



Science: Year 6

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>Autumn 1</p> <p>Completed by October half-term break</p>	<p>Light:</p> <ul style="list-style-type: none"> recognise that light appears to travel in straight lines use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <p>Working scientifically skills: (Task 1: Light in Straight Lines)</p> <ul style="list-style-type: none"> Reporting and presenting findings from enquiries, including conclusions, causal relationships, and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> Guide and Examples Skills Assessment Task 1: Light in Straight Lines Skills video explanation Scheme of Work (Hamilton) Topic Sheet Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> 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"> Making shadows (Y5 p48) Shadows outside (Y5 p50) Changing the size of a shadow (Y5 p52) Recording shadows (Y5 p54) Materials and light (Y5 p56) Playing with light and materials (Y5 p58) Can we measure light? (Y5 p60) When do we measure light intensity? (Y5 p62) Seeing light (Y5 p64) Reflecting light (Y5 p66) Reflecting and absorbing light (Y5 p68) Changing the direction of light (Y5 p70) Science Equipment manual with scans <p>Kit Boxes Science Investigations KS2 Light</p> <p>Big Cat Science Readers Your Sense (White) Light (Diamond)</p>	<p>Hamilton Trust “Crime Lab Investigation”</p> <p>STEM Learning</p> <p>Cayman Islands Astronomical Society</p> <p>timeanddate.com (Sun and Moon times)</p>
<p>Autumn 2</p> <p>Completed by Christmas holidays</p>	<p>Electricity:</p> <ul style="list-style-type: none"> associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches use recognised symbols when representing a simple circuit in a diagram <p>Working scientifically skills: (Task 2: Electrical Circuits)</p> <ul style="list-style-type: none"> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> Guide and Examples Skills Assessment Task 2: Electrical Circuits Skills video explanation Scheme of Work (Hamilton) Topic Sheet Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> 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"> Circuit diagrams (Y6 p74) Investigate conductors (Y6 p76) Changing circuits (Y6 p84) Changing components (Y6 p86) Science Equipment manual with scans <p>Kit Boxes Science Investigations KS2 Electricity</p> <p>Big Cat Science Readers I’ve Just Had a Bright Idea (Green) How Does It Work? (Gold) Code Making, Code Breaking (Emerald)</p>	<p>Hamilton Trust “Electric Celebrations”</p> <p>STEM Learning</p> <p>Caribbean Utilities Company</p> <p>National Energy Policy</p>

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<p>Spring 1</p> <p>Completed by February half-term break</p>	<p>Living things and their habitats:</p> <ul style="list-style-type: none"> describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals give reasons for classifying plants and animals based on specific characteristics <p>Working scientifically skills: (Task 3: Cayman Plants)</p> <ul style="list-style-type: none"> 3. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> Guide and Examples Skills Assessment Task 3: Cayman Plants Skills video explanation Scheme of Work (Hamilton) Topic Sheet Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> 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"> Classifying living things 1 (Y3 p40) Classifying living things 2 (Y3 p42) Identifying and grouping animals (Y4 p30) Using identification keys (Y4 p32) Science Equipment manual with scans <p>Kit Boxes</p> <p>Science Investigations KS2 Life Cycles</p> <p>Big Cat Science Readers</p> <p>Fabulous Creatures – Are They Real? (Lime) Mega Plants (Copper) Evolution (Ruby) The Incredible Life of David Attenborough (Sapphire) Creatures From the Past (Diamond) The Mysterious World of Micro-organisms (Pearl) Coral Reefs (Pearl) Linnaeus: Organising Nature (Pearl) Charles Darwin and Alfred Russel Wallace (Pearl)</p>	<p>Hamilton Trust “Classification Connoisseurs”</p> <p>STEM Learning</p> <p>Department of Agriculture</p> <p>Central Caribbean Marine Institute</p> <p>National Trust for the Cayman Islands</p> <p>Department of the Environment</p> <p>Mangrove Rangers</p> <p>Mosquito Research and Control Unit</p> <p>Queen Elizabeth II Botanic Park</p> <p>Turtle Centre</p> <p>Guy Harvey Ocean Foundation</p>
<p>Spring 2</p> <p>Completed by Easter holidays</p>	<p>Adaptation and inheritance:</p> <ul style="list-style-type: none"> recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution <p>Working scientifically skills: (Task 4: Beak Adaptations)</p> <ul style="list-style-type: none"> 4. Using test results to make predictions to set up further comparative and fair tests 6. Identifying scientific evidence that has been used to support or refute ideas or arguments 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> Guide and Examples Skills Assessment Task 4: Beak Adaptations Skills video explanation Scheme of Work (Hamilton) Topic Sheet Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> 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"> Plants in different environments (Y2 p6) Animals in different environments (Y2 p8) Adapting to different habitats (Y4 p26) Science Equipment manual with scans <p>Kit Boxes</p> <p>Science Investigations KS2 Life Cycles Earth Science</p> <p>Big Cat Science Readers</p> <p>Fossils (White) Fabulous Creatures – Are They Real? (Lime) A Finder’s Guide to Rocks, Fossils and Soils (Topaz) Evolution (Ruby) Creatures From the Past (Diamond) The Mysterious World of Micro-organisms (Pearl) Coral Reefs (Pearl) Linnaeus: Organising Nature (Pearl) Charles Darwin and Alfred Russel Wallace (Pearl)</p>	<p>Hamilton Trust “The Game of Survival”</p> <p>STEM Learning</p> <p>Department of Agriculture</p> <p>Central Caribbean Marine Institute</p> <p>National Trust for the Cayman Islands</p> <p>Department of the Environment</p> <p>Mangrove Rangers</p> <p>Mosquito Research and Control Unit</p> <p>Queen Elizabeth II Botanic Park</p> <p>Turtle Centre</p> <p>Guy Harvey Ocean Foundation</p>

