Lesson 4 The Legacy of Greece

MAIN IDEAS

Culture Greek art and architecture introduced new styles and concepts that set standards for generations of artists around the world.

Culture The Greek love of reason and logic influenced the development of Western knowledge.

Science and Technology Hellenistic science provided much of the scientific knowledge of the world until the modern age.

The Arts and Architecture

ESSENTIAL QUESTION What new elements did Greek art and architecture introduce?

Drama

• Greeks invented drama—written work performed by actors
• Drama contests part of religious festivals
  - plays sponsored by rich citizens, selected by city leader

Actors

• Men played all parts, including female roles; wore costumes, masks
• Chorus danced, sang, recited poetry

Tragedy and Comedy

• Two forms of drama: tragedy and comedy
• Tragedy—serious drama showing downfall of important character
  - themes included love, hate, war
  - an example is Sophocles’ Oedipus Rex
• Comedy—less serious drama; often made fun of politics, people, ideas
  - an example is Aristophanes’ The Birds
Sculpture
• Greek sculptors aimed to capture ideal in work
  - tried to show objects, humans as perfectly as possible
  - tried to create order, beauty, harmony
• Art works were large, outdoors; statues of gods placed in temples
• Sculptor Phidias worked on Parthenon; created statue of Athena
  - statue was made of gold, ivory; was over 30 feet tall

Architecture
• Architects designed temples, theaters, meeting places, homes of rich
  - sought beautiful buildings with graceful proportions
• Colonnade—series of columns around building
  - pediment—pace between top of column and roof
• Parthenon had common temple form: four-sided colonnade
  - housed statue of Athena, sculptured designs with scenes from her life

REVIEW QUESTION
What was the goal of Greek artists?
History, Philosophy, and Democracy

**ESSENTIAL QUESTION** How did the Greek love of reason and logic influence the development of Western thought?

**Democracy Becomes Reality**

- City-states’ direct democracy gave citizens a voice in government
  - ideas of open, fair system have been copied elsewhere over time

**Herodotus and Thucydides**

- One of first civilizations to write history, examine facts of past
- Herodotus—“Father of History”, wrote Persian Wars book *History*
- Thucydides wrote history of Peloponnesian War, set writing standard
  - used documents, eyewitness accounts

**The Search for Truth**

- After Peloponnesian War, Greek thinkers questioned values
  - developed *philosophy*—study of basic truths, ideas about universe
- Greek philosophers had two basic ideas about the universe
  - universe is ordered and controlled by laws of nature
  - people can understand these laws

**Socrates**

- Socrates was famous philosopher who lived from 470 to 399 B.C.
  - encouraged young students to examine beliefs through questions
  - question-and-answer style of teaching called Socratic method
- Enemies said Socrates caused youth to rebel; they put him on trial
  - Socrates defended teaching youth to think about values, actions
  - jury sentenced him to death; made him drink hemlock, a poison
Plato and Aristotle

- Plato, born around 427 B.C., was one of Socrates’ best students
  - *The Republic* describes ideal government ruled by philosopher-king
  - Plato started school of higher learning called the Academy
- Aristotle, one of Plato’s best students, lived from 384 to 322 B.C.
  - devised debate method based on logic; applied logic to science
  - opened the Lyceum—a school in Athens; tutored Alexander the Great

**REVIEW QUESTION**
How did Herodotus and Thucydides influence the writing of history today?
Science and Technology

ESSENTIAL QUESTION  Why is Hellenistic science so important?

Astronomy

• Hellenistic scholars expanded the science of Greece, Egypt, India
• Scientists studying at Alexander learned about planets, stars
  - Eratosthenes estimated circumference — distance around Earth
  - Aristarchus studied sun, moon, Earth; estimated size of sun
  - Ptolemy studied universe, incorrectly put Earth at center

Mathematics and Physics

• Euclid’s geometry text with proofs of work is basis of geometry
• Archimedes explained levers, invented compound pulley
  - may have created water-lifting device for irrigation
  - his ideas were later used to build pumps, steam engines
• Hypatia — first noted female mathematician, also astronomer
  - taught at Alexandria; wrote about Ptolemy, Euclid’s works

REVIEW QUESTION
In what areas of math and science did Greek thinkers work?

Lesson Summary

• Greek and Hellenistic writers, artists, and architects invented new and beautiful styles.
• Greek philosophy and history set standards of logic, reason, and record keeping.
• Hellenistic scientists made important discoveries about the world.

Why It Matters Now . . .
The Greek and Hellenistic cultures set enduring standards in art, philosophy, and science.