

Rowley Park Academy

Design and Technology Overview

Year group		Autumn (12 wks)		Spring (12wks)		Summer (12wks)	
EYFS	Cycle 1	THE BIG PICNIC BAKE OFF WELLBEING – CLASS/SCHOOL COMMUNITY	<u>You and Me</u> How can we share our school experiences with our families? TEXT: EYFS - Big Adventure Picnic	<u>Let's Celebrate</u> How can we create a performance for our families? Hook Pumpkin Party Santa Visit	<u>Let's Visit</u> How can we show our families and friends the places we'd like to visit? Hook Mini Town	<u>Ship Ahoy!</u> How can we discover the history and secrets of the sea? Hook Pirate Day	<u>On Show</u> How can we retell a favourite story to our friends and families? Hook Puppet Show
	Cycle 2		<u>You and me</u> How can we share our school experiences with our families? TEXT: EYFS - Big Adventure Picnic	<u>Let's Celebrate</u> How can we create a performance for our families? Hook Pumpkin Party Santa Visit	<u>Say hello to Community Heroes</u> How can we say thank you to the people that help us? TEXTS: Hook Fire station/visit	<u>It's a Magical World</u> How can we transform an area of our school into a magical world? Hook Lichfield/Cannock chase fairy forest:	<u>We Love Books</u> How can we tell people about our favourite story? (Outcome: Nur. Become a favourite book character Rec. Rewrite a favourite book) Hook Telford Wonderland
	<p> Children in EYFS will have exposure to resources and teaching opportunities across the EYFS journey to enable them to work towards the early learning goals. These are not mapped across challenge packs as children's interests and child-initiated opportunities directs the learning. Fine Motor - Use a range of small tools, including scissors, paintbrushes and cutlery. • Begin to show accuracy and care when drawing. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used. </p> <p align="center">3-4 year olds:</p> <ul style="list-style-type: none"> • Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel. • Collaborate with others to manage large items, such as moving a long plank safely, carrying large hollow blocks. Use one-handed tools and equipment, for example, making snips in paper with scissors. • Use a comfortable grip with good control when holding pens and pencils. <p align="center">Reception:</p> <p> Learn new vocabulary. Articulate their ideas and thoughts in well-formed sentences. Show resilience and perseverance in the face of challenge. Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Return to and build on their previous learning, refining ideas and developing their ability to represent them Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. Create collaboratively sharing ideas, resources and skills. </p>						

