



# Science: Year 4

This guide leads to full coverage of the 2019 Cayman Islands National Curriculum for Science including the content and working scientifically skills. Find all of the science resources centrally on the [“Teaching Resources Science for NC2019”](#) area in the “Files” area of your school’s “Teams” team.

Sequence	NC Content and Skills (bullet points correspond directly to FFT)	In-School Resources	External Resources
<p><b>Autumn 1</b></p> <p>Completed by October half-term break</p>	<p><b>Electricity:</b></p> <ul style="list-style-type: none"> <li>identify common appliances that run on electricity</li> <li>construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>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</li> <li>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>recognise some common conductors and insulators, and associate metals with being good conductors</li> </ul> <p><b>Working scientifically skills:</b> (Task 1: Electrical Circuits)</p> <ul style="list-style-type: none"> <li>6. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 1: Electrical Circuits Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books (<i>Note: This legacy resource does not match the current curriculum year-for-year</i>) <ul style="list-style-type: none"> <li>What is a circuit (Y2 p68)</li> <li>How to build a circuit (Y2 p70)</li> <li>Switches (Y2 p72)</li> <li>Build your own switch (Y2 p72)</li> <li>Electrical circuits (Y4 p72)</li> <li>Building circuits (Y4 p72)</li> <li>Why won’t it work? (Y4 p74)</li> <li>Electrical current (Y4 p76)</li> <li>Investigate conductors (Y6 p76)</li> <li>Conductors and insulators (Y6 p78)</li> <li>Metals are good conductors (Y6 p80)</li> <li>Conductors and insulators in use (Y6 p82)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2 Electricity</p> <p><b>Big Cat Science Readers</b> Robots (Blue) How Does It Work? (Gold) Wind Power (Topaz)</p>	<p><a href="#">Hamilton Trust “It’s Electric”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">National Energy Policy</a></p> <p><a href="#">Caribbean Utilities Company</a></p>
<p><b>Autumn 2</b></p> <p>Completed by Christmas holidays</p>	<p><b>States of Matter:</b></p> <ul style="list-style-type: none"> <li>compare and group materials together, according to whether they are solids, liquids or gases</li> <li>observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) (and Fahrenheit)</li> <li>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</li> </ul> <p><b>Working scientifically skills:</b> (Task 2: Melting Ice)</p> <ul style="list-style-type: none"> <li>2. Setting up simple practical enquiries, comparative and fair tests</li> <li>8. Identifying differences, similarities or changes related to simple scientific ideas and processes</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 2: Melting Ice Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books (<i>Note: This legacy resource does not match the current curriculum year-for-year</i>) <ul style="list-style-type: none"> <li>States of matter (Y4 p54)</li> <li>Water (Y4 p42)</li> <li>Heating matter (Y4 p44)</li> <li>Cooling matter (Y4 p46)</li> <li>Liquid to gas (Y4 p48)</li> <li>Gas to liquid (Y4 p50)</li> <li>Solids, liquids and gases (Y5 p30)</li> <li>Liquid to gas – evaporation (Y5 p32)</li> <li>Gas to liquid – condensation (Y5 p34)</li> <li>Water vapour in the air (Y5 p36)</li> <li>The water cycle (Y5 p38)</li> <li>Boiling and freezing (Y5 p40)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2 Properties of Materials Changing Materials</p> <p><b>Big Cat Science Readers</b> Breath (Topaz) The Water Cycle (Ruby)</p>	<p><a href="#">Hamilton Trust “States of Matter Scientists”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">National Weather Service</a></p> <p><a href="#">Water Authority</a></p> <p><a href="#">Department of Agriculture</a></p> <p><a href="#">Department of the Environment</a></p>

