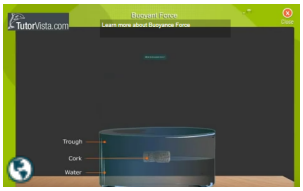
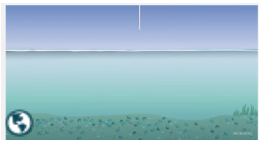
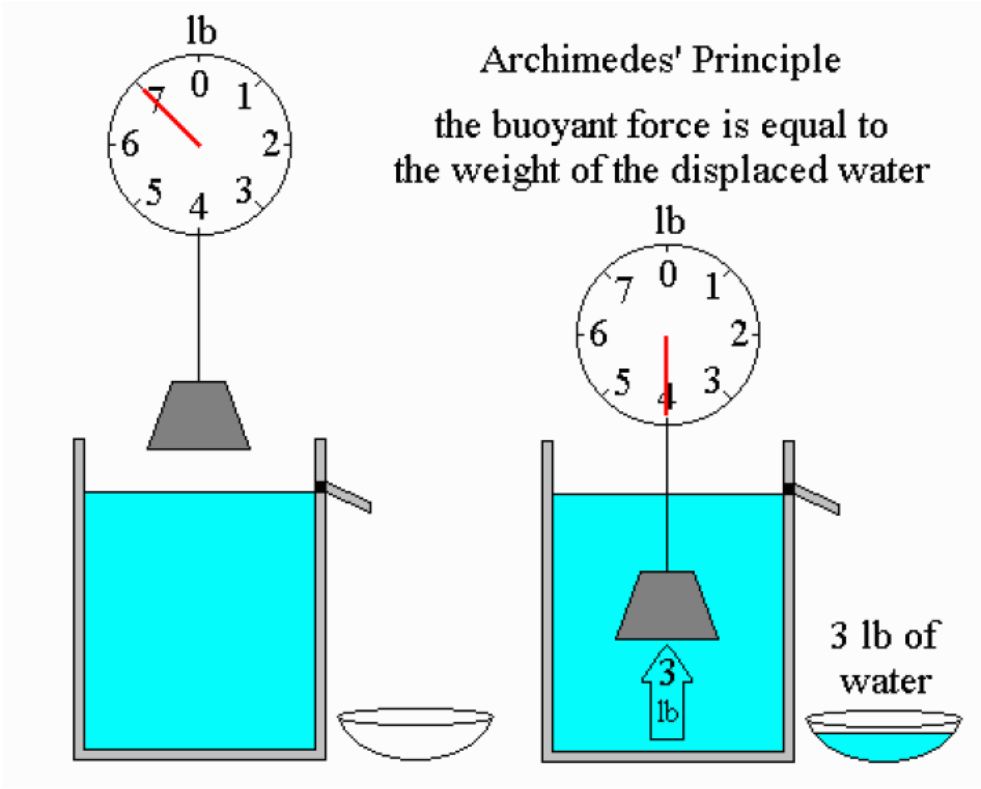
Archimedes took it further..

Archimedes principle & buoyancy | fluids | Physics | Khan Academy - YouTube





"When an object is immersed in a liquid the apparent loss of weight of an object is equal to the upthrust and this is also equal to the weight of the liquid displaced".



Archimedes knew that the desity of the crown had to match the density of the gold. ($D = \frac{mass}{volume}$)

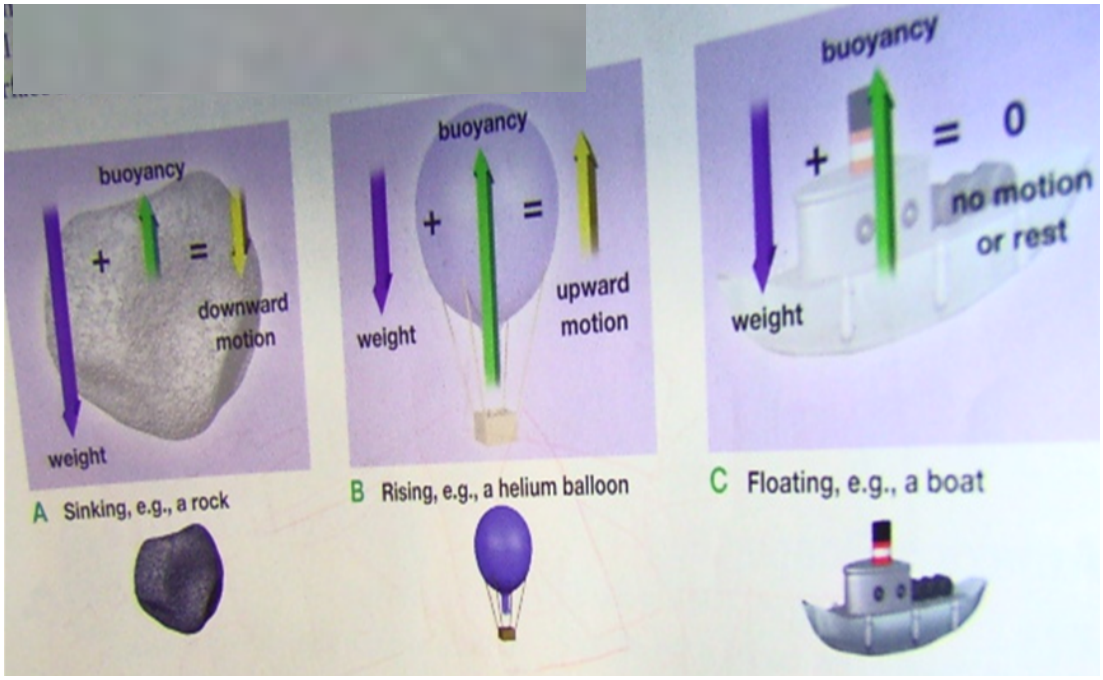
- the mass of the crown was easily measured with a balance

-Volume of crown was set by displaced water

Gold has density of 19.32g/cm^3 from chart

Neutral Buoyancy - is when the amount of force pulling down(gravity) equals the amount of force pushing up (buoyancy)
- you float

Weight = buoyance force --> then float
Weight less than buoyance force then float



Hydrometer - an instrument designed to measure a liquids density

Measure density of beer

Attachments

Archimedes story.docx

Chapter 5 Review Questions Pg 160.docx