



Department: Science: Physics – Electricity, Electromagnets and Energy
Year Group: Seven

Working toward	Working at	Working above
- Identifies simple electrical components like bulbs and batteries. - Recognizes that electricity flows in a circuit. - Understands that magnets attract certain materials. -Can describe a magnetic field. - Identifies different types of energy (e.g. heat, light, sound). - Recognizes that energy can be transferred. - Understands that some energy is wasted. - Can name an energy resource	- Describes current, voltage, and resistance in circuits. - Explains how series and parallel circuits work. - Understands the relationship between electricity and magnetism. - Can draw a magnetic field. - Describes energy transfers and transformations. - Explains energy conservation in systems. - Understands efficiency and Sankey diagrams. - Describes the difference between renewable and non-renewable energy resources.	- Calculates current and voltage using Ohm's Law. - Explains how electromagnets are used in devices. - Analyses circuit diagrams and predicts outcomes. - Can explain why magnets can have different field strengths. - Calculates energy changes using formulas. - Evaluates energy resources and their impact. - Analyses energy systems for efficiency improvements. - Calculates electricity bills in given scenarios.