

DT Skills and Knowledge Progression

Nursery	
Knowledge	<p>For children to be able to construct with a purpose and safely (Au1/2) To know how to create recognisable representations of objects. (Sp1/2) To know that different construction toys can be used to make new things that can be used in pretend play. (Su1/2)</p> <p>Key vocabulary: bricks, balance, tall, wide, stack, tower, enclosure, build, join, stick, cut.</p>
Skills	<ul style="list-style-type: none"> •Uses various construction materials. (Au1) • Joins construction pieces together to build and balance. (Au2) •Beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces. (Sp1) •Realises tools can be used for a purpose. (Sp2) •Uses available resources to create props to support role-play. (Su1)
Intent, Impact and Implementation in the EYFS	<p>Aylward’s Intent: Our intent is for children to be able to use resources that are readily available to enhance their learning experiences through building and designing objects.</p>
	<p>Suggestions for implementation:</p> <ul style="list-style-type: none"> •Provide a place where work in progress can be kept safely. •Talk with children about where they can see models and plans in the environment, such as at the local planning office, in the town square, or at the new apartments down the road. •Demonstrate and teach skills and techniques associated with the things children are doing, for example, show them how to balance bricks so that they will not fall down.
	<p>Suggested questions to measure impact:</p> <p>What materials can we use to build..... What tools can we use to make.... Where does wood come from? What resources can you use to make.... How will you make</p>
	<p>Possible enrichment opportunities:</p> <p>Drama-based workshops Construction/Creation workshops Offer a variety of junk modelling materials</p>
Reception	
Knowledge	<p>For children to be able to safely construct with a purpose and evaluate their designs. For children to be able to safely construct with a purpose and evaluate their designs. (Au1) To learn the names of different tools and techniques that can be used to create Art. (Au2) To experiment with creating different things and to be able to talk about their uses. (Au2) To identify and select resources and tools to achieve a particular outcome. (Sp2)</p>

DT Skills and Knowledge Progression

	<p>To know the different uses and purposes of a range of media and materials. (Su1) To describe ways of safely using and exploring a variety of materials. (Su2) Selects tools and techniques needed to shape, assemble and join materials they are using. (Su2) Key vocabulary: bricks, balance, tall, wide, stack, tower, enclosure, build, join, stick, cut, design, modify, purpose, use, joins, edges, hammer, safely, tools, make.</p>	
Skills	<ul style="list-style-type: none"> • Uses simple tools and techniques competently and appropriately. (Au2) To use resources to create own props. (Sp1) Constructs with a purpose in mind, using a variety of resources. (Sp1) To plan, carry out and evaluate and change where necessary. (Sp2) Manipulates materials to achieve a planned effect. (Sp2) <p>To use what they have learnt about media and materials in an original way and be able to explain their choices. (Su1) Selects appropriate resources and adapts work where necessary. (Su1) They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (Su2)</p>	
Intent, Impact and Implementation in the EYFS	Aylward's Intent:	Our intent is for children to be able to use resources that are readily available to enhance their learning experiences through building and designing objects. Children will be able to evaluate their creations and think of ways to modify them if necessary to make them fit for purpose.
	Suggestions for implementation:	<ul style="list-style-type: none"> • Provide resources for joining things together and combining materials, demonstrating where appropriate. • Provide children with opportunities to use their skills and explore concepts and ideas through their representations. • Have a 'holding bay' where models and works can be retained for a period for children to enjoy, develop, or refer to. <p style="text-align: center;"><u>Early Learning Goal.</u> <u>Creating with Materials.</u></p> <p style="text-align: center;"><i>*Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</i></p> <p style="text-align: center;"><i>*Share their creations, explaining the process they have used.</i></p> <p style="text-align: center;"><i>*Make use of props and materials when role playing characters in narratives and stories.</i></p>
	Suggested questions to measure impact:	<p>What materials can we use to build.....</p> <p>What tools can we use to make....</p> <p>Where does wood come from?</p> <p>What resources can you use to make....</p> <p>How will you make</p>

