
























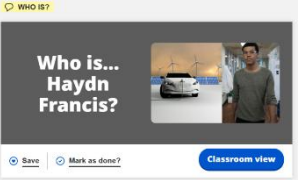






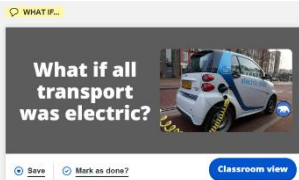







Science Learning Objectives and Enquiries, Year 6, 2024-25









Year 6

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Autumn Term		Spring Term		Summer Terms	
Industrial Revolutions	Heart Beaters	Brazil, Biomes and Urbanisation		Transatlantic Slave Trade	
Electricity	Animals Including Humans	Living Things and their Habitats	Light	Evolution and Inheritance	
<p>Lesson 1 DE LO: Create a simple electrical circuit and identify components from their symbol and definition WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: What components are needed to create a simple electrical circuit?</p> 	<p>Lesson 1 LO: Describe the structure and function of the heart WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: What is the role of a heart? READING</p> 	<p>Lesson 1 LO: Group examples of animals, plants and fungi/micro-organisms. WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: How can we group living things?</p> 	<p>Lesson 1 LO: Understand how to draw a scientific diagram that helps support what you have found out WS: Record data and results of increasing complexity using scientific diagrams and labels • Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: How does a light travel?</p> 	<p>Lesson 1 LO: Understand how offspring vary and are not identical to their parents WS: • Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results - in oral and written forms such as displays and other presentations</p>	
<p>Lesson 2 DE LO: Describe how the brightness of a bulb is affected by the voltage/number of cells WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Enquiry: Does voltage affect brightness of a bulb?</p> 	<p>Lesson 2 LO: Define the function of different blood vessels WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: How can we classify different blood vessels?</p> 	<p>Lesson 2 & 3 LO: Make a dichotomous key and use it to classify organisms. WS: Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: How can we use a dichotomous key to classify organisms?</p> 	<p>Lesson 2 LO: Label the main parts of the human eye and explain their functions. Eye Dissection WS: Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: What are the parts of an eye?</p> 	<p>Lesson 2 LO: Identify how animals are adapted to suit their environment WS: • Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results - in oral and written forms such as displays and other presentations Enquiry: How an animal adapt to survive in a specific environment?</p> 	
<p>Lesson 3 DE LO: Use technology to create online circuits WS: Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results - in oral and written forms such as displays and other presentations Enquiry: What do we need to include to be able to create a broken circuit?</p> 	<p>Lesson 3 LO: Describe the composition of the blood WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: What is blood made out of?</p> 	<p>Lesson 4 LO: Describe some characteristics of invertebrates found in gardens, parks and woodland. WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: What invertebrates can we find in our local area?</p> 	<p>Lesson 3 & 4 LO: Understand how to set up a fair test and carry it out LO: Understand that light is reflected off of surfaces so that we can see it WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Enquiry: What is the reflectivity of different surfaces?</p> 	<p>Lesson 3 LO: Explain how a plant's adaptation helps it to survive in the habitat WS: • Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results - in oral and written forms such as displays and other presentations Enquiry: How a plant's adaptation helps it to survive in the habitat?</p> 	

