BISHOP CREIGHTON ACADEMY – THE LEARNING JOURNEY OF A YEAR 4 SUPERHERO

BISHOP CREIGHTON ACADEMY

	YEAR 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Core subjects	**Maths**	**Place value** • count in multiples of 6, 7, 9, 25 and 1000 • count backwards through zero to include negative numbers • identify, represent and estimate numbers using different representations • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value • find 1000 more or less than a given number • recognise the place value of each digit in a four-digit number (Th, H, T, O) • order and compare numbers beyond 1000	**Addition and subtraction** • add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate • solve addition and subtraction twostep problems in contexts, deciding which operations and methods to use and why **Area** • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares **Multiplication and division (A)** • recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations	**Multiplication and division (B)** •multiply two-digit and three-digit numbers by a one-digit number using formal written layout • solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to objects **Perimeter and area** • measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares	**Fractions** • count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten • recognise and show, using diagrams, families of common equivalent fractions • add and subtract fractions with the same denominator • solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number **Decimals (A)** •recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to 1/4 , 1/2 , 3/4 • round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places	**Decimals (B)** • solve simple measure and money problems involving fractions and decimals to two decimal places **Money** • estimate, compare and calculate different measures, including money in pounds and pence **Time** • read, write and convert time between analogue and digital 12- and 24-hour clocks • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	**Shape** • compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify lines of symmetry in 2-D shapes presented in different orientations • identify acute and obtuse angles and compare and order angles up to two right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry **Statistics** • interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs • solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs **Position and Direction** • describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon
	Writing	**Entertain:** Narrative **Persuade:** Persuasive speech **Entertain:** Poetry – free verse	**Inform:** Explanations **Entertain:** Narrative	**Inform:** Newspaper reports **Persuade:** Travel leaflets	**Entertain:** Narrative **Entertain:** Poetry – Haiku	**Persuade:** Persuasive letters **Inform:** Non-chronological report	**Entertain:** Poetry **Entertain:** Narrative **Entertain:** Poetry
	Science	**Digestion and food** • using models, describe the function of key organs in the digestive system. • identify the types of human teeth to create a model and investigate factors that impact our dental health. •compare human teeth to other animals' and consider this in the light of prior knowledge about predators, prey and food chains. • take on the role of a naturalist investigating animal faeces for clues about diet, digestion and dentition	**Electricity and circuits** • explore appliances that use electricity in their setting • learn how to work with electricity safely and build circuits. • investigate electrical conductors and insulators and explore the relationship between the number of bulbs and bulb brightness. • understand scientific progression and home safety through real scenarios and historical discoveries.	**States of matter** • investigate the properties of solids, liquids and gases • learn about the different states of matter. • explore changes of state using relatable examples and use this to explain changes to water through the water cycle • investigate the relationship between temperature and rate of evaporation while broadening their experience of working scientifically.	**Sound and vibrations** • explore different ways of producing sounds • learn about the relationship between vibrations and what they hear. • study dolphins and whales to develop understanding of how sound travels between objects and investigate the role of insulation to protect our ears. • explore how pitch and volume can be altered and make their own musical instruments to demonstrate these principles	**Classification and changing habitats** • identify different ways living things can be grouped • make classification keys to explore which grouping methods are most effective. • study ways that habitats may change over time and understand that humans can have both positive and negative effects on their surroundings. • play the role of naturalists and review the impact of conservation programmes	**How does the flow of liquids compare?** • consider methods for measuring how liquids flow differently from each other. · plan and execute an enquiry, considering different ways of representing data to support a conclusion. • ρevisit the digestive system and explore how the flow of different liquids should be considered when producing different medicines.
Foundation subjects	**Geography**		**Why are rainforests important to us?** • focus on the link between biomes and climate and locate the Amazon rainforest and explain how the vegetation in a tropical rainforest is defined by the two Tropics • investigate the physical features and layers of the Amazon rainforest, considering how plants adapt to these conditions • learn about the people who live in the rainforest and discuss the impact of human activity locally and globally		**Where does our food come from?** •look at the distribution of the world's biomes and map food imports from around the world •learn about trading fairly with a specific focus on Côte d'Ivoire and cocoa beans •explore where the food for their school dinners comes from and the pros and cons of local versus global		**What are rivers and how are they formed?** • develop an understanding of the water cycle by investigating and recording different weather phenomena • map out the world's major rivers and learn about the features and courses of a river • study a local river as fieldwork and learn about ways in which humans interact with and use rivers locally and in a contrasting environment
	History	**How have children's lives changed?** • investigate the changes in children's lives through time and learn how spare		**British History 3: How hard was it to invade and settle in Britain?**		**British History 3: How did the achievements of the Maya civilisation influence their society and beyond**	

