



Launch Day:

Trips/Visitors:

Literacy topics/Guided Reading Book/Texts:

	Science	History	Geography	Art	DT	Computing	Music	RE	PE
Prior knowledge	<u>Early Learning Goal: Understanding the World:</u> <u>The natural world</u> Children know about similarities and differences in relation to places, objects, materials and living things. • (Year 1) - Distinguish between an object and the material from which it is made • describe the simple physical properties of a variety of everyday materials (hard/soft, stretchy/stiff, shiny/dull, waterproof/non-waterproof, opaque/see-through) • (Year 4) - identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • 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 • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and	N/A	<u>Early Learning Goal: Understanding the World:</u> <u>The natural world</u> Explore the natural world around them making observations Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class • (Year 2) - Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key • (Year 3) - South American countries grow fair trade crops such as chocolate. • How to locate regions where cacao beans are grown. • Most of the world's cocoa is grown in a narrow belt 10 degrees either side of the equator. • (Year 5) - Know about changes to world environments over time. • Identify the world's climate zones.	N/A	• (Year 4) – Pupils start to understand how simple electrical circuits work • Pupils understand that there are reasons why visual and auditory systems might be used • (Year 5) - Pupils understand how a simple circuit works • Pupils understand the functions of different parts of a circuit • Pupils recognise that electricity can be generated in different ways	• (Year 3) – How to build a physical circuit for a Crumble • What events and actions in programs are • How to create a program to create a sequence of actions • How to sequence actions correctly to produce a physical output • How to identify and fix bugs in a program • How to design and create a project with a real-life output • (Year 4) – How to create a Crumble circuit with multiple outputs (Two lights/motor in sequence) • How to create a sequence that alternates commands e.g. changing light colours • How to develop the use of loops in a different programming environment • That in programming there are infinite loops and count controlled loops • How to develop a design that includes loops • How to design a project that includes repetition • (Year 5) – Selection in physical computing • How to control a simple circuit connected to a computer	See music curriculum map	• (EYFS) - Recognise and retell stories connected with celebration of Easter • Say why Easter is a special time for Christians • (Year 2) - Recognise that Incarnation and Salvation are part of a ‘big story’ of the Bible • Tell stories of Holy Week and Easter from the Bible and recognise a link with the idea of Salvation (Jesus rescuing people) • Give at least three examples of how Christians show their beliefs about Jesus’ death and resurrection in church worship at Easter • Think, talk and ask questions about whether the story of Easter only has something to say to Christians, or if it has anything to say to pupils about sadness, hope or heaven, exploring different ideas and giving a good reason for their ideas. • (Year 4) - Recognise the word ‘Salvation’, and that Christians believe Jesus came to ‘save’ or ‘rescue’ people, e.g. by showing them how to live • Offer informed suggestions about	

	associate metals with being good conductors. • (Year 5) - compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets					• How to write a program that includes count-controlled loops • That a loop can stop when a condition is met • That a loop can be used to repeatedly check whether a condition has been met • How to design a physical project that includes selection • How to create a program that controls a physical computing project • (Year 6) - A ‘variable’ as something that is changeable • Why a variable is used in a program • How to improve a game by using variables		what the events of Holy Week mean to Christians • Give examples of what Christians say about the importance of the events of Holy Week • Make simple links between the Gospel accounts and how Christians mark the Easter events in their communities • Describe how Christians show their beliefs about Jesus in worship in different ways • (Year 5) Explain the place of Incarnation and Messiah within the ‘big story’ of the Bible • Identify Gospel and prophecy texts, using technical terms • Explain connections between biblical texts, Incarnation and Messiah, using theological terms • Show how Christians put their beliefs about Jesus’ Incarnation into practice in different ways in celebrating Christmas • Comment on how the idea that Jesus is the Messiah makes sense in the wider story of the Bible • Make links with sources of authority that tell people how to be good (e.g. Christian ideas of ‘being made in the image of God’ but ‘fallen’, and Humanists saying people can be ‘good without God’)	
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Knowledge	Key Question: How can you change the power of a circuit and what impact does this have on the components being used? The children will know: • The brightness of a lamp or the volume of a buzzer is linked with the number and voltage of cells used in the circuit • Reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • Recognised symbols when representing a simple circuit in a diagram		Key Question: The children will know: • Key aspects of human geography including types of settlement and land use, economic activity, including trade links and the distribution of natural resources including energy, food, minerals and water		Key Question: The children will know: <u>Electrical systems:</u> <u>Programmable systems</u> Potential project idea – Building a robotic buggy to transport resources, which uses a Crumble to allow programming of instructions and responses. • Pupils are aware that some robots need to work independently of human control • Pupils understand coding language to program actions in a device • Pupils select devices to perform appropriate actions in their electrical system	Key Question: The children will know: • Sensing movement • How to create a program to run on a controllable device • That selection can control the flow of a program • How to update a variable with a user input • To use a conditional statement to compare a variable to a value • How to design a project that uses inputs and outputs on a controllable device	See music curriculum map Key Question: The children will know: •	Christianity - God Key Question: U2.5 What do Christians believe Jesus did to ‘save’ people? The children will know: Make sense of belief: • Outline the ‘big story’ of the Bible, explaining how Incarnation and Salvation fit within it • Explain what Christians mean when they say that Jesus’ death was a sacrifice Understand the impact: • Make clear connections between the Christian belief in Jesus’ death as a sacrifice and how Christians celebrate Holy Communion/Lord’s Supper • Show how Christians put their beliefs into practice in different ways Make connections: • Weigh up the value and impact of ideas of sacrifice in their own lives and the world today • Articulate their own responses to the idea of sacrifice, recognising different points of view	https://peplanning.org.uk/
Skills	Children will be able to: • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking		Children will be able to: • Ask questions such as ‘How does it compare to other places? What feature does it have?’ • Recognise that people differing quality of life living in different locations and environments. • Describe how people have been affected by changes in the environment.		The children will be able to: Design • Pupils confidently use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. • Pupils generate, develop, model and communicate their ideas through discussion,	Children will be able to: • Apply knowledge of programming to a new environment • Test a program on an emulator • Transfer a program to a controllable device • Determine the flow of a program using selection • Use a variable in an if, then, else statement to select	Children will be able to: •	Children will be able to: •	Children will be able to: •