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<p>Lesson 4 LO: Design and conduct an investigation; identify possible variables WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Enquiry: Investigate the effect of adding more motors and buzzers to a circuit.</p> 	<p>Lesson 4 LO: <u>Heart dissection</u> WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs Enquiry: How can we identify and classify the different chambers of a heart?</p> 	<p>Lesson 5 LO: Create an imaginary creature or living organism WS: Reporting and presenting findings from enquiries</p> 	<p>Lesson 5 & 6 LO: Understand how to make a periscope to reflect an image LO: Understand how to explain how an unseen image can be seen using a scientific diagram WS: Record data and results of increasing complexity using scientific diagrams and labels Enquiry: How are periscopes useful?</p> 	<p>Lesson 4 LO: Use evidence from fossils to suggest some conclusions about life in the past WS: Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: What can we learn about the past from fossils?</p> 
<p>Lesson 5 LO: Investigate if the temperature of a light bulb goes up the longer it is on WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Using test results to make predictions to set up further comparative and fair tests; Enquiry: Do temperature of a light bulb goes up the longest it stays on?</p> 	<p>Lesson 5 LO: Design an investigation associated with heart rate, diet and exercise WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary WS: • Taking measurements and using a range of scientific equipment with increasing accuracy and precision; Enquiry: What does affect your heart rate?</p> 	<p>Lesson 6 LO: Know and explain that microorganisms are both helpful and harmful – yeast WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary WS: • Taking measurements and using a range of scientific equipment with increasing accuracy and precision; Enquiry: What are the best conditions for yeast to grow?</p> 	<p>Lesson 7 LO: Understand the basics behind how light is refracted, how a rainbow is made and what happens when light hits a bubble WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Using test results to make predictions to set up further comparative and fair tests; Enquiry: How is light use other than for us to see?</p> 	<p>Lesson 5 LO: Explain if there is a pattern between the size and shape of a bird's beak and the food it will eat WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Enquiry: Why do you think birds have different types of beaks?</p> 
<p>Lesson 6 SDGs  </p>	<p>Lesson 6 LO: Describe the impact of drugs and alcohol on health WS: Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results - in oral and written forms such as displays and other presentations Enquiry: What is the impact of drugs and alcohol on our health? READING</p> 	<p>Lesson 7 LO: Investigate how mould grows WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary WS: Reporting and presenting findings from enquiries - Enquiry: What conditions causes mould to grow?</p> 	<p>Lesson 8 LO: Understand the basics behind how light is refracted, how a rainbow is made and what happens when light hits a bubble WS: Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Using test results to make predictions to set up further comparative and fair tests; Enquiry: How is light use other than for us to see?</p> 	<p>Lesson 6 LO: Describe how natural selection causes living things to evolve over time WS: Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: How natural selection causes living things to evolve over time</p> 
<p>Lesson 7 SDGs   </p>	<p>Lesson 7 LO: Describe the effects of smoking WS: Reporting and presenting findings from enquiries - Enquiry: What is the impact of smoking on our health? READING</p> 	<p>Lesson 8  </p>	<p>Lesson 9-10 LO: Understand that shadows change length depending on how far away they are from a light source LO: Understand how to collect data WS: Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs WS: • Taking measurements and using a range of scientific equipment with increasing accuracy and precision; Enquiry: How does my shadow change over the day?</p> 	<p>Lesson 7 LO: Describe how humans have evolved WS: Identifying scientific evidence that has been used to support or refute ideas or arguments Enquiry: How did humans evolve?</p> 

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	<p>Lesson 8</p>  <p>THE BIG QUESTION</p> <p>What is a balanced diet for us and the planet?</p>  <p>Save Mark as done? Classroom view</p>	<p>Lesson 9</p>  <p>WHAT'S GOING ON?</p> <p>Fantastic fibres</p>  <p>Save Mark as done? Classroom view</p>	<p>Lesson 11</p>  <p>PROBLEM SOLVERS</p> <p>Light up the dark</p> <p>A creative construction task which asks your class to make a skylight using a range of different materials.</p>  <p>Save Mark as done? Classroom view</p>	<p>Lesson 8</p>  <p>WHO IS?</p> <p>Who is... Mary Anning?</p>  <p>Save Mark as done? Classroom view</p>
<p>Assessment Test from Developing Experts Skills assessed during enquiries</p>	<p>Assessment Test from Developing Experts Skills assessed during enquiries</p>	<p>Assessment Test from Developing Experts Skills assessed during enquiries</p>	<p>Assessment Test from Developing Experts Skills assessed during enquiries</p>	<p>Assessment Test from Developing Experts Skills assessed during enquiries</p>