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<p>Summer 1</p> <p>Completed by Discovery Day in May</p>	<p>Animals, including humans:</p> <ul style="list-style-type: none"> • identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • describe the ways in which nutrients and water are transported within animals, including humans. <p>Working scientifically skills: (Task 5: Heart Rate)</p> <ul style="list-style-type: none"> • 2. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> • Guide and Examples • Skills Assessment Task 5: Heart Rate Skills video explanation • Scheme of Work (Hamilton) Topic Sheet Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> • 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"> ○ Drugs and medicines (Y4 p18) ○ Different medicines (Y4 p20) ○ The human body (Y6 p2) ○ Major organs (Y6 p4) ○ Body systems (Y6 p6) ○ Locating major organs (Y6 p8) ○ The circulatory system and the heart (Y6 p12) ○ Essential functions of the major organs (y6 p20) • Science Equipment manual with scans <p>Kit Boxes Science Investigations KS2 PSHE Our Body</p> <p>Big Cat Science Readers The Digestive System (Purple) Why Can’t Humans Fly? (White) Blood (Lime) Breath (Topaz) Surgery Through Time (Ruby)</p>	<p>Hamilton Trust “The Art of Being Human”</p> <p>STEM Learning</p> <p>Health City Cayman Islands</p> <p>Health Services Authority</p>
<p>Summer 2</p> <p>Completed by Summer holidays</p>	<p>Integrated topics:</p> <ul style="list-style-type: none"> • refer to individual the lesson plans for specific curriculum references if using the Hamilton Trust scheme of work linked to the theme of “the science of sport” 	<p>Teams: “Year 6” folder</p> <ul style="list-style-type: none"> • Scheme of Work (Hamilton) Videos (BBC) <p>Teams: “All years” folder</p> <ul style="list-style-type: none"> • 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"> ○ Various references from earlier in the year • Science Equipment manual with scans <p>Kit Boxes Science Investigations KS2 Our Body Forces</p> <p>Big Cat Science Readers Pushing and Pulling (Pink A) Bones (Red B) Growing and Changing (Blue) Sounds (Blue) I’ve Just Had a Bright Idea (Green) The Digestive System (Purple) How Does It Work? (Gold) Your Senses (White) Why Can’t Humans Fly? (White) Blood (Lime) Breath (Topaz) Surgery Through Time (Ruby) Evolution (Ruby) Your Brain (Emerald) Code Making, Code Breaking (Emerald) Life Cycles (Sapphire) A Time Traveller’s Guide to the Future (Pearl)</p>	<p>Hamilton Trust “The Science of Sport”</p> <p>STEM Learning</p> <p>Health Services Authority</p> <p>Health City Cayman Islands</p> <p>Ministry of Youth, Sports, Culture & Heritage</p>