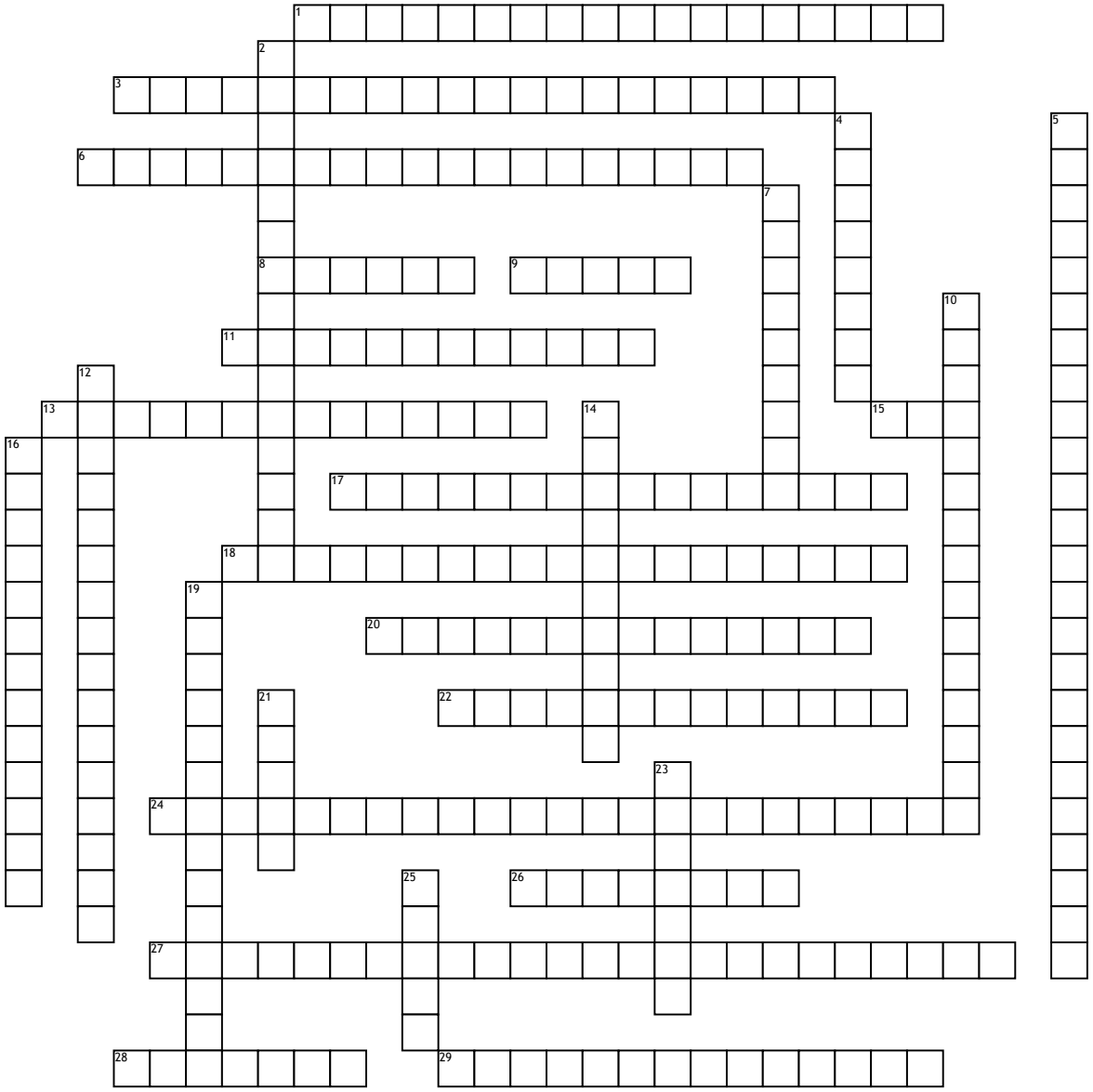
Name: _____ Date: _____

Matters properties and changes



Across

1. One that has a uniform composition throughout and always has a single phase; also called a solution

3. One that does not have a uniform composition and in which the individual substance remain distinct

6. A physical property, such as mass, length, and volume, that is dependent upon the amount of substance present

8. A form of matter that flows, has constant volume, and takes the shape of its container

9. A form of matter that has its own definite shape and volume, is incompressible, and expands only slightly when heated

11. A technique that can be used to physically separate most homogeneous mixtures based on the differences in the boiling points of the substances involved.

13. A process involving one or more substances changing into new substances; also called a chemical reaction

15. A form of matter that flows to conform to the shape of its container's entire volume, and is easily compressed

17. A characteristic of matter that can be observed or measured without changing the sample's composition- for example, density,color, taste, hardness, and melting point

18. A physical property that remains the same no matter how much of a substance is present

20. A technique that is used to separate the components of a mixture based on the tendency of each component to travel or be drawn across the surface of another material

22. A chart that organizes all known elements into a grid of horizontal rows (periods) and vertical columns (groups or families) arranged by increasing atomic number

24. States that mass is neither created nor destroyed during a chemical reaction but is conserved

26. A uniform mixture that may contain solids, liquids, or gases;also called a homogeneous mixture

27. States that when different compounds are formed by the combination of the same elements, different masses of one element combine with the same mass of the other element in a ratio of small whole numbers

28. A pure substance that cannot be broken down into simpler substances by physical or chemical means

29. The physical forms, in which all matter naturally exists on Earth- most commonly as a solid, a liquid, or a gas

Down

2. A separation technique that produces pure solid particles of a substance from a solution that contains the dissolved substance

4. A chemical combination of two or more different elements; can be broken down into simpler substance by chemical means and has properties different from those of its component elements.

5. States that, regardless of the amount, a compound of the same elements in the same proportion by mass

7. A form of matter that has a uniform and unchanging composition; also known as a pure substance

10. A type of change that alters the physical properties of a substance but does not change its composition

12. The ability or inability of a substance to combine with or change into one or more new substances

14. A technique that used a porous barrier to separate a solid from a liquid

16. A percentage determined by the ratio of the mass of each element to the total mass of the compound

19. A process involving one or more substances changing into new substances; also called a chemical reaction

21. Gaseous state of a substance that is a liquid or a solid at room temperature

23. A physical blend of two or more pure substances in any proportion in which each substance retains its individual properties; can be separated by physical means

25. A form of matter that has its own definite shape and volume, is incompressible, and expands only slightly when heated