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<p><b>Spring 1</b></p> <p>Completed by February half-term break</p>	<p><b>Sound:</b></p> <ul style="list-style-type: none"> <li>• identify how sounds are made, associating some of them with something vibrating</li> <li>• recognise that vibrations from sounds travel through a medium to the ear</li> <li>• find patterns between the pitch of a sound and features of the object that produced it</li> <li>• find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>• recognise that sounds get fainter as the distance from the sound source increases</li> </ul> <p><b>Working scientifically skills:</b> (Task 3: Sound)</p> <ul style="list-style-type: none"> <li>• 1. Asking relevant questions and using different types of scientific enquiries to answer them</li> <li>• 9: Using straightforward scientific evidence to answer questions or to support their findings</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>• Guide and Examples</li> <li>• Skills Assessment Task 3: Sound Skills video explanation</li> <li>• Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>• Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>○ How sounds are made (Y4 p54)</li> <li>○ Measuring sound (Y4 p56)</li> <li>○ Sound travels through various materials (Y4 p58)</li> <li>○ Reducing sound levels (Y4 p60)</li> <li>○ Soundproofing materials (Y4 p62)</li> <li>○ Musical instruments (Y4 p64)</li> <li>○ Pitch (Y4 p66)</li> <li>○ Changing the pitch of an instrument (Y4 p68)</li> </ul> </li> <li>• Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2</p> <p><b>Big Cat Science Readers</b> Sounds (Blue) I’ve Just Had a Bright Idea (Green) Your Senses (White) Your Brain (Emerald) Code Making, Code Breaking (Emerald)</p>	<p><a href="#">Hamilton Trust “Listen Up!”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Cayman National Choir and Orchestra</a></p>
<p><b>Spring 2</b></p> <p>Completed by Easter holidays</p>	<p><b>Living things and their habitats:</b></p> <ul style="list-style-type: none"> <li>• recognise that living things can be grouped in a variety of ways</li> <li>• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> </ul> <p><b>Working scientifically skills:</b> (Task 4: Lizards and Snakes)</p> <ul style="list-style-type: none"> <li>• 4. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• 5. Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>• Guide and Examples</li> <li>• Skills Assessment Task 4: Lizards and Snakes Skills video explanation</li> <li>• Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>• Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>○ Classifying living things 1 (Y3 p40)</li> <li>○ Classifying living things 2 (Y3 p42)</li> <li>○ Identifying and grouping animals (Y4 p30)</li> <li>○ Using identification keys (Y4 p32)</li> </ul> </li> <li>• Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2 Life Cycles</p> <p><b>Big Cat Science Readers</b> What’s inside (Red A) The Oak Tree (Red B) Water Bears (Yellow) What’s Underground (Blue) Why Can’t Humans Fly? (White) Fabulous Creatures – Are They Real? (Lime) Mega Plants (Copper) Plants, Pollen and Pollinators (Topaz) Evolution (Ruby) The Incredible Life of David Attenborough (Sapphire) Creatures From the Past (Diamond) The Story of the Wolf (Diamond) The Mysterious World of Micro-organisms (Pearl) Coral Reefs (Pearl) Linnaeus: Organising Nature (Pearl) Charles Darwin and Alfred Russel Wallace (Pearl)</p>	<p><a href="#">Hamilton Trust “Name That Living Thing”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Department of Agriculture</a></p> <p><a href="#">Cayman Islands National Museum</a></p> <p><a href="#">Central Caribbean Marine Institute</a></p> <p><a href="#">Department of the Environment</a></p> <p><a href="#">Mangrove Rangers</a></p> <p><a href="#">National Trust for the Cayman Islands</a></p> <p><a href="#">Queen Elizabeth II Royal Botanic Park</a></p> <p><a href="#">Guy Harvey Ocean Foundation</a></p>