	repeat readings where necessary • Use test results to make predictions to set up further comparative and fair tests • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs		• Explain about key natural resources for example water in the locality. • Plan the steps and strategies for an enquiry.		annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and Computer-Aided Design (CAD). • Pupils accurately apply a range of finishing techniques, including those from art and design. • Pupils confidently draw up a specification for their design- link with Mathematics and Science. • Plan the order of their work, choosing appropriate materials, tools and techniques. • Pupils suggest alternative methods of making if the first attempts fail. • Identify the strengths and areas for development in their ideas and products. • Pupils know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose. • Pupils use market research to inform plans. • Pupils suggest ideas about how their product could be sold and work within a given budget. Make • Pupils confidently select appropriate tools, materials, components and techniques and use them with accuracy. • Pupils aim to make and to achieve a quality product. • Pupils demonstrate when to make	the flow of a program • Experiment with different physical inputs • Explain that checking a variable doesn't change its value • Use a condition to change a variable • Explain the importance of the order of conditions in else, if statements • Modify a program to achieve a different outcome • Use an operand (e.g. <=>) in an if, then statement • Decide what variables to include in a project • Design the algorithm for a project • Test a program against a design • Use a range of approaches to find and fix bugs			
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					modifications as they go along. • Pupils know how to combine complex electrical circuits (series circuits with switches, bulbs, buzzers and motors) and components to create functional products. • Pupils use finishing techniques to strengthen and improve the appearance of their product using a range of equipment. • Pupils use their understanding of computing to program, monitor and control their products. Evaluate • Pupils evaluate their products, identifying strengths and areas for development, and carry out appropriate tests. • Pupils evaluate their work continuously both during and at the end of the assignment and frequently seek evaluation from others. • Pupils record their evaluations using drawings with labels. • Pupils discuss how key events and individuals have helped shape the world through design.				
Components (teaching sequence)	• I can understand the impact of adding cells to a circuit. • I can plan an experiment in order to record the impact of adding cells to a circuit. • I can take measurements		• I can Topic outcome:		• I can Topic outcome/product brief:	• I can Topic outcome:	• I can Topic outcome:	• I can I can explain how incarnation and salvation fit within the Bible • I can explain what Christians mean when they say that Jesus’ death was a sacrifice • I can make connections between the Christian idea of	• I can Topic outcome:

	and record my findings using scientific language. - I can use my test results to make a prediction. - I can use diagrams to create circuits and explain the result. Topic outcome:							sacrifice and the celebration of Holy Communion - I can weigh up the value and impact of sacrifice in my own life and the world today - I can explain my thoughts about the idea of sacrifice, recognising different points of view Topic outcome:	
Key Vocabulary	Cell Cathode Anode Electrolyte Circuit Circuit diagram Circuit symbol Current Voltage							Incarnation Salvation Sacrifice Apostle Messiah Sin Holy Communion	