

Chapter 2 Self-Test: Properties of Matter

Successful students test themselves before major tests and exams. You don't know what you don't know until you test yourself.

1. Start by answering all the questions you can without your notes or the book and circle these problem numbers. If you can answer at least half of the questions without your notes or the book then you are in good shape. If not, you have a lot of work (learning) to do between now and the day of the test.
2. For those questions that you did not circle, identify which section (e.g. 4.1, 4.4) in the book covers each question in the left-hand margin.
3. Start by reading the entire section that you wrote down most often. Your goal is not to word search or to look up answers, but to read for understanding.
4. When you get to a paragraph or page with information pertaining to one of your questions, read the entire page or paragraph carefully and think of how you could organize the information in your science journal so that you understand it better.

1. Because of _____, all objects tend to resist a change in motion.
2. The physical property of matter that describes the relationship between mass and volume is _____.
3. Water evaporating from a puddle is an example of a(n) _____.
4. One way to learn about the _____ properties of a substance is to observe what new substances form during a reaction.
5. An object's _____ is affected by the gravitational force.
6. A copper penny can turn green if it reacts with carbon dioxide and water. This is an example of a(n) _____.
7. Things with _____ cannot share the same place at the same time.
8. A chemical _____ describes which changes are possible for a substance.
9. A chemical _____ describes the process by which new substances are formed.
10. The amount of matter in an object is its _____.
11. The SI unit for mass is the _____.
12. If you know an object's mass, you can figure out its _____ on Earth.
13. The tendency of an object to resist a change in its motion is _____.
14. You could use _____ to measure the volume of a soft drink can.

Matching

Match each item with the correct statement below.

- | | |
|----------------------|-------------------------|
| a. density | d. physical change |
| b. physical property | e. malleability |
| c. solubility | f. thermal conductivity |

- _____ 15. the ability to conduct heat
_____ 16. the relationship between mass and volume
_____ 17. ability of a substance to dissolve

Match each item with the correct statement below.

- | | |
|--------------------|--------------------|
| a. reactivity | d. composition |
| b. chemical change | e. physical change |
| c. flammability | |

- _____ 18. the type of matter and its arrangement in an object
_____ 19. changes in matter that do not change the composition of the substance
_____ 20. the ability of two or more substances to combine to form other substances

Match each item with the correct statement below.

- | | |
|-------------------------|-----------------|
| a. thermal conductivity | f. solubility |
| b. composition | g. reactivity |
| c. nonflammability | h. electrolysis |
| d. inertia | i. ductility |
| e. state of matter | j. density |

- _____ 21. This is the physical form in which a substance exists.
_____ 22. This is the type of matter makes up an object and the way it is arranged.
_____ 23. The breakdown of water to form two gases is the result of this process.
_____ 24. This is the rate at which a substance conducts heat.

Match each item with the correct statement below.

- | | |
|---------------|--------------------|
| a. ductility | c. state of matter |
| b. reactivity | d. malleability |

- _____ 25. an ice cube made of solid water
_____ 26. rust forming on metals

Match each item with the correct statement below.

- | | |
|---------------|-----------------|
| a. density | c. odor |
| b. solubility | d. flammability |

- _____ 27. wood burning in a fireplace
_____ 28. a flower smelling sweet