

	Autumn		Spring	Summer
N	You and Me Challenge: How can we show and tell? The children will make papier-mâché decorations to sell. They will construct with a purpose in mind, using a variety of resources. Context: Enterprise		Me and My School Challenge: How can we organise a parade for our families around our school? The children will be making an Easter Bonnet to show off in their Easter Bonnet parade. They will manipulate materials to achieve a planned effect. Context: Culture	Me and my Friends Challenge: How can we make some friends that are further away? Children will be designing and making plant pots. They will use simple tools and techniques competently and appropriately. Context: Gardens and Playgrounds
	The Big Adventure How can we share our Big Adventure? VPPA Bake Off – whole school Cooking and Nutrition challenge	A New Adventure Challenge: How can we tell a story? Children use different materials to make props to help tell their stories. They manipulate different materials to achieve a planned effect. Context: Culture	A Real World Challenge: How can we recognise those that help us? The children understand that different media can be combined to make new effects by making decorations for their tea party. They use an introduction to food to make food and drinks for their tea party. Context: Local Community and Food	A Magical World Challenge: How can we explore our outdoors and make it really magical? The children select the right materials and techniques to turn selected outdoor areas into a magical event. They explore which sounds can make it magical and experiment with colour, design, texture and form. Context: Culture and School
1	The Big Adventure How can we share our Big Adventure? <u>COOKING AND NUTRITION</u> Design, make and evaluate a fruit salad using fruits from South Africa (mango/papaya/peach) for the VPPA Bake Off – whole school challenge. The children will understand where a range of fruit and vegetables come from. They will understand how fruit and vegetables are part of <i>The Eatwell Plate</i> . They will use simple utensils and equipment to peel, cut, slice, squeeze, grate and chop safely. Context: Culture	Comics Can... Challenge: Publish a comic book celebrating heroes and villains from different times and places. <u>TEXTILES – TEMPLATES AND JOINING TECHNIQUES</u> Design, make and evaluate a superhero cape for their teddy bears for the Comic Con event. The children will select from and use a range of tools to mark out, cut, join and finish. Context: Enterprise	Far Far Away Challenge: How can we produce a soundtrack for a traditional tale? <u>MECHANISMS – SLIDERS AND LEVERS</u> Design, make and evaluate a pop-up book for Nursery to use in Storytime. The children will use simple sliders and levers to create moving pictures. Context: Community	Buckets and Spades Challenge: Plan and design a gallery that brings the seaside to the city <u>FREESTANDING STRUCTURES</u> Design, make and evaluate a seaside model for the Seaside Gallery. The children will make sandcastles, piers, fun fair rides, etc. using a range of materials (polystyrene cups, Modroc, reclaimed materials, construction kits) and use simple finishing techniques suitable for the structure they are creating. Context: Community
2	The Big Adventure How can we share our Big Adventure? <u>COOKING AND NUTRITION</u> Design, make and evaluate Paratha (Punjabi Potato Cakes) from India for the VPPA Bake Off – whole school challenge. The children will understand where a range of food comes from. They will understand how vegetables are part of <i>The Eatwell Plate</i> . They will use simple utensils and equipment to peel, cut, slice, squeeze, grate and chop safely. Context: Culture	Sparks will Fly Challenge: How can we tell the story of fire creatively? <u>STRUCTURES – FREESTANDING</u> Design, make and evaluate Tudor Houses for a Great Fire of London display. The children will select and use tools and new/reclaimed materials to build their structures, using simple finishing techniques suitable for the structure they are creating.	Up, Up and Away Challenge: How can we make something fly/move? <u>MECHANISMS – WHEELS AND AXLES</u> Design, make and evaluate a moon buggy, using wheels and axles, for a toy space man to travel on the moon. The children will select from and use a range of materials and components such as paper, card, plastic and wood, performing practical tasks such as cutting and joining to allow movement and finishing. Context: Culture	The Really Rural Show Challenge: How can we recreate the countryside in our city environment? <u>COOKING AND NUTRITION</u> Design, make and evaluate a range of food products (bread, jams, pickles) for people to buy at The Really Rural Show. The children will measure, prepare and combine ingredients, using a variety of techniques – peeling, cutting, slicing, grating, squeezing, mixing, rubbing, and kneading. They will make, decorate and present the food products appropriately for the intended user and purpose. Context: Enterprise

