The Legacy of Ancient Greece



Greek Contributions to Modern Language

- The word *alphabet* comes from the first two letters of the Greek alphabet.
- Many English words have Greek roots.
- English grammar, punctuation, and paragraphing are all based on Greek writing.

- aster = star
- auto = self
- bio = life
- chrono = time
- geo = earth
- graph = to write
- path = feel, hurt
- phon = sound
- photo = light
- tele = far, end
- anthrop = human
- dem(o) = people
- morph = form, shape
- ped = child

Greek Contributions to Modern Literature

- The Greeks excelled in poetry—both epics and other forms—history, and drama.
- Homer's epic poems the Iliad and the Odyssey tell stories about the Trojan War and how the hero Odysseus angers the gods and is forced to wander the sea for 10 long years.
- Thucydides and Herodotus, "father of history," developed historical writing.
- The Greeks invented drama, both comedy and tragedy.



Greek Contributions to Modern Government

- The basic idea that citizens control their own destiny comes from the Greeks
- The Athenian democracy system, in which all citizens vote directly on an issue, is called a direct democracy.
- In the U.S. representatives are elected to make laws. However, citizens vote for the representatives and sit on juries.



Greek Contributions to Modern Medicine and the Body

- For centuries, the Greeks believed that the gods controlled, health, illness, and even accidents.
- Hippocrates, "the father or modern medicine" brought scientific thought to medicine.
- Hippocrates believed that diseases had natural causes.
- Eventually, the Greeks dissected human bodies (including some living prisoners)
- Today, doctors take the Hippocratic Oath: a promise to be honest, to preserve life, an to keep patient information private.



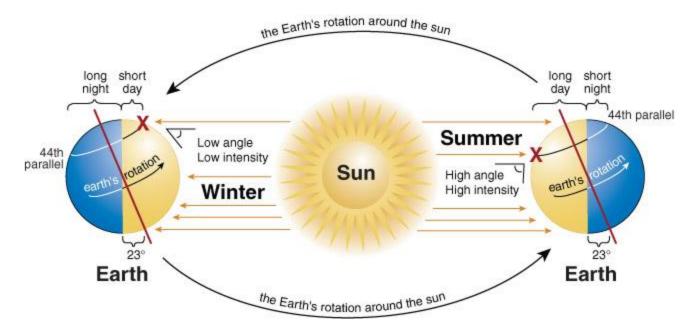
Greek Contributions to Modern Mathematics

- The Greeks loved reasoning and looked for logical answers to nature' s mysteries.
- Pythagoras believed that numbers were the key to understanding nature.
- Euclid wrote a geometry text.
- Hypatia was the first famous female mathematician

NAME	FIGURE	AREA	PERIMETER CIRCUMFERENCE
TRIANGLE	M b P	$A = \frac{b \times h}{2}$	P=MN+NP+PM
PARALLELOGRAM	E h b F	$A = b \times h$	P=DE+EF+FG+GD
RHOMBUS	b	$A = b \times h$	P = b + b + b + b $P = 4b$
RECTANGLE	L w	$A = L \times w$	P = L + w + L + w $P = 2L + 2w$
SQUARE	1	$A = l^2$	P = l+l+l+l $P = 4l$
TRAPEZOID	M B R	$A = \frac{(B+b) \times h}{2}$	P=MN+NP+PR+RM
CIRCLE	d	$A = \pi r^2$	$C = 2\pi r = \pi d$

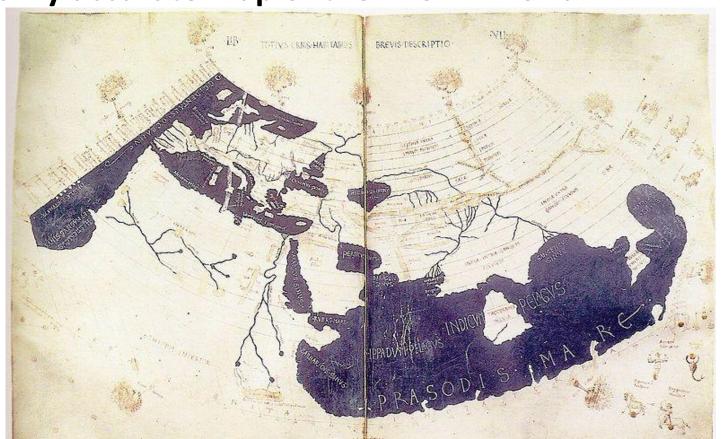
Greek Contributions to Modern Astronomy

- The word astronomy literally means "law of the stars."
- Aristarchus suggested that the earth moved around the sun.
- Hipparchus estimated the distances from the Earth to the moon and the sun.



Greek Contributions to Modern Geography

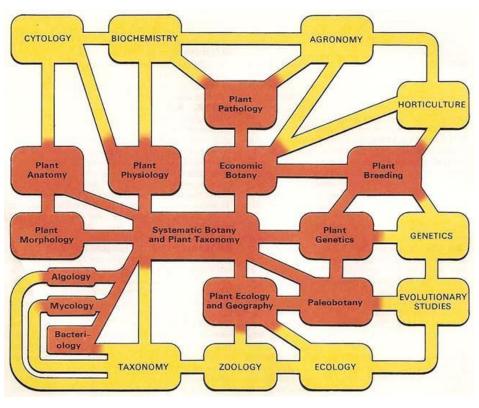
- Geography means "writing about the earth."
- Greeks developed the system of <u>longitude</u> and <u>latitude</u>.
- Ptolemy wrote a book called Geography that gave a fairly accurate map of the known world.



Greek Contributions to Modern Understanding of Plants and Animals

 Aristotle came up with a system of classifying plants and animals.





Greek Contributions to Modern Logic

Aristotle helped develop the field of logic, the process of making inferences. He taught that people could use what they already know to infer new facts. For a simple example of Aristotle's logic, read the sentences below. Notice how the third sentence uses information from the first two to draw a conclusion.

- Birds have feathers and lay eggs.
- Owls have feathers and lay eggs.
- Therefore, an owl must be a type of bird.

