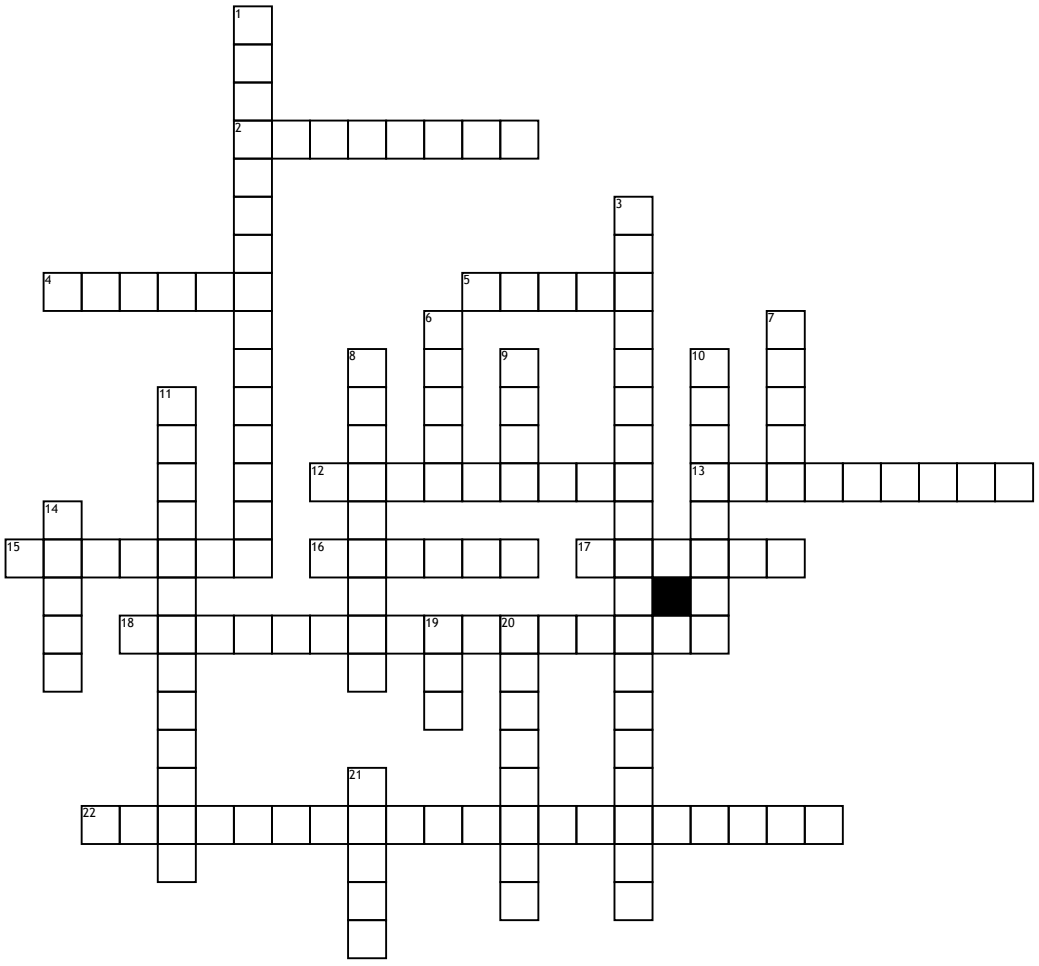
Name: _____

Bonding



Across

2. These are neutrally charged.

4. Carbon nanotubes are far far _____ than their diameter.

5. In graphite, each carbon is bonded to _____ other carbons.

12. These are negatively charged.

13. The positive ions and delocalised electrons are _____ to eachother in metallic bonding.

15. These are positively charged.

16. The giant covalent structures we have looked at are all made out of the element...

17. Graphite is soft due to its weak intermolecular forces between its ...

18. If we need lots of energy to break the bonds, the structure will have a _____ _____ _____.

22. Diamond does not have these and so cannot carry a charge.

Down

1. metals are known as ...

3. There are _____ _____ of attraction between positive ions and delocalised electrons.

6. This is the bonding where electrons are transferred.

7. Atoms in group 0 do not form ions as there are _____ electrons in its outer shell.

8. This word means we can bend, reshape or draw metals into wires.

9. In diamond, how many carbons are each carbon bonded to?

10. This is the bonding where electrons are shared.

11. If we don't know the group number of an element we can check the?

14. We can tell the number of electrons in the outer shell of an atom by looking at its _____ number

19. If an atom gains or loses electrons it forms an ....

20. This structure is one single layer of graphite.

21. Buckminsterfullerene has _____ carbons all covalently bonded.

Word Bank

attracted	three	longer	covalent	Ionic
sixty	Graphene	delocalised electrons	high melting point	electrostatic forces
four	electrons	neutrons	protons	ion
malleable	Periodic Table	layers	giant structures	carbon
group	eight			