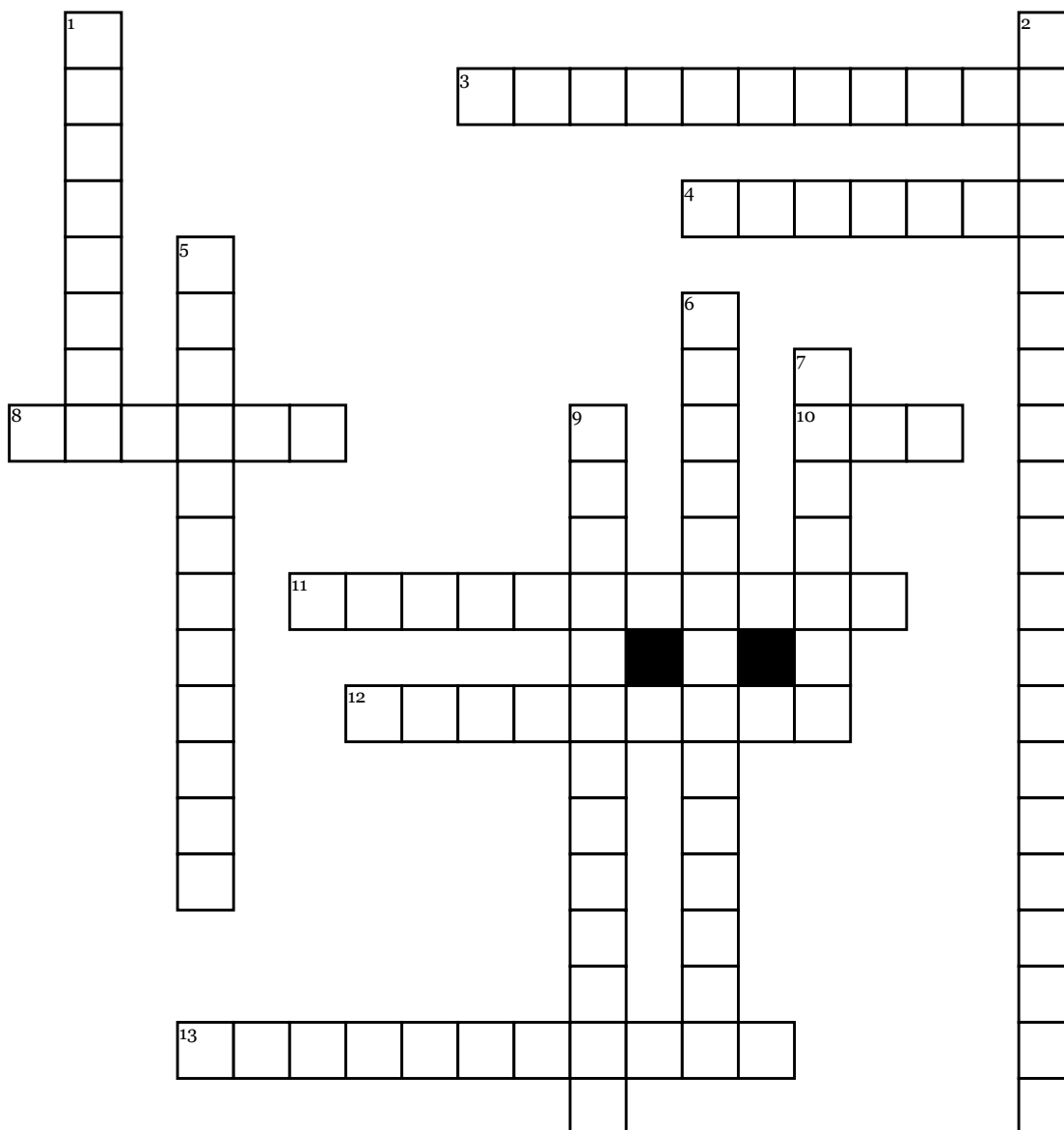


Name: \_\_\_\_\_

# Bonding



## Across

- 3.** Formed when metal atoms lose electrons from their outer shell.
- 4.** Regular arrangement of particles.
- 8.** Giant structure of positive ions surrounded by a 'sea of electrons'.
- 10.** Charged particle formed when atoms lose or gain electrons.
- 11.** Formed when non-metal atoms gain electrons to their outer shell.

**12.** Electrostatic attraction between ions of opposite charge.

**13.** Large molecules made up of hexagons and pentagons of carbon atoms

## Down

- 1.** Each carbon bonds to three others in a layer structure. Soft and slippery. Conducts electricity.
- 2.** Weak force found between small molecules, causes them to have a low m.p. and b.p.

**5.** Shared pair of electrons found between non-metal atoms.

**6.** Molecule made up of a small number of atoms held by covalent bonds. Examples include water and ammonia.

**7.** Each carbon forms 4 bonds to other carbon atoms resulting in a very hard substance.

**9.** Compound made up of positive and negative ions, key example: sodium chloride.