

- Essential Question:
  - What were the important contributions of Hellenistic Greece?
  
- Warm-Up Question:
  - How did geography affect the development of ancient Greece?

# Greek Achievements

- The ancient Greeks made contributions in many fields of learning & developed new innovations because:
  - The Greeks emphasized education & the pursuit of knowledge
  - Many Greeks could afford to support academies & centers of learning
  - Greece's location along the Mediterranean Sea allowed for trade, the spread of diverse ideas, & the ability to build n achievements from other parts of the ancient world

# Greek Democracy

- An important decision needs to be made at NSAA...Should students be able to leave campus for lunch?
- Use the slips of paper to cast your ballot and vote now!

YES or NO



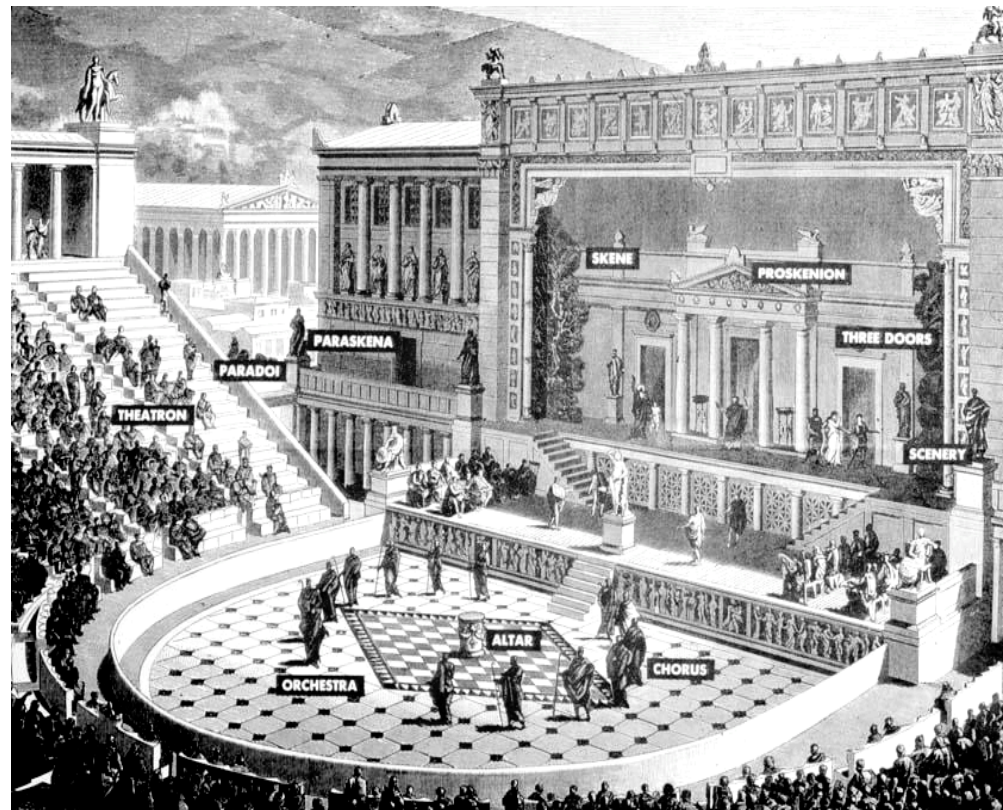
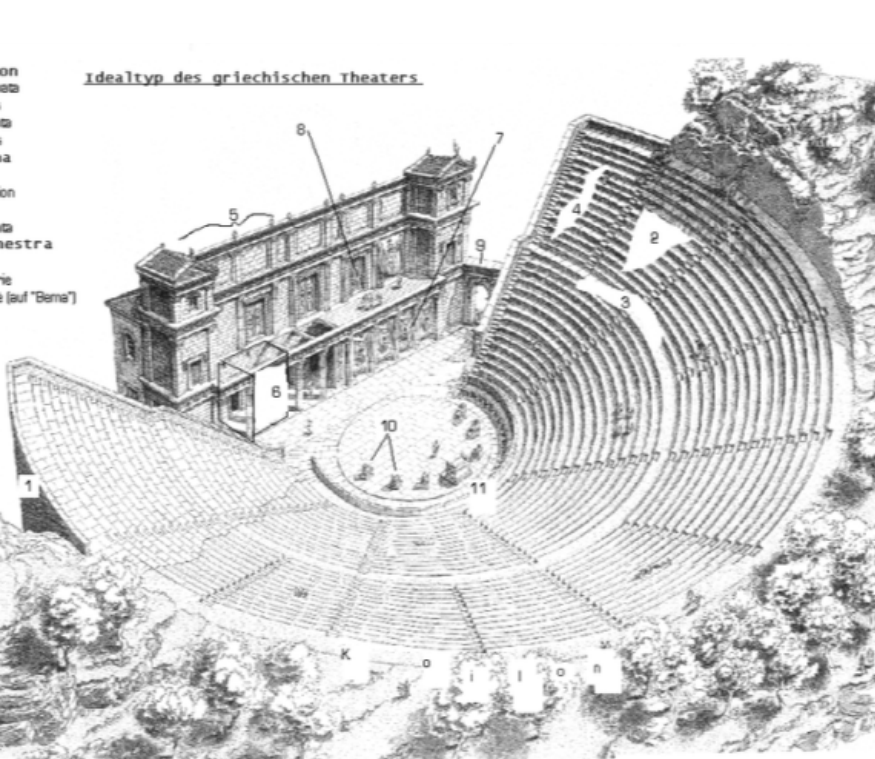
\*Please note this is a non-binding referendum!