DT Skills and Knowledge Progression

		<p>Early Learning Goal: Children explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p>Early Learning Goal: Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.</p>				
	Possible enrichment opportunities:	Offer a variety of materials, tools & joining materials to create junk modelling				
Year 1						
	Autumn 1		Spring 2		Summer 1	
	Cooking Create Smoothies		Textiles T-shirt prints		Construction Moving pictures	
Key Vocabulary	<i>Texture, taste, colour, names of tools; mortar and pestle, potato masher, blender, hand blender, healthy diet, varied diet, preparing, cutting, chopping, blending, recipe, hygiene</i>		<i>Printing, Potato printing, transfer, fabric paint, logo, design, paint, create, t-shirt</i>		<i>Picture, landmark, movement, mechanism; levers, sliders, wheels and axels, material, joining tools; glue, cellotape, tools; scissors, design, strong, stiff, stable, mock-up</i>	
Knowledge	<p><u>Design</u></p> <ul style="list-style-type: none"> - Understand basic principles of a healthy and varied diet - To think of interesting combinations of ingredients - Survey favourite fruits in class 	<p><u>Make</u></p> <ul style="list-style-type: none"> - Know the rules regarding how to cut food safely - Know the purpose of different tools e.g. mortar and pestle, cake mixer, potato masher, blender 	<p><u>Design</u></p> <ul style="list-style-type: none"> - Recognise that there are different ways to communicate an idea e.g. talking, drawing, 2Simple program 	<p><u>Make</u></p> <ul style="list-style-type: none"> - To know about different printing methods, potato printing, transfer, fabric pens 	<p><u>Design</u></p> <ul style="list-style-type: none"> - Can talk about the different landmarks - Can talk about the different movements and what mechanisms make it 	<p><u>Make</u></p> <ul style="list-style-type: none"> - Select from and use a wide range of material and components; split pins, lollipop sticks, boxes, spinner - Select from and use tools to join and finish; glue, scissors, cello tape

DT Skills and Knowledge Progression

	<p>Evaluate</p> <ul style="list-style-type: none"> - Describe textures of food - Evaluate the taste of different fruits - Evaluate the combinations of smoothies 	<p>Technical Knowledge</p> <ul style="list-style-type: none"> - Understand where food comes from - To understand why we must wash hands and make sure that surfaces are clean 	<p>Evaluate</p> <ul style="list-style-type: none"> - Explore ideas on existing products, such as logos, prints, designs - Evaluate their ideas and peers ideas against design criteria - Explain what designs they like and why. - Explain what tool is best for printing and why 	<p>Technical knowledge</p> <ul style="list-style-type: none"> - To know how each tool used to create print will last when dunked in water. 	<p>Evaluate</p> <ul style="list-style-type: none"> - Evaluate their mock up; what worked well and what didn't work well - Evaluate against their design criteria - Explain any changes that they made from original design 	<p>Technical knowledge</p> <ul style="list-style-type: none"> - To know about different mechanism, levers, sliders, wheels and axels. - To understand how you might make a design stronger, stiffer and more stable. - To understand how to make the design stable using other materials, cardboard.
<p>Suggestions for the development of greater depth:</p> <p>A1: Smoothies</p> <ul style="list-style-type: none"> - To adjust recipe based on taste - To look at and evaluate health factors <p>Sp2: T-shirt Prints</p> <ul style="list-style-type: none"> - To use a variety of materials/tools to create prints - To create print on an outfit- bottoms and top <p>Sum1: Moving Pictures</p> <ul style="list-style-type: none"> - Using more than one mechanism - Using a range of strong and stable materials 						
<p>Skills and Fieldwork</p>	<p>Skills taught in Aut1:</p> <ul style="list-style-type: none"> • Select from and safely use a range of tools and equipment to perform practical tasks such as cutting, chopping and blending (S1) 	<p>Skills taught in Sp2:</p> <ul style="list-style-type: none"> • Design a t-shirt for a specific user based on design criteria (S4) • Generate ideas through talking, drawing and technology (S5) 	<p>Skills taught in Sum 1:</p> <ul style="list-style-type: none"> • Generate, develop, model and communicate his/her ideas through mock-ups (S9) 			

