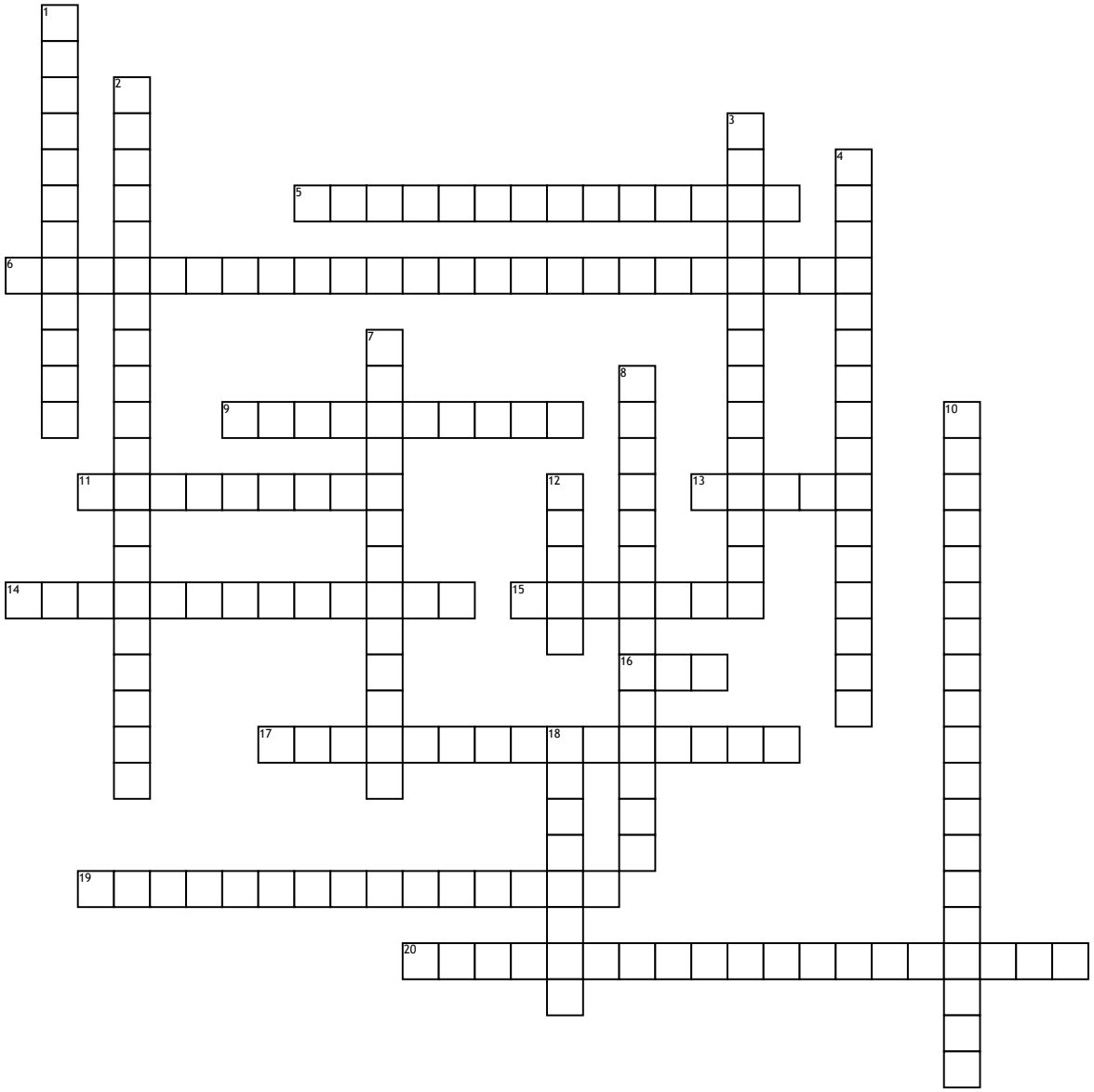
Name: _____ Date: _____

States of Matter



Across

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

6. 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

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

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

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

14. 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

15. 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

16. A form of matter that flows to conform to the shape of its containers entire volume, and is easily compressed

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

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

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

Down

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

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

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

4. A characteristic of matter that can be observed or measured without changing the samples composition for example, density, color, taste, hardness, and melting point

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

8. 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

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

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

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