# Greek Democracy

- The foundation for our democratic republic began in Athens with their development of direct democracy.
- Athenian citizens participated in government decisions by voting.
- A council would propose laws and then all men over 18 years that wanted to could vote. The approved ideas would become laws.

# Greek Literature & Drama

- Examine the images and answer these questions:
  - How does the seating arrangement in theater make it easy for the audience to see & hear what is happening?
  - Why would it be important for actors to wear large masks and colorful costumes?

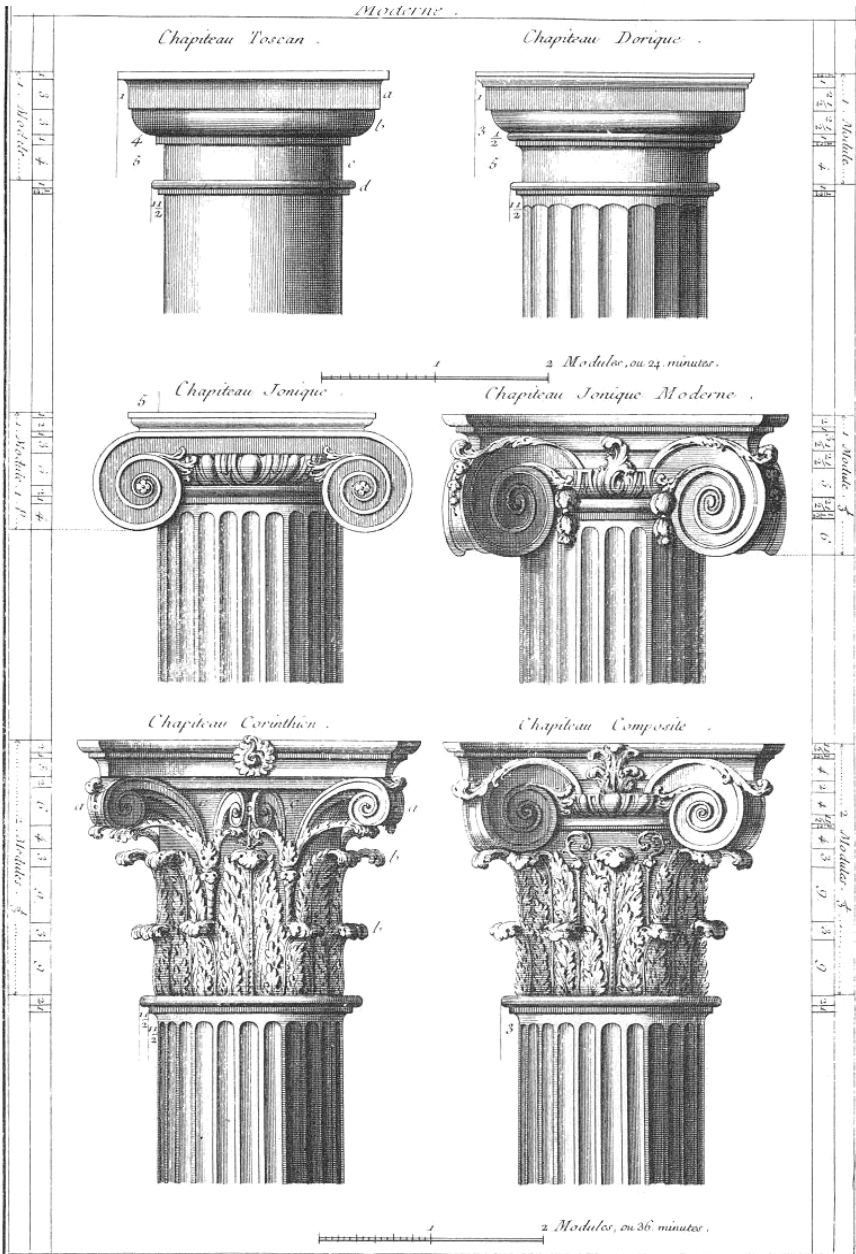


# Greek Literature & Drama

- Homer, the poet wrote the famous stories of *The Odyssey* and *The Iliad*, which are read in Language Arts classes all over the world.
