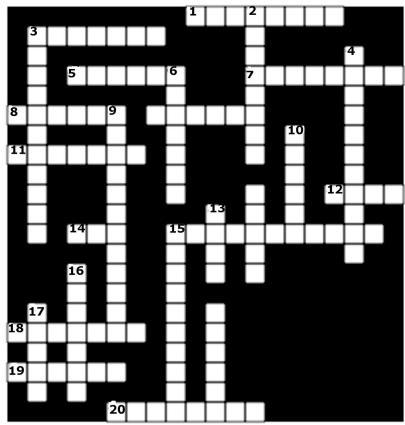
## Structure of Matter

Use the vocabulary words from Chapters 3, 4, and 12 to solve this puzzle.



## Across

- 1 the change in state from a liquid to a solid
- 3 a pure substance that cannot be broken down into simpler substances
- 5 the positively charged particles of the nucleus of an atom
- 7 a pure substance composed of two or more elements that are chemically combined
- 8 the number of protons in nucleus of an atom
- 11 the change in state from a solid to a liquid
- 12 the smallest particle into which an element can be divided and still retain all of the properties of that element
- 14 the state in which matter changes in both shape and volume
- 15 vaporization that occurs at the surface of a liquid
- 18 vaporization that occurs throughout a liquid
- 19 the state in which matter takes the shape of its container but has a definite volume
- 20 the negatively charged particles found in all atoms

## Down

- 2 the region outside the nucleus where electrons are likely to be found
- 3 a change in which energy is absorbed
- 4 the change in state from a solid directly into a gas
- 6 The particles of the nucleus that have no charge
- 9 the change in state from a gas to a liquid
- 10 the state of matter that does not have a definite shape of volume and whose particles have broken apart
- 13 the sum of the protons and neutrons in an atom
- 15 a change in which energy is released or removed
- 16 the center of an atom that is made up of protons and neutrons
- 17 the state in which matter has a definite shape and volume