DT Skills and Knowledge Progression

	<ul style="list-style-type: none"> Select and use healthy foods (S2) Evaluate his/her ideas and products against design criteria (S3) 	<ul style="list-style-type: none"> Select from and use a range of tools for e.g. cutting, shaping, joining and finishing. (S6) Select from and use a wide range of materials and components such as fabric and printing materials (S7) Evaluate his/her ideas and products against design criteria (S8) 	<ul style="list-style-type: none"> Select from and use a range of tools and equipment for cutting, shaping, joining and finishing (S10) Select from and use a wide range of materials and components (S11) Explore and evaluate a range of existing products (S12) Evaluate his/her ideas and products against design criteria (S13) Build a moving picture, exploring how it can be made stronger, stiffer and more stable (S14)
Autumn 1 Cooking Smoothies S1, S2, S3	Aylward's Intent:	<i>Aylward wants students to have an understanding of where food comes from, the nutritional benefits of different foods and experiment with different combinations that may appeal to them or their peers. We would like to give them the expertise to make healthy choices for themselves in their everyday lives.</i>	
	Suggestions for implementation:	<ul style="list-style-type: none"> Tasting different fruits and discussing whether they like them FPT - Find and follow a recipe discussing the different parts that it uses Look at the importance of hygiene and food handling. FPT – using different tools to cut and prepare fruits. Discuss which are the most appropriate Think of different combinations of fruits they could use in their smoothie Create their smoothie discussing their choice of fruits, tools, hygiene practises and choices to do so. 	
	Suggested questions to measure impact:	<i>Can you tell me where shops get their fruit? What is the journey of a strawberry from seed to stomach? What makes a healthy drink? What is your ideal smoothie? How do you make a smoothie?</i>	
	Possible enrichment opportunities:	Trip which could include; strawberry farm, local grocery store, farmers market, smoothie shop. Talks from superstores. Creating a blog about their smoothie. Looking at different recipe books.	

DT Skills and Knowledge Progression

Spring 2 Textiles T-Shirt Prints S4, S5, S6,S7, S8	Aylward's Intent:	Aylward wants students to be able to evaluate the design choices of products. By choosing their own designs for t-shirts and creating mock-ups they will be able to reflect on the choices they have made. They will also develop an understanding of user requirements such as making sure the design is waterproof.
	Suggestions for implementation:	<ul style="list-style-type: none"> ● Explore current t-shirt designs, discuss their favourite t-shirts from home ● FPT- Children to explore different printing resources; potato printing, transfer, fabric pens ● FPT- Children to explore different printing methods; transfer ● Children to use 2simple to create designs ● Children to spend time printing their t-shirt ● Reflect on their designs and suggest future improvements
	Suggested questions to measure impact:	<i>What are the different methods we could use for printing?</i> <i>What is the best method and why?</i> <i>What are the requirements of t-shirt designs?</i>
	Possible enrichment opportunities:	Fashion show for another class or key stage 1
Summer 1 Construction Moving Pictures S9, S10, S11, S12, S13, S14	Aylward's Intent:	Aylward wants students to understand the accurate use of mechanisms by creating a moving picture that uses a variety of mechanisms such as wheels and levers. They will evaluate their products against existing designs.
	Suggestions for implementation:	<ul style="list-style-type: none"> ● Explore existing moving pictures ● Explore different mechanisms (wheels, axles, and levers) ● Encourage children to think of their own moving picture to create- Can they create a moving picture to a story they have written or to a story read in class? ● Children to design their own moving picture- a sketch while labelling mechanisms that will be used ● Children to create their moving pictures (over 2+ lessons) ● Children to evaluate their own moving pictures against existing moving pictures/evaluate their peers'
	Suggested questions to measure impact:	<i>What mechanisms have you used for your moving picture? Why have you used that/those mechanisms?</i>
	Possible enrichment opportunities:	Writing a short paragraph/story to go along with their moving picture Invite the parents or another class in to see their moving pictures

DT Skills and Knowledge Progression

Year 2						
	Autumn 2		Spring 2		Summer 2	
	Construction Fire Truck		Textiles Punch and Judy Puppets/Chinese puppets		Cooking Seaside themed snack	
Key Vocabulary	<i>Design, movement, vehicle, functional, mock-up, tech card, cut, join, shape, tools, truck, stiff, strong, wheels & axels</i>		<i>Puppets, design, functional, features, mock-up, joining, cutting, sewing, running stitch</i>		<i>Healthy, snack, ingredients, select, tools; knife, peeler, cutting, blending, safety, appearance, taste, hygiene, balanced diet</i>	
Knowledge	<u>Design</u> -To consider a design criteria -To understand how to create a tester using tech card	<u>Make</u> -To choose materials based on their properties - To know the appropriate tools to join/stick	<u>Design</u> -To recognise different designs and functions of puppets -To think about different features that could be added to the puppet	<u>Make</u> -To know different ways to join materials together – glue, sew, cellotape, stapling	<u>Design</u> -Can discuss what they like to eat when they go to the seaside -To know interesting combinations of ingredients for their seaside themed snack	<u>Make</u> -To think of ideas for a snack that has a theme - Can identify the best tool/equipment to perform practical tasks (cutting, blending)
	<u>Evaluate</u> Evaluate functions of an existing truck Evaluate mock-up and whether they were able to move	<u>Technical Language</u> -To understand how to make structures stiffer and stronger	<u>Evaluate</u> -Evaluate the purpose of a sock puppet - To look at puppets from England and China	<u>Technical Language</u> - To know how to make eyes etc more secure to puppet	<u>Evaluate</u> - Evaluate different types of seaside themed snacks - Evaluate recipes and the health factor of the ingredients	<u>Technical Language</u> - To understand the importance of safety when handling tools & teach appropriate skills to use

