

Assessment

Quiz**Section: The Way Science Works**

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. Scientific methods
- a. are a general description of scientific thinking.
 - b. are used to find and evaluate possible answers to problems.
 - c. use critical thinking to solve scientific problems.
 - d. All of the above
- _____ 2. A tool used to break light into a rainbowlike spectrum is the
- a. radio telescope.
 - b. particle accelerator.
 - c. spectroscope.
 - d. telescope.
- _____ 3. Which tool would a scientist use to find information on the structure of an atom?
- a. radio telescope
 - b. particle accelerator
 - c. spectroscope
 - d. telescope
- _____ 4. SI is considered a consistent system because it
- a. is used worldwide.
 - b. uses derived units.
 - c. dates back to 1795.
 - d. has seven base units.
- _____ 5. Which unit is used to measure the height of a bookcase?
- a. kelvin
 - b. meter
 - c. kilogram
 - d. mole
- _____ 6. Which unit is used to measure the mass of a computer?
- a. kelvin
 - b. meter
 - c. kilogram
 - d. mole
- _____ 7. Convert 1,250 millimoles to moles.
- a. 125 mol
 - b. 12.5 mol
 - c. 1.25 mol
 - d. 0.125 mol
- _____ 8. Most scientific questions are developed from
- a. research.
 - b. investigation.
 - c. observations.
 - d. forming a hypothesis.
- _____ 9. After formulating a question, the next step of the scientific method is
- a. to research and collect data.
 - b. to perform an experiment.
 - c. to test a hypothesis.
 - d. to state a conclusion.
- _____ 10. Critical thinking
- a. is based on facts.
 - b. uses logic.
 - c. uses observations.
 - d. All of the above