Item # \_\_\_\_\_\_\_\_\_ MATTER REVIEW Name: \_\_\_\_\_\_\_\_\_\_\_

**READ**

1. Matter can be made of combinations of different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. There are more than \_\_\_\_\_\_\_\_\_\_\_\_\_ known elements.
3. Most elements are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at room temperature.
4. Elements cannot be physically or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ broken down into simpler substances.

**READ**

14. Matter is anything that has \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

15. Is it matter or energy? Write out the word.

 a. sunlight \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. air \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. electricity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. sand \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16. Is it a chemical property or a physical property? (Write Chemical or Physical)

1. 23.9 grams  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. irregular shape  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. combines with oxygen   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. boils at 100C  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**READ**

17. A \_\_\_\_\_\_\_\_\_\_\_ has no definite shape or volume

18. A \_\_\_\_\_\_\_\_\_\_\_ has a definite volume but no definite shape.

19. The size of a container will determine the volume of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

20. Particles in a \_\_\_\_\_\_\_\_\_\_\_\_ have the least motion or kinetic energy

21. The change from solid to liquid is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

22. If heat energy is added to a liquid it can become a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

23. Condensation is the change from \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**READ**

24. Density is the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a unit of volume.

25. A substance with a mass of 12.0 grams and a volume of 4.0 cm3 will have a density of \_\_\_\_\_\_\_\_\_\_\_.

26. Density is a \_\_\_\_\_\_\_\_\_\_\_\_ property of matter.

27. As temperature increases, density will \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

28. As pressure increases, density will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

29. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the least dense phase of matter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**READ**

31. The phase change from solid to liquid is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

32. During melting, heat is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

33. Energy is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when a gas changes to a liquid.

34. Energy is released when a liquid changes to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

35. Molecules of a \_\_\_\_\_\_\_\_\_\_\_\_\_ have the most heat energy.

36. a. Temperature when the solid melts is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Letter at which all the material is a liquid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 c. Letter where the material has the least energy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. Letter where the material begins to boil: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

32. A \_\_\_\_\_\_\_\_\_\_\_\_ change takes place when matter only changes its appearance.

33. During a \_\_\_\_\_\_\_\_\_\_ change, a new substance forms.

34. Is it physical or chemical change? (Write Physical or chemical)

a. burning wood \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. sawing wood \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. melting ice \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. making yogurt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

35. A \_\_\_\_\_\_\_\_\_\_\_\_ is a substance made up of two or more elements chemically combined.

36. The smallest part of a compound is a \_\_\_\_\_\_\_\_\_\_\_\_\_.

37. In the chemical compound: BaCO3

a. how many different elements are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. how many atoms of Carbon are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

38. A \_\_\_\_\_\_\_\_\_ can be physically separated.

39. The part of the solution that dissolves is the \_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. |

Give an example of physical change followed by a chemical change:

36. a. Temp when the solid melts: \_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Letter at which all the material is a liquid: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. Letter where the material has the least energy: \_\_\_\_\_\_\_\_\_\_\_

 d. Letter where the material begins to boil: \_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 28. | 29. | 30. | 31. | 32. | 33. |

**READ (Parts of a Solution pg 272 and Solubility/Temperature pg 273)**

(Bring back your brains also use the picture that is above the reading—think Borax snowflake)

1. The substance that is dissolved is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_. (example: salt)
2. The substance in which a solute dissolves in is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (example: water)
3. Solutions are not always in liquid form. Give an example of gas form and solid form:
	1. Gas form: b. Solid form:
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has an effect on solubility. Example: hot tea will \_\_\_\_\_\_\_\_\_\_ more sugar than \_\_\_\_\_\_\_\_\_\_\_ tea.
5. When one substance dissolves in another substance is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_.