Year 1/2 Cycle A	Through all year groups during the first 2 week bake off challenge the cooking and nutrition skills will be met planned for and demonstrated by children.	<p align="center"><u>Sparks Will Fly</u></p> <p>How can we teach our families to be safe at home? (History/Art/ICT)</p> <p>Children will design and create a Tudor house by selecting tools and materials to help them replicate a house on pudding lane during the great fire of London. They will compare this to a design that is representative of modern housing to see the impact the change of materials has had on design development – linking this to safety.</p> <p align="center">Hook</p> <p>Visit from the fire station/or to the fire station</p> <p align="center">Outcome</p> <p>Film</p>	<p align="center"><u>Heroes and Villians</u></p> <p><i>How can we share the impact of heroes past and present and inspire others to be heroes?</i> <i>(History/PSHE)</i></p> <p align="center">Hook</p> <p>Community Visitors/St John’s ambulance</p> <p align="center">Outcome</p> <p>Book....</p>	<p align="center"><u>Buckets, Spades and Umbrellas</u></p> <p>How can we make a product to use at the beach? (Geography/DT)</p> <p>Using their experience of the beach, children will create a product that can be used at the beach – they will test out materials and use their knowledge to select appropriate tools, materials and joining techniques that are best for the set task. They will plan their design and then evaluate their product.</p> <p align="center">Hook</p> <p>In school ‘beach day’ followed by an end of challenge pack visit to the seaside</p> <p align="center">Outcome</p> <p>Sharing their beach products – having a stand at the Summer Fair.</p>
		<p align="center">Coverage</p> <p>D1.1a, D1.3a, D1.3b</p>	<p align="center">Coverage</p>	<p align="center">Coverage</p> <p>D1.1a, D1.1b, D1.1c, D1.1d, D1.3a, D1.3b, D1.3c, d1.3d, D1.4a, D1.4c, D1.2b,</p>
Year1/2 Cycle B		<p align="center"><u>We Are Family</u></p> <p>How can we create a gallery of ourselves? (History/Art)</p> <p>Children will explore, design and make moving toys (roly polys) in this challenge pack. Children will explore toys old and new; making predictions and investigating travel, wheels size, joining techniques and materials. They will then use their knowledge to design, construct and test out the toy against their designs. Could have a hook challenge to DT – teams make your own marble run.</p> <p align="center">Hook</p> <p>Local Artist/Workshop/People in Portraits (Aston Hall)</p> <p align="center">Outcome</p> <p>Gallery</p>	<p align="center"><u>Really Rural, Utterly Urban</u></p> <p>How can we produce a locally sourced traditional breakfast for our family? (Geography/DT - Food)</p> <p>During this challenge pack, children will explore rural and urban locations and link learning to food production. Using knowledge gained, children will plan and produce a breakfast, sourcing their food locally and demonstrating their knowledge and understanding to their parents.</p> <p align="center">Hook</p> <p>Lower Drayton Farm/Supermarket Visit/visit to local butchers</p> <p align="center">Outcome</p> <p>Breakfast Picnic for family members.</p>	<p align="center"><u>Feeling hot, hot, hot or cold, cold, cold!</u></p> <p>How can we protect animals around the world? (Geography/Art)</p> <p align="center">Hook</p> <p>Safari Park</p> <p align="center">Outcome</p> <p>Fundraiser/Raise awareness Sponsored animal</p>
		<p align="center">Coverage</p> <p>D1.1a, D1.1b, D1.1d, D1.2a, D1.2b, D1.4a, D1.4b, D1.4b</p>	<p align="center">Coverage</p> <p>D1.5a, D1.5b, D1.5c, D1.5d, D1.5e, D1.5f</p>	<p align="center">Coverage</p>

Year 3/4 Cycle 1	Through all year groups during the first 2 week bake off challenge the cooking and nutrition skills will be met planned for and demonstrated by children.	<p align="center"><u>Catastrophe!</u> How can we help those affected by.....? (Geography/DT)</p> <p align="center">DT based shelter designs/protective element</p> <p align="center">Hook British Red Cross Introducing Emergencies/ Charity Visit/Freshwater Workshops</p> <p align="center">Outcome Charitable act to support community</p>	<p align="center"><u>History Detectives</u> How can we communicate who made the earliest changes to Britain? (History/Art/DT)</p> <p align="center">Some elements of their Museum in the box may require DT skills.</p> <p align="center">Hook BMAG Museum</p> <p align="center">Outcome Museum in a box</p>	<p align="center"><u>The Toymaker's Apprentice</u> How can we create a toy to encourage communication between younger children? (History/DT)</p> <p align="center">DT – Investigate and technically understand levers/pulleys/axels to make a toy.</p> <p align="center">Hook Toy Workshop/Childhood Museum</p> <p align="center">Outcome: Toy workshop with their identified class.</p>
Year 3/4 Cycle 2		Coverage D1.2a, D2.1bD2.4a. D2.4b, D2.4c	Coverage	Coverage D2.1b, D2.2a, D2.3a, D2.3b
Year 5/6 Cycle 1		<p align="center"><u>Around the World in 80 Beats</u> How can we represent music from around the world? (Geography/Music/Digital Art)</p> <p align="center">Hook Musical Experience</p> <p align="center">Outcome Musical performance</p>	<p align="center"><u>Deep Water</u> How can we have a positive impact on our waterways? (Geography/Art)</p> <p>Children will learn about the different types of bridges and use their learning to plan and design a prototype for the Bridge challenge – Create a prototype of a bridge idea to allow crossing of the river in forest school to share with Ms Lipton. Children build upon knowledge of investigate Strengthening, stiffening and reinforcing structures and use this to develop more complex structures.</p> <p align="center">Hook Visit to local waterway Canal Trip</p> <p align="center">Outcome Presentation/communication with the local council about improving local waterways.</p>	<p align="center"><u>It's All Greek to Me</u> How can we celebrate the legacies left by significant world civilisations? (History/Sport/Art)</p> <p align="center">Hook sports stadium/sports event/visiting sports men/women</p> <p align="center">Outcome Sporting Event</p>
		Coverage	Coverage D2.4a, D2.4b, D2.4c, D2.3a, D2.1b, D2.3b, D2.1b	Coverage
		<p align="center"><u>Lest We Forget</u> Can we transform an area of our community through 3 dimensional art so that we remember fallen heroes? (History/Geography)</p>	<p align="center"><u>The Power of Words - Literature Focus</u> Can we create an ebook to share with a partner school? (English)</p>	<p align="center">Year 5 Castle Attack! Can we engineer a piece of equipment to attack a castle? (Geography, History, DT)</p>