DT Skills and Knowledge Progression

	Share thoughts of other people's designs.		- To recognise the differences and similarities between the countries		- Evaluate the look and taste of their finished product	- To know appropriate hygiene practises (i.e. hand washing, food handling)
<p>Suggestions for the development of greater depth:</p> <p>Aut2: Fire truck</p> <ul style="list-style-type: none"> - Creating a unique sound for their fire truck using their voice <p>Spr2: Puppets</p> <ul style="list-style-type: none"> - Using multiple joining strategies (i.e. multiple stitching techniques) <p>Sum2: Seaside-Themed Snack</p> <ul style="list-style-type: none"> - identifying health factors of their snacks (calories, sugars, fats, etc.) 						
Skills and Fieldwork	<p>Skills taught in Autumn 1</p> <ul style="list-style-type: none"> • Design a strong and stable fire truck replica (S1) • To use talking, drawing and labels to design mock-ups (S2) • Select and use appropriate materials based on design properties (S3) • Use wheels and axels to create a moving vehicle (S4) • Evaluate product based on design criteria (S5) 		<p>Skills taught in Spring 1</p> <ul style="list-style-type: none"> • Select and use appropriate tools to join materials (S6) • Select strong and durable materials (S7) • Design a puppet and label diagram accurately (S8) • Evaluate their design against design criteria (S9) 		<p>Skills taught in Summer 1</p> <ul style="list-style-type: none"> • Select healthy and varied ingredients (S10) • Choose and use appropriate tools to handle/manipulate the materials (S11) • Handle food safely and appropriatley (S12) 	
<p>Autumn 2</p> <p>Construction</p> <p>Fire Truck</p>	<p>Aylward's Intent:</p>	<p><i>Aylward wants students to have an understanding of the purpose of emergency vehicles. Students will link this to their Learning Enquiry topic. Students will also develop an understanding of axis and wheels. Students at Aylward will begin to broaden their knowledge and use of tools, such as glue guns, as well as beginning to evaluate their product based on a success criteria.</i></p>				

DT Skills and Knowledge Progression

S1, S2, S3, S4, S5	Suggestions for implementation:	<p>See Yr1 Summer 1 for previously taught knowledge and skills</p> <ul style="list-style-type: none"> - Compare how they stopped fire of London to how they stop fires today - Look at and compare a basic vehicle to a fire engine – what is different? What do fire engines need? - FPT – Create a mock up cardboard chassis with an axel that moves - FPT – Body work – how can we attached the axis - Create - Evaluate product and test if they work and hold the water
	Suggested questions to measure impact:	<ul style="list-style-type: none"> - <i>What is the difference between a normal vehicle and an emergency vehicle?</i> - <i>How does the emergency services compare during Fire of London and modern day?</i> - <i>What problems did you face? How did you fix it?</i> <i>Why did you do.....?</i> <i>Did your fire engine hold the water?</i> <i>What could you do different next time?</i>
	Possible enrichment opportunities:	<p>Fire engine visit form local emergency services thinking about how the vehicles have been adapted to meet the purpose</p>
Spring 2 Textiles Puppets S6, S7, S8, S9	Aylward’s Intent:	<p>Aylward wants students to understand the many different functions of puppets across the different cultures. They will begin to learn how to connect different materials together by using simple stitches and glue on different aesthetic features such as eyes and a mouth.</p>
	Suggestions for implementation:	<p>See Yr1 Spring 2 for previously taught knowledge and skills</p> <ul style="list-style-type: none"> - Watch a puppet show. Discuss how the story was told and what made it exciting. Look at different types of puppets from different cultures. - FPT – running stitch sample - FPT – joining two pieces of material together - Design puppets - Create puppets - Peer review
	Suggested questions to measure impact:	<p>What types of stitch do you know? How do you connect two pieces of fabric together? What is the purpose of puppets?</p>