- Drama was also important to the ancient Greeks. They were the first to develop comedies and tragedies.
- Theaters were built that were open-air and built in a way that everyone in the audience could hear and see the action.



# Greek Architecture



- Which column do you think is the best style? Make a sketch of that style in the activity box of your notes for this station



# Greek Architecture

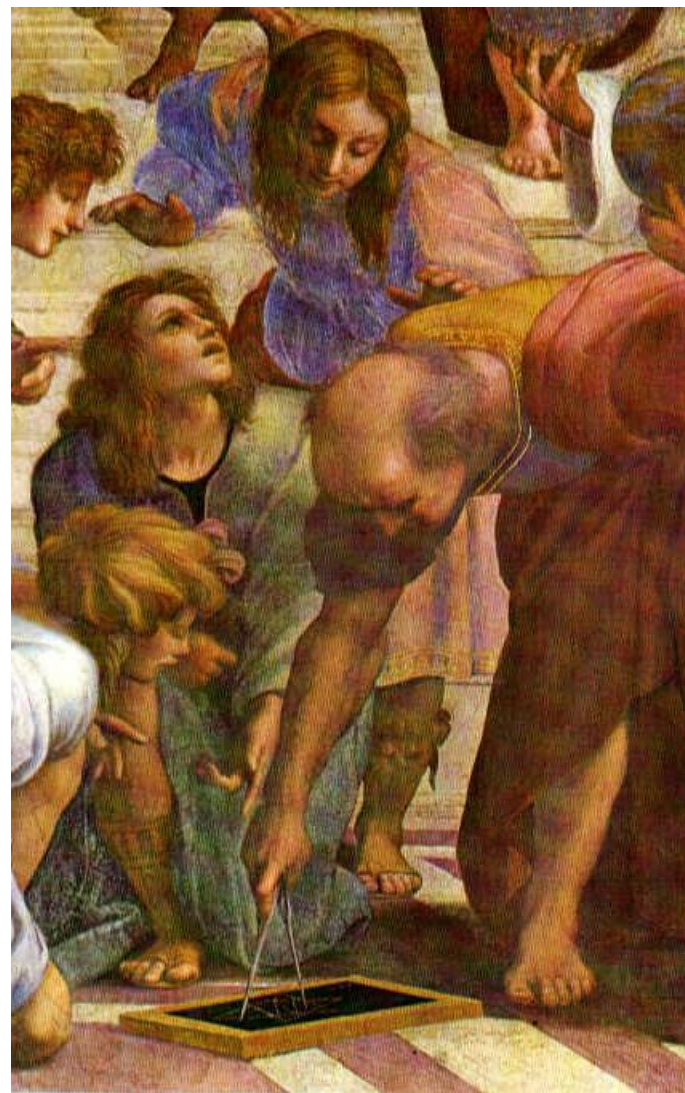
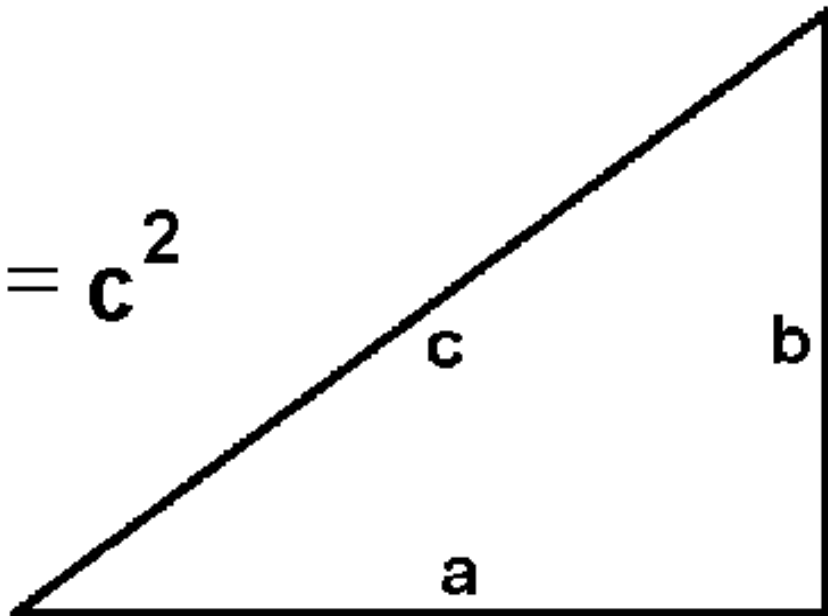
- The Greeks were among the most talented architects of the ancient world
- The Parthenon, a temple made of marble in honor of the goddess Athena, is probably one of the most famous examples of Greek architecture.
- The Greeks used columns (Doric, Ionic and Corinthian) & displayed murals of mythological scenes in their buildings.