	<p>Through all year groups during the first 2 week bake off challenge the cooking and nutrition skills will be met planned for and demonstrated by children.</p>	<p>Hook Staffordshire Regimental Museum/Arboretum Army experience day</p> <p>Outcome Remembrance themed sculpture</p>	<p>Hook Author/Illustrator Visit</p> <p>Outcome ebook</p>	<p>Movement and mechanisms – levers/pulleys/gears atc....Launch objects, get through doors etc....</p> <p>Hook Local (Stafford) Castle</p> <p>Outcome Banquet inclusive of attacking a castle competition.</p> <p>Year 6 Let Us Entertain You Can we entertain an audience? (Art, Social Enterprise, Design, Music) TEXT: THE SCRIPT</p> <p>Hook Theatre/Backstage at the Theatre</p> <p>Outcome Performance</p>
		<p>Coverage</p>	<p>Coverage</p>	<p>Coverage Year 5 – D3.1a, D3.2a, D3.2b, D3.3a, D3.3b, D3.3c, D3.4a, D3.4b, D3.4c</p>
<p>Year 5/6 Cycle 2</p>		<p>Space Infinity! Can we code to create a space game? (History/Art/DT)</p> <p>Children will become Martian Explorers and investigate the question - how does the ExoMars Rover Work? (based on European Space Agency’s (ESA) new robotic rover Rosalind Franklin). They will understand the need for exploration robots, different types of motions and mechanisms and learn about how they function; including elements around design proposals, circuit diagrams, hydraulic and pneumatic systems. Creating and testing their own vehicles.</p> <p>Hook Planetarium and coding session</p> <p>Outcome Shared Space themed game</p>	<p>Food v Man Can we promote Fairtrade through a healthy tuckshop? (Geography/DT/History)</p> <p>Children will explore the theme of fair-trade and food and resource production and conditions. Using their knowledge, they will then as a group, plan and produce fair trade healthy tuckshop products for the rest of the school.– including skills such as carrying out cooking techniques and recipes.</p> <p>TEXT: THE RAINFOREST, THE EXPLORERS</p> <p>The Mayan Civilisation</p> <p>Hook Cadbury’s world</p> <p>Outcome To run a healthy tuckshop for the rest of the school.</p>	<p>Year 5 We Are Britain – Castle Attack! Can we engineer a piece of equipment to attack a castle? (Geography, History, DT)</p> <p>Hook Local (Stafford) Castle</p> <p>Outcome Banquet - Attacking a castle competition</p> <p>Year 6 Let Us Entertain You Can we entertain an audience? (Art, Social Enterprise, Design, Music) TEXT: THE SCRIPT</p> <p>Hook Theatre/Backstage at the Theatre</p> <p>Outcome Performance</p>

				Coverage
		Coverage D3.1a, D3.1c, D3.2b, D3.3a, D3.3b, D3.3c, D3.4a, D3.4b, D3.4c	Coverage D3.1b, D3.1c, D3.5a, D3.5b, D3.5c, D3.5d, D3.5e	