

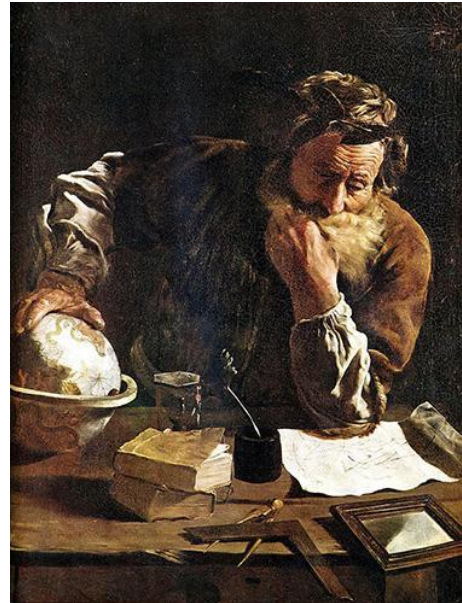
ARCHIMEDES

Archimedes was born in 287 B.C. and died in 212 B.C. He was an inventor, a Greek scientist, a mathematician and an astronomer.

Where Was He Born?

Archimedes was born in Sicily in a town called Syracuse.

He had a father and a mother, and he only stayed in Syracuse until he was 10 years old.



Family Life

Archimedes has a dad that was an astronomer and his name was Phidias.

Since his dad was an astronomer, he taught Archimedes everything that he knew.

No one is really sure about the life of Archimedes and some people think that his dad might have been a king.

Where Did He Live?

Archimedes lived in Syracuse which was a Greek city that was very rich.

He lived there until he was 10 years old and then he moved to Alexandria, which was in Egypt, so that he could go to school. Syracuse is located on the east coast of Sicily and was originally a Greek colony

School Life

Archimedes was very smart, and he wanted to know all that he could about maths. He also loved other things and he took as many classes in school that he could. He loved science almost as much as he loved maths.

Geometry

When Archimedes got older, he realized that shapes and numbers had a huge part in life.

He published a work called, "On the Sphere and Cylinder," and it talked about geometry.

His book talked about how the surface area of a place is four times the area of its great circle.

Archimedes came up with different shapes and the volume and area of them.

His work helped people in his time, and it helps people today.

People would have a hard time measuring and building things if it wasn't for the work that Archimedes did.

Scientist

Besides math, Archimedes loved science.

He wanted to be able to take numbers and mathematics and apply it to other things.

This is how the class statistics came along.

Archimedes is credited with using numbers with buildings and bridges and he also was able to write down about buoyancy or how things float in liquids.

People later used Archimedes writings and teachings to be able to move things.

Archimedes' Principle

The Archimedes' Principle is used today, and it helps people to use pulleys in order to move heavy objects.

With his ideas, Archimedes proved that whatever water weighs, if an object that weighs the same or more than the water then the object will become buoyant.

Archimedes works allow people to be able to measure density of objects using a scale or other measuring references.

A floating ship's weight F_p and its buoyancy F_a (F_b in the text) must be equal in size.

Inventor

Archimedes was a man with many talents.

Not only did he know about numbers and about water and other objects, Archimedes invented things.

He made many different inventions, tools and machines.

One thing that he made was a lift that would help farmers to move water into their fields.

Archimedes invented the odometer which was a machine that would measure the distance someone or something went.

He also built a cart that had wheels and gears and that was how he measured the distance.

Another great invention that Archimedes is responsible for is a compound pulley.

With this invention, people could pull a large ship with one rope.

Archimedes made many war machines including catapults, cranes and other war machines.

Death

Many people did not like Archimedes because he was so smart, especially people that went to war against him.

It is said that when he was an old man that he was busy drawing circles and measuring them that a soldier came up and killed him.

Facts About Archimedes:

- The inventions of Archimedes allow people to haul heavy loads.
- Some believe that Archimedes measured how much his crown weighed by using buoyancy to measure it and putting it into water.
- In order to tell how far an object went, it would make small stones fall into a cup each mile and then people would count the stones to know how far it went.
- Archimedes is known for making machines that helped win the Punic Wars.
- Archimedes helped to stop Rome from attacking Syracuse with his inventions.
- Archimedes invented “The Claw of Archimedes,” which is believed to be a claw that lifted enemy ships out of the water and destroyed them.”
- Some people started a myth that Archimedes burned Roman ships by using mirrors and the light from the sun but people believe that this was really missiles that were flying from the catapult.
- A large crater on the moon is named after Archimedes.

What Did You Learn?

1. **Who is Archimedes?** Archimedes is an inventor, mathematician and scientist from Ancient Greek times.
2. **Why was Archimedes famous?** Archimedes is famous for his works in mathematics.
3. **What did Archimedes believe could be done with math?** Archimedes believed that everything in life could be based around numbers. This is why we have statistics.
4. **What was something Archimedes invented?** Archimedes invented the catapult, the pulley system and more.
5. **What did Archimedes use water for?** Archimedes used water to measure the buoyancy of an object.