Topic	Electricity
EYFS	**Technology:** **30-50** Know how to operate simple equipment. **40-60** Use ICT hardware to interact with age-appropriate computer software. **ELG** Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.
Year 1	
Year 2	
Year 3	
Year 4	• Can they identify common appliances that run on electricity? • Can they construct a simple series electric circuit? • Can they identify and name the basic part in a series circuit, including cells, wires, bulbs, switches and buzzers? • Can they identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery? • Can they recognise that a switch opens and closes a circuit? • Can they associate a switch opening with whether or not a lamp lights in a simple series circuit? • Can they recognise some common conductors and insulators? • Can they associate metals with being good conductors? **Challenge** • **Can they explain how a bulb might get lighter?** • **Can they recognise if all metals are conductors of electricity?** • **Can they work out which metals can be used to connect across a gap in a circuit?** • **Can they explain why cautions are necessary for working safely with electricity?**
Year 5	
Year 6	• Can they identify and name the basic parts of a simple electric series circuit? (cells, wires, bulbs, switches, buzzers) • Can they compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers, the on/off position of switches? • Can they use recognised symbols when representing a simple circuit in a diagram? **Challenge** • **Can they make their own traffic light system or something similar?** • **Can they explain the danger of short circuits?** • **Can they explain what a fuse is?** • **Can they explain how to make changes in a circuit?** • **Can they explain the impact of changes in a circuit?** • **Can they explain the effect of changing the voltage of a battery?**