# Greek Mathematics

- Use the Pythagorean Theorem to solve for “c”.
- The value of “a” is 3 and “b” is 6

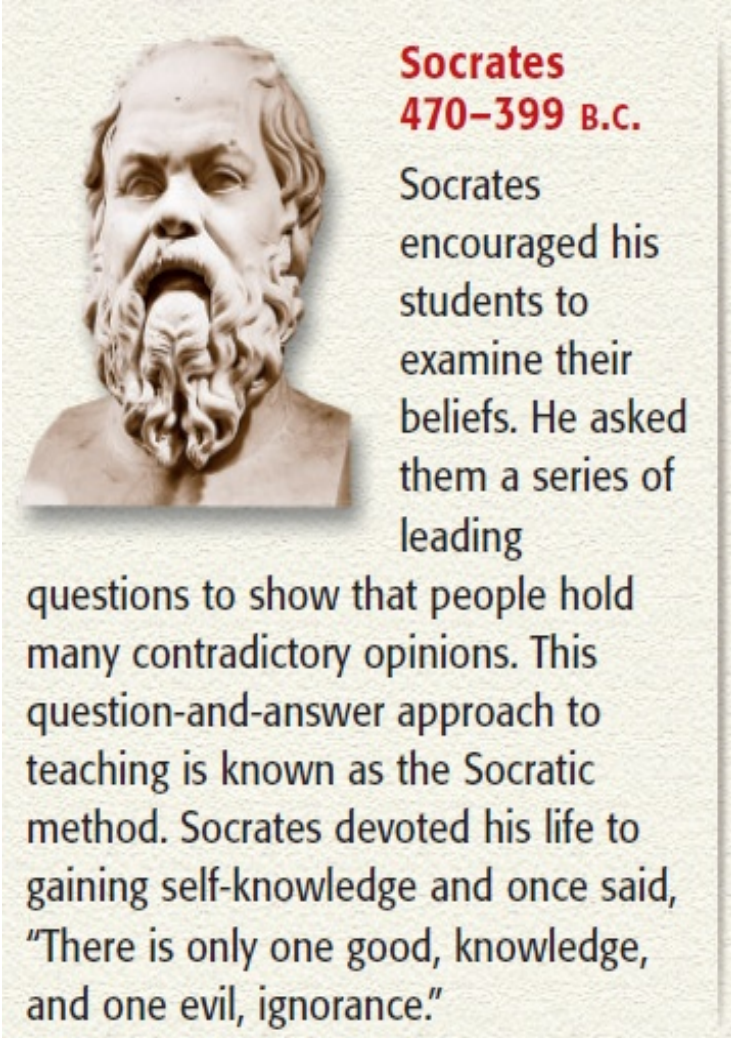
$$a^2 + b^2 = c^2$$



# Greek Mathematics

- Ancient Greek mathematicians developed many important concepts that are still used today. Scientists used pi to find circumference of circles.
- Euclid developed proofs that became the basis for modern geometry
- Pythagoras tried to explain everything in mathematical terms. He created a theorem about relationships of sides of right triangle that is used all over the world called the Pythagorean Theorem

# Greek Philosophy



- Answer the following:
  - Do you think that questioning is a good way of learning?
  - Is there such a thing as too many questions? Why or why not?

