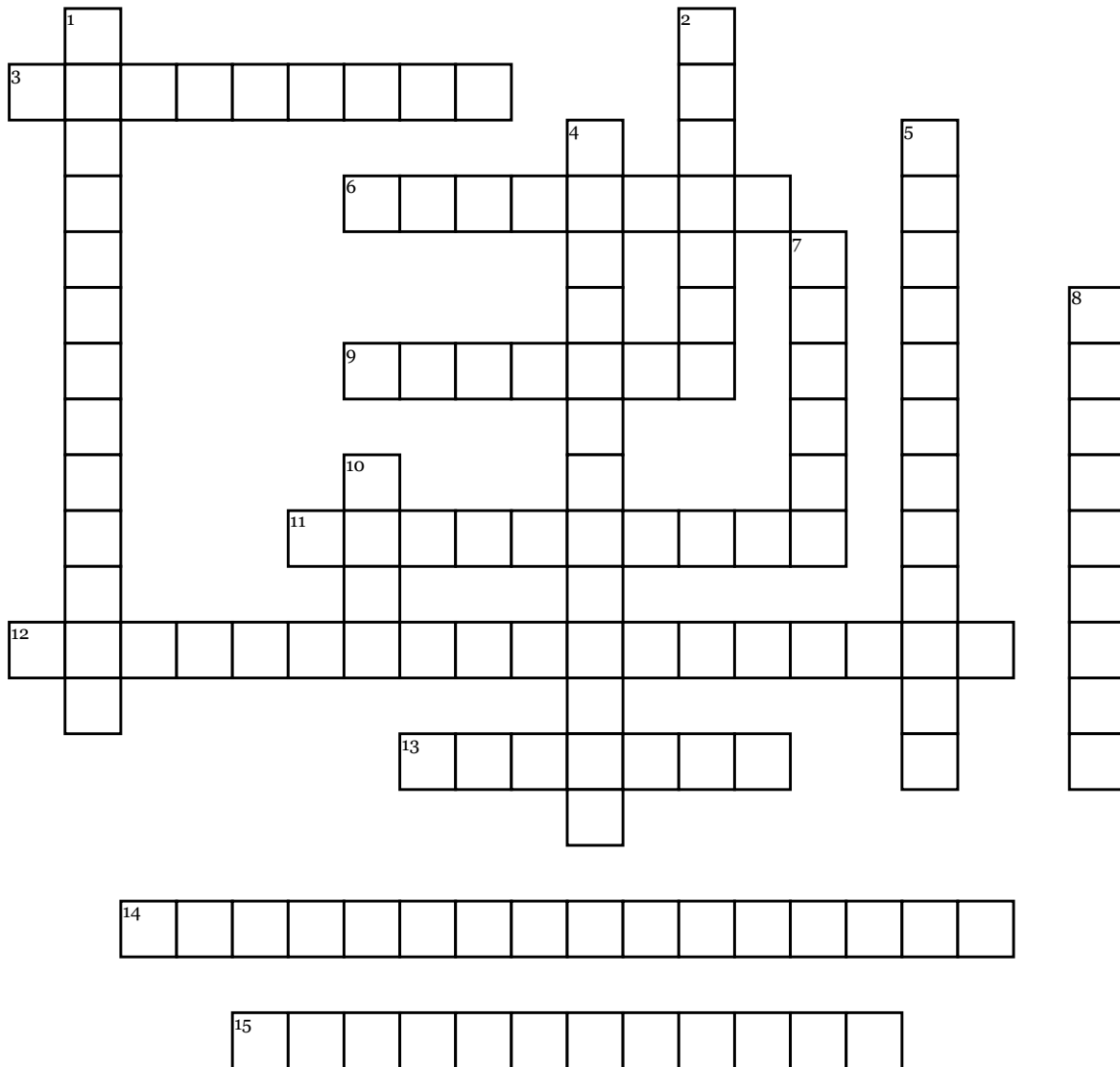


# atoms



**Across**

- 3.** have no charge(neutral), have a mass of one and located in the nucleus
- 6.** pure substance that is made from a single type of atom
- 9.** the horizontal line same number of electron shells
- 11.** the TOTAL mass of the atom usually written underneath the name of the element on the periodic table
- 12.** what atoms are made up of

- 13.** the place in the atom containing most of the mass
  - 14.** the number of electrons located on the outer most electron shell
  - 15.** the mass of protons usually written on top of the symbol in the periodic table
- Down**
- 1.** where electrons are located on, this is located on the outside of the nucleus
  - 2.** have a positive charge, a mass of one AMU and is located in the nucleus

- 4.** a graph showing all the elements and their atomic mass, mass number and the element name and symbol
- 5.** also known as orbitals
- 7.** the vertical line in the periodic table has the same number of valence electrons
- 8.** have a negative charge, no mass and is located on the electron shells
- 10.** made up of three different subatomic particles and a nucleus