



Engineering Computing

A map of DTECS

Whole School	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<u>Topic</u>	<u></u>	<u> </u>	<u></u>	<u> =</u>	<u></u>	<u></u>	<u> </u>	<u></u>
Autumn 1 EY-I wonder what is special about where I live? Where in the world is Beeston?	Seasonal Change/Materials Food: Making porridge/cake in Goldilocks story Computer Science: Simple City Programme: Make your own Beeston Creating with Materials: Building our homes John	Seasonal Change + Senses Now Press. Play- Seasons Creating with Materials: Building our homes- Bushcraft John Simple City Programme: Make your own Beeston	Seasonal Change and Humans and Senses Moving Pictures- sliders and wheels- Beeston as a story setting. Unit 1.4-Lego Builders Unit 1.5- Maze explorers	Animals including humans Effective searching and creating pictures (searching for information and pictures on animals)	Light and shadows – reflection, light travelling and shadows Design and make a puppet for a shadow play Photography editing in art Coding Graphing	Living things and their habitats: What type of organisms live in our local habitat. Bushcraft John – Minibeast hunt Looking at different leaves from the trees in the school grounds. Information Technology – Searching information	Earth and Space Make rockets with bushcraft John (link to English in Autumn 2 for the book Cosmic) Computer Science- Coding	Electricity
Autumn 2 (-I wonder what we telebrate and why? Let's Celebrate!	Computer Science: Drawing Maps 2 paint a picture programme: Rangoli patterns. Design and make a christmas bauble for the school's christmas tree. Design and make Rangoli patterns- stay and play with parents	Design and make Rangoli patterns- stay and play with parents Design and make a christmas bauble for the school's christmas tree. Computer Science: Drawing Maps 2 paint a picture programme: Rangoli patterns	Seasonal Change-Materials Slingshots with Bushcraft John-toys with Bushcraft John-Making bridges to test strength of materials. Unit 1.2- Grouping and sorting. Unit 1.3- Pictograms Design and make a christmas bauble for the school's christmas tree.	Classifying and grouping materials Now Press Play - Materials Waterproof testing for everyday materials - Bushcraft John Design and make a christmas bauble for the school's christmas tree.	Rocks and soils — describing rocks and classifying them, rock cycle and how soil is made Design and make a Christmas bauble for the christmas tree Now Press Play — Stone Age Spreadsheets Typing skills Development of Stone Age hunting tools — Bushcraft	DT Dioramas to celebrate climate Engineering - Levers and linkages, Animal food chains: What factors are impacting food chains visit local park to see impact on food chains. Design and make a christmas bauble for the school's christmas tree.	Properties and changes of materials. Chn taste a range of tea and make their own tea bag. Information technology- 3D Modelling and concept maps. Design and make a christmas bauble for the school's christmas tree.	Light Design and make a christmas bauble for the school's christmas tree.

A map of DTECS

Spring 1 EY-I wonder what I vas like as a baby? Can you travel in time?	Materials/Forces Information Technology: Using technology to draw, make marks and colour		Seasonal Change Hibernation Habitats Building freestanding hedgehog houses out of construction materials. Unit 1.6- Animated Story books	Everyday, changes for materials — Making our own recycled paper and constructed our own roads.	Forces and Magnets - push and pull forces, friction, poles and reactions, magnet strength Design a game involving a magnet Design and make a reading cushion Email Egyptian pulleys and moving large stones - Bushcraft	States of Matter – Bushcraft John – Shaking cream to make a solid. Melting ice and boiling water. Water cycle experiment using icecubes, foil trays and hairspray. Compuitng – E- safety – persuasive leaflets (Englsh)	Information technology- Word processing	Evolution and inheritance
Spring 2 EY-I wonder how things grow and change? Let's be curious!	STEM week Plants and Animals Structures: Andy Goldsworthy: Making plant structures Creating with Materials: Andy Goldsworthy- Bushcraft John- making plant structures Trip to the farm Information Technology: Using technology to draw, make marks and colour	STEM week Food from Africa linked to Handa's suprise Design and make African jewellery Plants and Animals- growing plants and animals from different cultures Design and making habitats for different animals around the world	STEM week Seasonal Change and Plants Unit 1.8- Spreadsheets Typing Skills	Plants – Ipads to record how plants change over time. Photo diary. Plants – Dips and diippers DT making dips and recognising the different parts of the plant that we eat.	STEM week Forces and magnets – push and pull forces, friction, poles and reactions, magnet strength Design a game involving a magnet Presenting Now Press Play – Ancient Greeks	STEM week Why is each component important in a circuit? - creating working, circuits Effective Searching DT - Make a torch	STEM week Animals including humans- Links with PSHE (Puberty) Lights- Using information technology to make lights - PSHE SEND product Information technology- Spread sheets	STEM week Living things and their habitats Can we make a bag Spreadsheets
Summer 1 EY- Nursery- I wonder what happens when? eception- "I wonder everywhere in the orld is the same" Freestyle	Changing States Bushcraft John- making smores to see the change in materials Exploration:Floating Sinking/melting/ heating Digital Literacy: How to navigate a simple computer program	Melting animals out of ice Design and make igloos out of different materials.	Seasonal Change Smoothie making- Cooking and Nutrition Unit 1.7 Coding	Plants – Plant search with Bushcraft John	Plants – functions of plant parts, reproduction, plant needs, seed dispersal types. Cut and join together nets to make a cube. Simulations Branching Databases. Planting vegetables and recognising plant species – Bushcraft	Cooking and Nutrition Pizzas Bushcraft John — Bread	Living things and their habitats Structures- Isambard Brunel- building a bridge in class with paper cups and with Bushcraft John using twigs Computer Science-Game Creator Unit 5.2 Online Safety	Working scientificall Quizzing Networks

A map of DTECS

									
					PSHE – healthy eating Now Press Play – Plants and Volcanoes				
Summer 2 EY-I wonder who inspires me? Moving on up!	Digital Literacy: How to navigate a simple computer program Litter picking to become reuse collectors and compare the materials found.	Design and make London Bridges linked to the story The Queen's Hat Design and make the Queen's hat	Animals Unit 1.9- Tech Outside School Creating with Materials:- natural sculptures with Bushcraft John	Living things in their habitats Making animal quizzes on 2quiz	Skeletons and muscle - nutrients needed for animals and humans, naming bones, muscles and bones creating movement Design and make a healthy wrap Flood survival - Bushcraft Beebot simulators	How is sound produced and why do we hear different pitches and volume. DT - Making string telephones Information Technology - Using tablets to record sound. Research.	Forces Levers and linkages. Experimenting with pulleys and levers. Bushcraft Jon shows children how to lift the big stones in the playground. Food Technology-Making pasta sauces (could like to PSHE - healthy eating choices and PE for keeping fit) Computer Science-Microbit Project	Animals including humans: circulatory system What is a healthy alternative meal?	