*“As for me, all I know is that I know nothing.”*

“

# Greek Philosophy

- Philosophy means “love of wisdom”
- Socrates taught students to challenge accepted values in Greece. He thought people must think for themselves to understand truth
- Aristotle created the basis for the scientific method (every truth is followed by other logical truths)

# Greek Astronomy & Geography

- Which contribution of the Greeks to astronomy and geography do you think is the MOST important? Make a sketch to represent that idea.

## Greek Astronomy

### Earth

Eratosthenes' estimate of the circumference—between 28,000 and 29,000 miles



actual circumference—24,860 miles

### The Sun

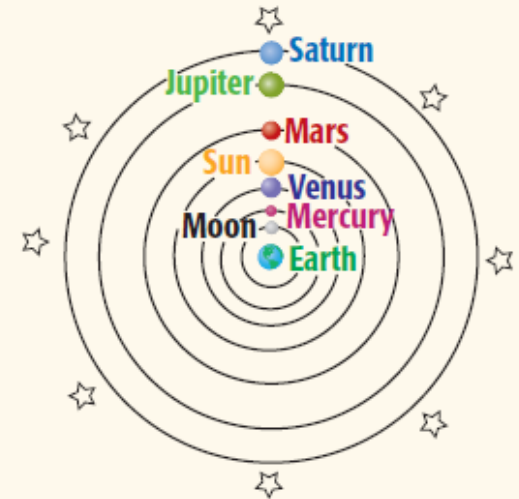


Aristarchus' estimate—300 times the size of Earth

The Sun is actually 1.3 million times the size of Earth.

### The Solar System

Ptolemy's view of the universe



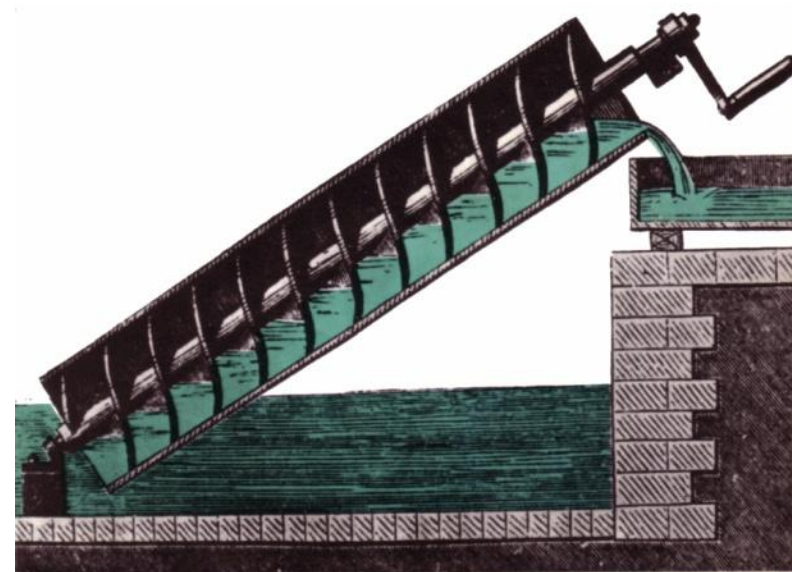
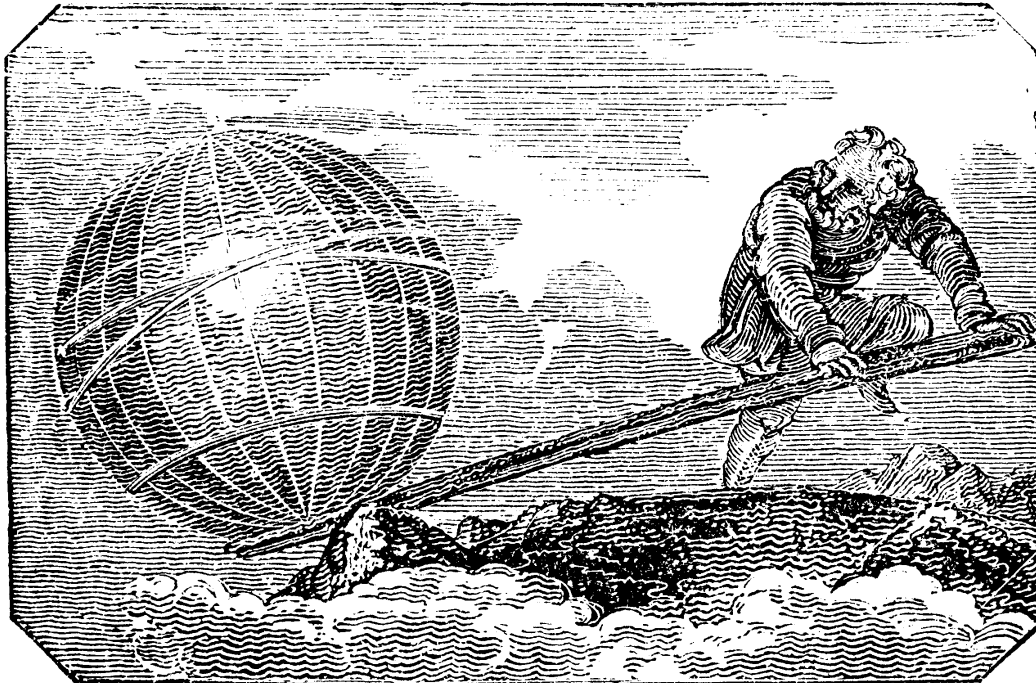