		Context: Community		
3	<p>The Big Adventure How can we share our Big Adventure? COOKING AND NUTRITION Design, make and evaluate a food product from China (e.g. spring rolls) for the VPPA Bake Off – whole school challenge. The children will select and use appropriate utensils and equipment to prepare and combine fresh/processed ingredients – grating, peeling, spreading and cutting using the bridge and claw techniques. They will understand the importance of a healthy and varied diet. Context: Culture</p>	<p>Around the World in 80 Beats Challenge: <i>Compose an album of songs of the world</i></p> <p>SHELL STRUCTURES Design, make and evaluate packaging for the music CD they have created. The children will select appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. They will develop knowledge of nets of shapes and stiffening and strengthening sheet materials (laminating, corrugating and ribbing). Context: Enterprise</p>	<p>A Day at the Museum Challenge: <i>How can we run our own pop-up museum?</i></p> <p>TEXTILES – 2D SHAPE TO 3D PRODUCT Design, make and evaluate purses/wallets/iPhone holders to sell at the pop-up museum. The children will measure, tape, pin, cut, join and finish products using appropriate tools and materials. They will use a range of joining techniques – back stitch, backward running stitch, over sew stitch, blanket stitch and running stitch. Context: Community and Enterprise</p>	<p>Dinosaur Stomp! Challenge: <i>How can we bring dinosaurs back to life creatively?</i></p> <p>MECHANICAL SYSTEMS – LEVERS AND LINKAGES Design, make and evaluate a dinosaur animation using levers and linkages. The children make a moving dinosaur using levers and linkages with fixed and loose pivots. They will use annotated sketches and prototypes to develop, model and communicate ideas. Context: Community</p>
4	<p>The Big Adventure How can we share our Big Adventure? COOKING AND NUTRITION Design, make and evaluate a food product from Spain (e.g. salad snacks, toasties, tapas) for the VPPA Bake Off – whole school challenge. The children will select and use appropriate utensils and equipment to prepare and combine fresh/processed ingredients – boiling, roasting, grating, peeling, spreading, cutting using the bridge and claw techniques. They will understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Context: Culture</p>	<p>Bolts n Bones Challenge: <i>How can we design a fitness program?</i></p> <p>STRUCTURES Design, make and evaluate a skull and bones using Modroc. The children generate ideas and produce labelled drawings. They select appropriate tools and techniques to mark out, measure and shape materials. They join materials in different ways. They will look at healthy food linked to the body. Context: Home and School</p>	<p>Time Traveller Challenge: <i>How can you produce a short movie on the history of the world?</i></p> <p>STRUCTURES Children make a short video clip about the Egyptians/Vikings/Anglo-Saxons using simple graphical communication techniques. They will design, make and evaluate a death mask. They will generate realistic ideas focusing on the needs of the user and purpose of the product. They will develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas. Context: Home and School</p>	<p>Crazy Contraptions Challenge: <i>Can we design and make a product which solves a problem?</i></p> <p>ELECTRICAL SYSTEMS – SIMPLE CIRCUITS AND SYSTEMS Design, make and evaluate a product using electricity that solves a problem for someone (e.g. reading light, nightlight, hands-free head lamp, buzzer for school office, siren for toy vehicle). The children will select from and use materials and components, including construction materials and electrical components (bulbs, handmade switches, commercial switches – ‘push-to-break/push-to-make, toggle switch and reed switches) according to their functional properties and aesthetic qualities. Context: Community</p>
5	<p>The Big Adventure How can we share our Big Adventure? COOKING AND NUTRITION Design, make and evaluate a food product from Australia (e.g. cheese and vegemite scrolls, Anzac biscuits, banana damper, lamingtons) for the VPPA Bake Off – whole school challenge. The children will select and use appropriate utensils and equipment to accurately weigh/measure, prepare and combine ingredients – mixing, rubbing, kneading, grating, peeling, spreading and cutting using the bridge and claw techniques. They will use heat sources to prepare and cook food. They will understand seasonality in relation to food products and the source of different food products.</p>	<p>Space Infinity Challenge: <i>How can we produce a Space game?</i></p> <p>ELECTRICAL SYSTEMS – MORE COMPLEX SWITCHES AND CIRCUITS Design, make and evaluate space shuttles using complex switches and circuits (latching switch, micro-switch, light-dependent resistor, tilt switch, control boxes). The children will look at key advances in people, events and turning points linked to Design and Technology.</p>	<p>Changemakers Challenge: <i>How can we celebrate our diverse community?</i></p> <p>COOKING AND NUTRITION Design, make and evaluate a savoury dish for their celebration. The children will use their knowledge of ingredients and healthy eating, using blends and flavours from the diverse community (linked to the Ballot Street Challenge). They will use words, annotated sketches and information communication technology as appropriate to develop and communicate ideas. Context: The Wider Community</p>	<p>Castle Attack! Challenge: <i>How can you re-enact a Castle attack?</i></p> <p>MECHANICAL SYSTEMS – PULLEYS AND GEARS Design, make and evaluate props and displays, using pulleys and gears, for their reenactment. This may include working models or items that can be used as part of the replica. They focus on the design process and the technical knowledge for making. They formulate step-by-step plans and allocate tasks within a team. They learn to work within the constraints of time, resources and cost. Context: School and Culture</p>

	Context: Culture	Context: Industry / The Wider Environment		
6	<p>The Big Adventure How can we share our Big Adventure? <u>COOKING AND NUTRITION</u> Design, make and evaluate an authentic war time food product from France/Germany/Russia/North America for the VPPA Bake Off – whole school challenge. The children will select and use appropriate utensils and equipment to accurately weigh/measure, prepare and combine ingredients – mixing, rubbing, kneading, grating, peeling, spreading and cutting using the bridge and claw techniques. They will use heat sources to prepare and cook food. They will understand seasonality in relation to food products and the source of different food products. Context: Culture</p>	<p>Ballot Street Challenge: Produce and launch the next Ballot Street Product</p>	<p>Goblin and Ghouls Challenge: Create our own chronicles <u>ELECTRICAL SYSTEMS – MORE COMPLEX SWITCHES AND CIRCUITS</u> Design, make and evaluate a Goblin trap using lights/buzzers and sensors. They work to communicate their ideas through detailed labeled drawings and to develop a design specification. They explore, develop and communicate aspects of their design proposals by modeling their ideas in a variety of ways and work to select appropriate tools, materials, components and techniques. Context: Community and Enterprise</p>	<p>The Final Countdown Challenge: How can we set up a VPA events company? <u>TEXTILES – COMBINING DIFFERENT FABRIC SHAPES</u> Design, make and evaluate clothing for their final events. The children will explore a range of possible fasteners – zip, Velcro, ties, toggles, clasps, press studs, buttons. They will use a variety of stitches stem, chain, satin and lazy daisy. They will also apply different surface decoration techniques – embroidery, cross stitch and appliqué. Children undertake work linked to their events including: display/design work to attract attention, decorations and layout design, invitations, catering, costume design and making. Context: Home/Enterprise</p>