

- 5 The bonding between two atoms of nitrogen in an N_2 molecule involves the hybridisation of atomic orbitals to form sp orbitals.

Which row is correct?

	formation of the σ bond between the nitrogen atoms in N_2	type of orbital which contains the lone pair of electrons on each nitrogen atom in N_2
A	an sp orbital from one atom overlaps with an sp orbital of the other atom	p
B	an sp orbital from one atom overlaps with an sp orbital of the other atom	sp
C	an s orbital from one atom overlaps with a p orbital of the other atom	p
D	an s orbital from one atom overlaps with a p orbital of the other atom	sp

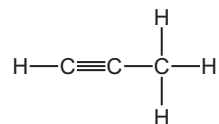
- 25 Two statements about a molecule of methanal are given.

- 1 It is planar.
- 2 It contains three σ bonds.

Which statements are correct?

- A both 1 and 2
B 1 only
C 2 only
D neither 1 nor 2

- 6 The diagram shows the bonding in a molecule of propyne.



Which types of hybridisation are shown by the carbon atoms in propyne?

- A sp, sp^2 and sp^3
B sp and sp^3 only
C sp^2 and sp^3 only
D sp^2 only