# Greek Astronomy & Geography

- Greek concluded that the sun was larger than earth (they had thought it was smaller than Greece).
- While they debated if the sun or the earth was the center of the universe, the astronomer Ptolemy thought that the earth was the center and this would be believed for 14 centuries.
- The Greeks were able to determined earth's true size.

# Greek Engineering

- Use the three different levers to lift the stapler.
- Which one was easiest?
- Sketch that lever in your activity box for this section.



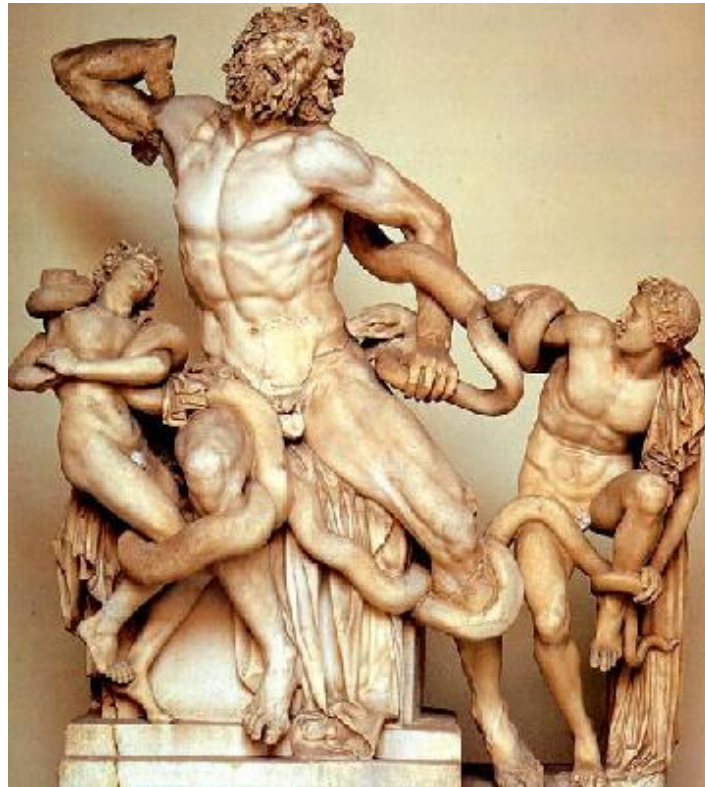
# Greek Engineering

- The Greek scientist Archimedes used engineering to design levers to lift heavy objects as well as a large screw that pumped water from the ground.
- Archimedes also invented war machines with reflective metals that used the sun's heat to burn ships and catapults that threw stones and arrows.

