

Covalent Bonding – Breaking the rules

Pre-lesson assignment- textbook page 65 and 66-7

Define the following terms

- Dative covalent/ Coordinate Bond

Make notes on dative bonds and hypervalency

Use the following questions as guidance

1. Explain why boron compounds break our 'octet rule' from GCSE. Use BF_3 as an example, including a dot and cross diagram.
2. Explain why the elements in the p-block in period 3 can form multiple fluoride compounds.
3. Demonstrate, using an ammonium ion, why it is that dative covalent bonds can form.