Ancient Greece Science and Technology

Math

- Pythangoras was a Greek philosopher, scientist, and mathematician.
- He believed that mathematics was part of everything in nature and he studied numbers.
- He developed the formula for the right-angled triangle which is still used today.
 - A triangle whose sides measure 3, 4, and 5 units forms a right angle.
 - Right-angled triangles can help lay out a building with square corners.





Water

- Archimedes has been called the greatest scientist and mathematician of the ancient world.
- He studied water (hydrostatics)
- While stepping into a tub in a public bath, he observed that the level of water went up.
- This helped him develop the principle that a floating object displaces its own weight in liquid.
 Things float because of a force in liquids that pushes upward and objects in water seem to lose weight. This force is called buoyant force.
- If the buoyant force is greater than the weight of an object, it floats.



Archimedes

Philosophy: The Love of Wisdom

- In classical Greece, there was a lot of debate over issues relating to personal conduct and morality.
- Debaters were often philosophers.
- Three of the most important Greek philosophers were Socrates, Plato, and Aristotle.

Socrates



- 470-399 BCE
- Well-known on the streets of Athens.
- Made many enemies among leaders in Athens because he questioned EVERYTHING.
- He had a mission to expose ignorance and lead people to truth.
- He lived in a state of poverty.
- He debated the existence of gods; the government charged him with atheism, and sentenced him to death.
- He chose death by poison, and drank hemlock.

Plato



- A student of Socrates427-347 BCE
- His main interest was politics.
- He believed in four basic virtues
 - Wisdom
 - Truth
 - Courage
 - Moderation

 He established a school called the Academy, teaching science and philosophy

- 384 323 BCE
- Student of Plato
- He served as tutor to Alexander the Great
- He opened in own school the year he died
- His primary interest was biology
- He collected samples of plants and animals and classified them.
- He added to the "Scientific Method" process

Aristotle

