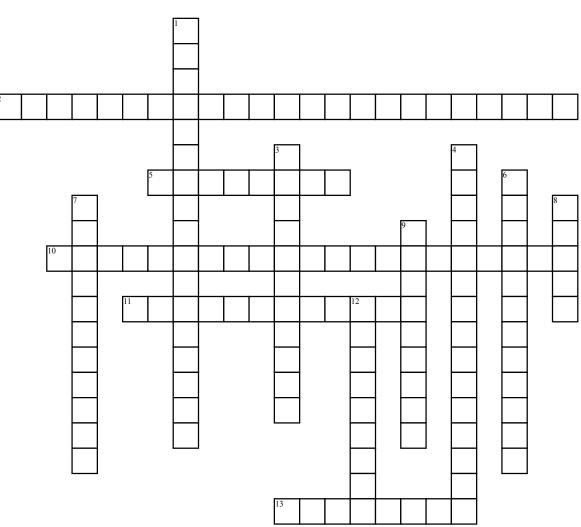
## Chemistry Crossword



## Across

 No two electrons in an atom can have identical quantum numbers.
 a chemical bond that involves the sharing of electron pairs between atoms

**10.** the term given to the electron configuration of noble gases

**11.** electrostatic attraction between the positively charged atomic nuclei of metal atoms and the delocalised electrons in the metal

**13.** a group of atoms bonded together, representing the smallest fundamental unit of a chemical compound that can take part in a chemical reaction

## <u>Down</u>

**1.** measure of the tendency of an atom to attract a bonding pair of electrons

**3.** chemical and physical properties of the elements recur periodically when the elements are arranged in the order of their atomic weights

**4.** electrons orbiting one or more atoms fill the lowest available energy levels before filling higher levels

**6.** any quantum state of the system that has a higher energy than the ground state

7. The lowest allowed energy state of an atom, molecule, or ion

**8.** pertaining to something carrying a net electrical charge, as an ionic bond or ionic compound

9. every orbital in a subshell is singly occupied with one electron before any one orbital is doubly occupied, and all electrons in singly occupied orbitals have the same spin
12. atoms of main-group elements tend to combine in such a way that each atom has eight electrons in its valence shell, giving it the same electronic configuration as a noble gas.