

How Can Materials Be Identified?

Main Idea Physical and chemical properties are characteristics used to describe, identify, and classify matter.

Fill in the blanks with words from the box below.

chemical property

conductivity

melting point

density

boiling point

solubility

physical property

1. A characteristic that can be measured or detected by the senses is called a(n) _____. (page E43)
2. A(n) _____ is the ability or tendency of a material to change its chemical makeup. (page E43)
3. The _____ of a material is its mass per unit volume, or ratio of mass to volume. (page E44)
4. The temperature at which a solid substance changes to a liquid is called its _____. (page E45)
5. The _____ of a substance is the temperature at which it changes from a liquid to a gas. (page E45)
6. The measure of how much of one substance can dissolve another substance is called _____. (page E46)
7. The _____ of a material is its ability to carry energy. (page E46)

Underline the term in parentheses that correctly completes each statement.

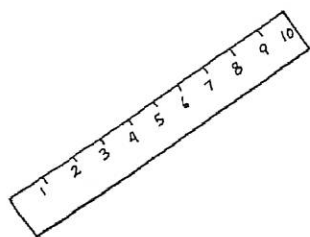
8. Every sample of matter has (properties, substances) that can be used to describe it. (page E42)



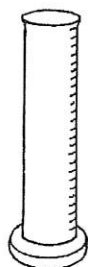
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9. State, size, color, and odor are examples of (chemical properties, physical properties). (page E43)
10. The fact that paper burns in air is a (physical property, chemical property) of paper. (page E43)
11. Mass is usually measured in units of (grams or kilograms, liters or milliliters). (page E44)

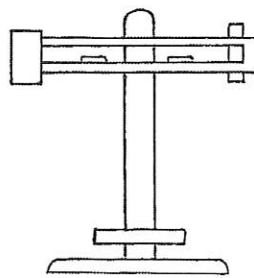
Circle the letter that best answers the question or completes the sentence.



A. centimeter ruler



B. graduated cylinder



C. balance



D. stop watch

12. (page E44) Which of the instruments shown above is used to measure mass?
- A.** centimeter ruler **C.** balance
B. graduated cylinder **D.** stop watch
13. (page E46) Which of the following substances is soluble in water?
- A.** sand **C.** oil
B. sugar **D.** glass
14. (page E46) Which of the following is a good conductor of heat and electricity?
- A.** copper **C.** rubber
B. plastic **D.** an insulator