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<p><b>Summer 1</b></p> <p>Completed by Discovery Day in May</p>	<p><b>Animals, including humans:</b></p> <ul style="list-style-type: none"> <li>describe the simple functions of the basic parts of the digestive system in humans</li> <li>identify the different types of teeth in humans and their simple functions</li> <li>construct and interpret a variety of food chains, identifying producers, predators and prey</li> </ul> <p><b>Working scientifically skills:</b> (Task 5: Tooth Decay)</p> <ul style="list-style-type: none"> <li>3. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard unit, using a range of equipment, including thermometers and data loggers</li> <li>7. Using results to draw simple conclusions, make predictions for new values, suggest improvements to raise further questions</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Skills Assessment Task 5: Tooth Decay Skills video explanation</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>The digestive system (Y6 p16)</li> <li>Feeding relationships (Y6 p30)</li> <li>Producers and consumers (Y6 p32)</li> <li>More about feeding relationships (Y6 p34)</li> <li>Food chains in different habitats (Y6 p36)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2 PSHE Life Cycles</p> <p><b>Big Cat Science Readers</b> Teeth (Pink A) The Digestive System (Purple) Food Chains (Ruby)</p>	<p><a href="#">Hamilton Trust “Are These Your Teeth?”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Health City Cayman Islands</a></p> <p><a href="#">Health Services Authority</a></p> <p><a href="#">Central Caribbean Marine Institute</a></p> <p><a href="#">Department of the Environment</a></p> <p><a href="#">Mangrove Rangers</a></p> <p><a href="#">National Trust for the Cayman Islands</a></p> <p><a href="#">Guy Harvey Ocean Foundation</a></p>
<p><b>Summer 2</b></p> <p>Completed by Summer holidays</p>	<p><b>Animals, including humans:</b></p> <ul style="list-style-type: none"> <li>recognise that environments can change and that this can sometimes pose dangers to living things</li> </ul>	<p><b>Teams: “Year 4” folder</b></p> <ul style="list-style-type: none"> <li>Guide and Examples</li> <li>Scheme of Work (Hamilton) Topic Sheet Videos (BBC)</li> </ul> <p><b>Teams: “All years” folder</b></p> <ul style="list-style-type: none"> <li>Collins IP Science Books <i>(Note: This legacy resource does not match the current curriculum year-for-year)</i> <ul style="list-style-type: none"> <li>Caring for the environment (Y2 p14) <ul style="list-style-type: none"> <li>What can you do? (Y2 p16)</li> <li>Making a difference (Y2 p18)</li> </ul> </li> <li>The importance of the environment (Y4 p24)</li> <li>Human activity and the environment (Y4 p34)</li> <li>Waste and recycling (Y4 p36)</li> <li>Humans and the environment (Y6 p24)</li> <li>Humans can have a positive impact (Y6 p26)</li> <li>What can you do? (Y6 p28)</li> </ul> </li> <li>Science Equipment manual with scans</li> </ul> <p><b>Kit Boxes</b> Science Investigations KS2 Life Cycles</p> <p><b>Big Cat Science Readers</b> The Oak Tree (Red B) Water Bears (Yellow) What’s Underground (Blue) The Life Cycle of a Polar Bear (Ruby) Evolution (Ruby) The Incredible Life of David Attenborough (Sapphire) Life Cycles (Sapphire) The Life Cycle of the Orca (Sapphire) Creatures From the Past (Diamond) The Story of the Wolf (Diamond) The Mysterious World of Micro-organisms (Pearl) Coral Reefs (Pearl) A Time Traveller’s Guide to the Future (Pearl)</p>	<p><a href="#">Hamilton Trust “Help Our Habitats!”</a></p> <p><a href="#">STEM Learning</a></p> <p><a href="#">Department of Agriculture</a></p> <p><a href="#">Cayman Islands National Museum</a></p> <p><a href="#">Central Caribbean Marine Institute</a></p> <p><a href="#">Department of the Environment</a></p> <p><a href="#">Mangrove Rangers</a></p> <p><a href="#">National Trust for the Cayman Islands</a></p> <p><a href="#">Queen Elizabeth II Royal Botanic Park</a></p> <p><a href="#">Guy Harvey Ocean Foundation</a></p>