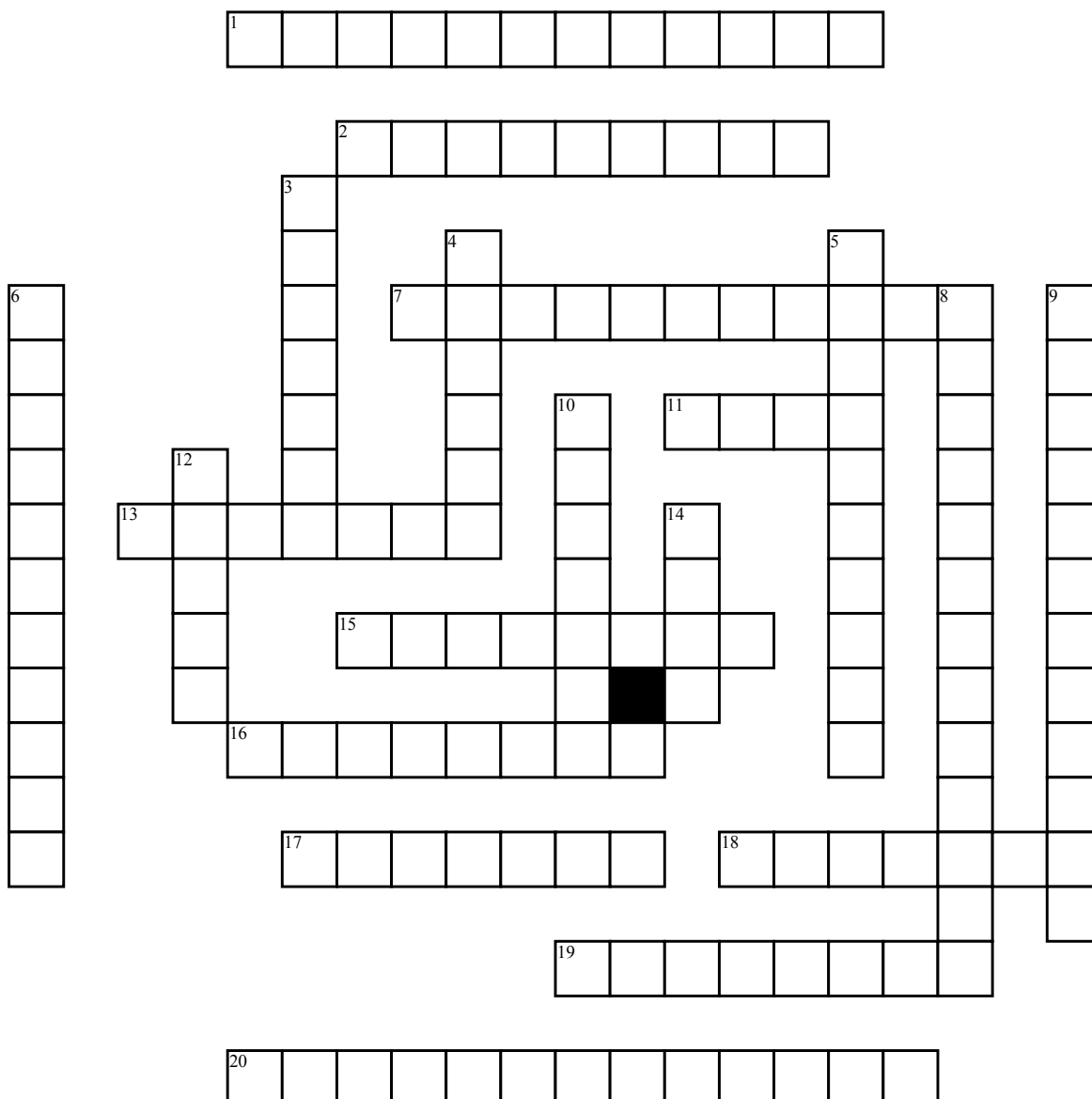


Name: \_\_\_\_\_

# Atoms



## Across

1. possible energies that electrons in an atom can have.  
2. The science of the composition, structure, properties, and reactions of matter, especially of atomic and molecular systems.  
7. Term for an atom whose electrons have the lowest possible energies  
11. An atom or molecule which has lost or gained one or more electrons, giving it a positive or negative electrical charge.  
13. Neutral subatomic particle found in the nucleus.

15. negatively charged subatomic particle which orbits outside of the nucleus.

16. Groups of atoms.

17. dense, positively charged mass in the center of an atom.

18. atoms of the same element having different numbers of neutrons.

19. Pure substances that are produced when elements combine.

20. Arrangement of atoms by increasing atomic number.

## Down

3. Substances that cannot be broken down into any other substances.

4. Positively charged subatomic particle found in the nucleus

5. sum of the protons and neutrons in the nucleus of an atom.

6. atoms that have the ability to spontaneously and continuously decay.

8. Visual model of the most likely locations for electrons in an atom.

9. number of protons in the nucleus of an atom.

10. Region of space where an electron is likely to be found.

12. Breaking down or breaking apart.

14. The smallest piece of an element that still represents that element.