# Greek Art

Answer the following questions:

- Why do you think that these and other Greek statues are considered to be works of art?
- What makes them different from other art that you have seen?



# Greek Sculpture

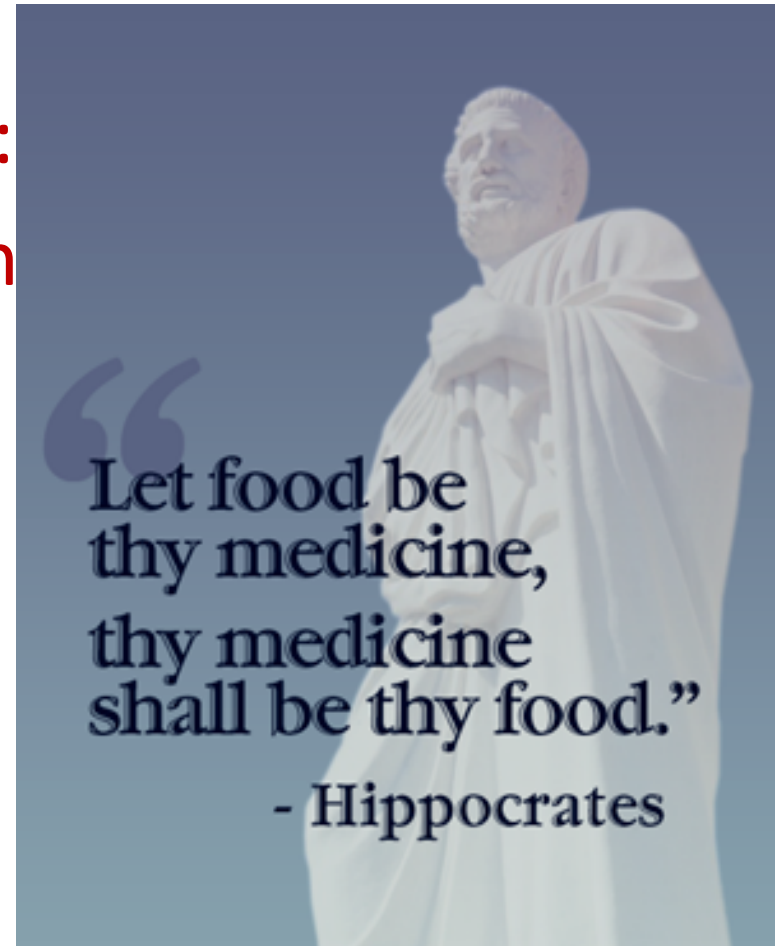
- The Greeks began carving life-size statues very early on. Greek sculpture was innovative by showing realism & human movement
- Greek artists tried to show “ideal human beauty” which often was represented by nude sculptures



# Greek Medicine

Answer the following questions:

- What part of the excerpt from the Hippocratic Oath stands out the most to you?
- What are doctors promising?
- Summarize the quote in a short phrase.



*“I swear by Apollo, the healer, and I take to witness all the gods...the following Oath: I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.”*

# Greek Medicine

- Hippocrates is called the “father of modern medicine” because he began a school that introduced new medical teachings and practices.
- Hippocrates believed that disease was caused by natural events not by the gods.
- The Greeks developed the Hippocratic Oath, a pledge that doctors take that emphasizes doctor’s responsibility for their patients.

# Discussion Questions

- Why do you think scholars call this period in Greek history a “golden age”?
- Which Greek achievement do you think is most important? Why?

## The Legacy of Greece



### Culture

- Greek language
- Mythology about gods and goddesses
- Olympic games
- Philosophers search for truth



### Science and Technology

- Disagreement whether Sun or Earth at center of universe
- Euclid's geometry textbook
- Accurate estimate of Earth's circumference
- Development of lever, pulley, and pump



### Arts

- Drama and poetry
- Sculpture portraying ideals of beauty
- Painted pottery showing scenes of Greek life
- Classical architecture



### Government

- Direct democracy; citizens rule by majority vote
- Citizens bring charges of wrongdoing
- Code of laws
- Expansion of citizenship to all free adult males, except foreigners