BISHOP CREIGHTON ACADEMY – THE LEARNING JOURNEY OF A YEAR 4 SUPERHERO

BISHOP CREIGHTON ACADEMY

		time, children's health and work have changed • explore the most crucial change - work - in more detail, learning about a day in the life of a working child before learning about the significance of Lord Shaftesbury and his impact on schools and working conditions		• develop an understanding of why people invade and settle • learn about the Anglo-Saxon invasion and Viking raids • learn about Anglo-Saxon beliefs and how Christianity spread • investigate Anglo-Saxon settlements and investigate how the period of Anglo-Saxon rule came to an end		• investigate historical and archaeological evidence, children explore the achievements of ancient people like the Maya • make inferences and observing artefacts, they study the Ancient Maya's settlements in rainforests the cultural significance of chocolate and the impact of their beliefs	
	Computing		**Computing systems and networks** • understand that software can be used to work offline collaboratively • understand how to create a digital survey • create and share a Microsoft form • analyse data **Programming 1** • understand how a Scratch game works by using decomposition to identify key features • recognise what a variable is • create a quiz using variables		**Data handling** • log data taken from online sources in a spreadsheet • design an automated machine to respond to sensor data • understand how weather forecasts are made **Online safety** • describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy • describe some of the methods used to encourage people to buy things online • explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs use		**Online safety** • explain that technology can be designed to act like or impersonate living things • explain how technology can be a distraction and identify when I might need to limit the amount of time spent using technology **Programming 2** • understand that computational thinking is made up of four key strands • understand what decomposition is and how to apply it to solve problems • understand what pattern recognition and abstraction mean • understand how to create an algorithm and what it can be used for • combine computational thinking skills to solve a problem
	Art & Design	**Drawings: Power prints** • use everyday electrical items as a starting point • develop an awareness of composition in drawing • combine media for effect to develop a drawing into a print.		**Painting and mixed media: Light and dark** • develop colour mixing skills • use shades and tints to show form and create three dimensions when painting • learn about composition • plan their own still life to paint, applying chosen techniques		**Craft and design: Fabric of nature** • use flora and fauna of tropical rainforests as a starting point • develop drawings through experimentation • explore textile-based techniques to design a repeating pattern suitable for fabric	
	Design & Technology		**Frame Structures: Pavilions (Aut 2)** • Explore a range of pavilion structures, finding out about their materials, construction, and purpose. • Investigate how to create strong and stable frame structures by reinforcing corners and selecting appropriate materials. • Design and create a stable, decorated pavilion structure for a specific client.		**Mechanical systems: Make a slingshot car (Spr 2)** • Design and make a car with a working slingshot mechanism. • Use a range of nets to create structures to house the mechanism. • Explore different shapes to reduce air resistance. • Conduct a trial accurately and draw conclusions and make improvements from the results.		**Electrical systems: Torches (Sum 2)** • Identify the difference between electrical and electronic products. • Evaluate a range of torches and their features. • Develop a new functioning torch with a switch, applying their scientific understanding of electrical circuits. • Create suitable designs and their own success criteria, giving consideration to the target audience.
	PSHE	**Family and relationships** • Families in the UK and around the world; roles related to bullying (including victim, bully, bystander)	**Family and relationships** • Courtesy and manners; stereotypes related to disability; feelings around bereavement or big life changes **Health and wellbeing** • Dental health; visualisation; skills for different jobs	**Health and wellbeing** • Experiencing a range of emotions; mental health is emotional wellbeing rather than physical; looking after own/other's mental health and getting support **Safety and the changing body** • Risks to sharing online; private Vs public when online; risks of smoking; physical changes in bodies from child to adult; asthma	**Citizenship** • Human rights; protecting human rights; role of local councillors	**Citizenship** • Benefits to the environment on reusing items; groups that make up the local community **Economic wellbeing** • Getting value for money; purchases influenced by needs, wants, peer pressure, advertising; interest earned on bank accounts	**Economic wellbeing** • Changing jobs; stereotypes in society **Transition** • Setting goals to help achieve something
	PE	**Teacher – Yoga** **YDP – Quicksticks**	**Teacher – Gymnastics** **YDP – Dodgeball**	**Teacher – Swimming** **YDP – Football**	**Teacher – Swimming** **YDP – Tennis**	**Teacher – Dance – Eco warrior** **YDP – Athletics**	**Teacher – OAA** **YDP – Kwik cricket**

BISHOP CREIGHTON ACADEMY – THE LEARNING JOURNEY OF A YEAR 4 SUPERHERO

BISHOP CREIGHTON ACADEMY

	Music	**Body and tuned percussion** • identify the structure of a piece of music • have an idea as to when there is one layer in a piece of music and when there are two • play a sequence in the correct order in time with their partner • have two contrasting rhythms being played together • have a complete piece of music with four different layers with an appropriate structure	**Haiku, music and performance** • suggest suitable words to describe their time outdoors, changing the sounds of their words to match their meanings • recognise, name and describe the effect of the interrelated dimensions of music • select instruments and sounds which match their vocabulary • work as a group to create a piece of music • perform a piece of music as part of a group	**Music Hub – WCIT**	**Music Hub - WCIT**	**Samba and carinval sounds and instruments** • explain what samba music is and that it is mainly percussion instruments used in celebrations such as Carnival in Brazil • clap on the off beat and be able to play a syncopated rhythm • play their rhythm in time with the rest of their group (even if they are not always successfully playing in time with the rest of the class) • play their break in time with the rest of their group and play in the correct place • play in time and with confidence; accurately playing their break	**Changes in pitch, temp and dynamics** • sing in tune and in harmony with others, with developing breath control • explain how a piece of music makes them feel with some use of musical technology • perform a vocal ostinato in time • listen to other members of their group as they perform • create an ostinato and represent it on paper so that they can remember it • create and perform a piece with a variety of ostinatos