

Topic Plan

Year 4 Autumn 2 – A lightbulb moment!		
Key Skills	Key Facts	Key Vocabulary
<ul style="list-style-type: none"> • Gather, record, classify and present data in a variety of ways to help in answering questions • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. • Describe how people have been affected by changes in the environment. 	<ul style="list-style-type: none"> • In about 600 BC, the Ancient Greeks discovered that rubbing fur on amber (fossilized tree resin) caused an attraction between the two • In 1752, Ben Franklin conducted his experiment with a kite, a key, and a storm. This simply proved that lightning and tiny electric sparks were the same thing. • Edison and British scientist Joseph Swan who each invented the incandescent filament light bulb in their respective countries in about 1878. • Renewable energy sources, like wind and solar power, generated over a third of the UK's electricity in 2019. 	<ul style="list-style-type: none"> • Electricity – the flow of an electric current or charge through a material, e.g. from a power source through wires to an appliance. • Appliances – a piece of equipment or device designed to perform a particular job, such as washing machine or mobile phone. • Generate – to make or produce. • Renewable – a source of electricity that will not run out. • Non-renewable – this source of energy will eventually run out and so will no longer be able to make electricity. • Battery – a device that stores electrical energy as a chemical. • Circuit – a pathway that electricity can flow around. It includes wires, a power supply and may include bulbs, switches or buzzers.
Key Figures/Places	Reading and Writing Links	
<ul style="list-style-type: none"> • Benjamin Franklin – drew similarities between lightning and electric sparks. • Thomas Edison – perfected the first long lasting, effective filament light bulb. • Lincs Wind Farm – a local wind farm located 8 km away from Skegness 	<p>Writing:</p> <ul style="list-style-type: none"> - Newspapers - Letters <p>Grammar – alliteration, expanded noun phrases, similes, time connectives and adverbs.</p> <p>Reading – Class text for guided reading. – ‘Boot, small robot, big adventure’ by Shane Hegarty. We are developing the children’s ability to infer and extract information from a text within school. To support this, it is vital that the children are reading at least 5 times per week at home for 30 minutes. They should record this in their reading record and ask an adult from home to initial it.</p>	

