

Chapter 14-18 Review

1. The center of learning and culture in the world before the 4th century BCE was
 - a. Alexandria
 - b. Syracuse
 - c. Athens
 - d. Babylonia
2. Alexander founded his great city in this country, which was home to the Library of Alexandria - the center for intellectual discovery
 - a. Greece
 - b. Ionia
 - c. Italy
 - d. Egypt
3. The study of points, lines, angles, surfaces, and solid shapes is
 - a. Mathematics
 - b. Geology
 - c. Geometry
 - d. Philosophy
4. “The whole is equal to the sum of its parts” is an
 - a. Equation
 - b. Axiom
 - c. Proposition
 - d. Law
5. Eratosthenes’s sieve is a device for finding
 - a. Integers
 - b. Natural numbers
 - c. Prime numbers
 - d. Irrational numbers
6. Angles that have the same measurement are
 - a. Right angles
 - b. Parallel lines
 - c. Degree angles
 - d. Congruent angles
7. When Archimedes said that he could lift the Earth, he was thinking about using a
 - a. Lever
 - b. Claw
 - c. Catapult
 - d. Bathtub

8. The statement, "An object immersed in a liquid will displace a volume of liquid equal to the object's own volume," is
- Euclid's Proposition
 - Archimedes' Principle
 - Eratosthenes' sieve
 - The law of the lever
9. Before Eratosthenes could calculate the circumference of the Earth, he had to assume that
- The distance between Alexandria and Syene is less than 100 miles
 - The Earth is round
 - The walker would start at noon
 - The Sun's rays are not parallel

Match one of Hero's simple machines to the invention that uses it. Use each letter more than once.

- | | | |
|----------|-------------------|-----------|
| a) lever | b) inclined plane | c) pulley |
| d) wedge | e) wheel and axle | f) screw |

- | | |
|------------------------|---------------------|
| _____ crow bar | _____ window blinds |
| _____ axe | _____ seesaw |
| _____ wagon | _____ stairs |
| _____ bottle opener | _____ jar lid |
| _____ sailboat rigging | _____ sliding board |
| _____ light bulb | _____ roller skate |
| _____ nail | |

Label the map "Geography of Science in the Ancient World" with these locations:

- Athens
- Alexandria
- Rome
- Ionia
- Mesopotamia
- Nile River
- Mediterranean Sea
- Tigris and Euphrates Rivers
- Aegean Sea

Write a short, meaningful paragraph to describe Alexandria, Egypt. Use these terms in your sentences:

Mouseion Ptolemy Mediterranean Hero lighthouse Alexander the Great

Write a short, meaningful paragraph to describe the work of Euclid. Use these terms in your sentences:

The Elements axioms geometry

Write a short, meaningful paragraph to describe how Archimedes proved that the goldsmith had cheated the king when he made the crown. Use these terms in your sentences:

gold immerse volume displace density silver