

Key Stage 3 Precise Learning Points



Unit Number

P4

Unit Title

Electricity & Magnetism

Chapter

Static Electricity

Key Scientific Points

1. An atom is made of a positively charged dense nucleus with negatively charged very light electrons orbiting at a great distance
2. An electric current is the movement of electrons, Electrons are free to move through metals but non-metals and so metals conduct electricity and non-metals do not
3. Atoms are neutral (+ve and -ve charges are balanced)
4. Rubbing two objects together can transfer electrons from one material to another resulting in an excess of electrons in one material (making it negatively charged) and a deficit of electrons in the other (making it positively charged)
5. Materials with like charges repel, materials with unlike charges attract. These are electrostatic forces. Static because the charge is trapped within the material and does not move as in an electric current.
6. Electrostatic forces act across a space between objects; they don't need to touch to experience the force. The area where they experience these forces is called a field.