DT Skills and Knowledge Progression

	Possible enrichment opportunities:	Watch puppet shows Create a puppet show for an audience
Summer 2 Cooking Sea-side themed snack S10, S11, S12	Aylward's Intent:	Aylward wants students to use their food skills knowledge to assemble a sea-side themed snack. They will need to use the appropriate tools and ingredients to create a snack based on the theme, refining their design through the process and evaluating the finished product against their design and existing products.
	Suggestions for implementation:	See Yr1 Autumn 1 for previously taught knowledge and skills <ul style="list-style-type: none"> • Look at and sample existing seaside themed snacks • Look at existing recipes • Practise using tools such as; knife, peeler, • Write their own recipe/list of ingredients • Draw and colour a picture of their snack- labelling the ingredients • Make their seaside themed snack
	Suggested questions to measure impact:	What ingredients will make your snack healthy? Do your ingredients vary according to the food groups? Does your snack go along with the seaside theme? What tools will you use to manipulate the ingredients?
	Possible enrichment opportunities:	Trip to the seaside Have a picnic-allowing the children to taste each other's seaside themed snacks Have a seaside theme party & taste each others' snacks (waves sounds playing in the background)

DT Skills and Knowledge Progression

Year 3						
	Autumn 2		Spring 2		Summer 1	
	Cooking Afternoon Tea		Construction Moving feature on Carnival Float		Textiles Egyptian Collars	
Key Vocabulary	<i>Design, garnish, select, handling, manipulating, cutting, texture, colours, appearance, taste, balanced diet, utensils, hygiene</i>		<i>Movement, float, Carnival, designs, colour, functionality, pneumatics, tools, join, appealing, mechanism</i>		<i>Collar, design, sketch, materials, sewing, secure, sewing needle, running stitch, back stitch, cutting</i>	
Knowledge	<u>Design</u> - To discuss healthy foods - To think of an appropriate set-up (plates, utensils) - To think of how to present the food (garnish, portion size) - To recognise where food comes from- is it in season?	<u>Make</u> -To understand use of tools when handling/manipulating the ingredients	<u>Design</u> - Can talk about Carnival (specifically in Trinidad and Tobago) - To consider design criteria for moving feature on a float (I.e. moving mascot) - To understand functional purpose of float (pneumatics involved)	<u>Make</u> - To know of appropriate tools to cut materials; scissors, cutting tool - To know which materials could be used to make their product appealing	<u>Design</u> - To consider design criteria - To understand purpose of collars	<u>Make</u> - To know the appropriate stitch to ensure security - To know appropriate tool to use when cutting, joining, and finishing
	<u>Evaluate</u> - Evaluating different textures and colours. - Evaluate foods and where they	<u>Technical Language</u> - To understand what a healthy balanced diet is	<u>Evaluate</u> - To consider views of others on their designs to improve their work.	<u>Technical Language</u> - To understand mechanical systems; pneumatics	<u>Evaluate</u> - Peer evaluate collars - Evaluate own design	<u>Technical Language</u> - To understand how to use a sewing needle and types of stitching

DT Skills and Knowledge Progression

	are grown/what time of the year they're grown	- Understand/learn how to appropriately use utensils necessary to manipulate the ingredients	- To know how you might test product for pneumatic movement			
<p>Suggestions for the development of greater depth:</p> <p>Aut2: Afternoon Tea</p> <ul style="list-style-type: none"> • Creating a theme within their food • Target market (age, gender, etc.) <p>Spr2: Carnival Float</p> <ul style="list-style-type: none"> • Include more than one type of pneumatic in their float (i.e. water, air, etc.) <p>Sum1: Egyptian Collars</p> <ul style="list-style-type: none"> • Think about design of the collars- compare and contrast with the Egyptian dress • Can they create a modern headdress with an Egyptian twist 						
Skills and Fieldwork	<p>Skills taught in Autumn 1</p> <ul style="list-style-type: none"> • Explore existing afternoon tea designs (S1) • Explore and appropriately select and use a range of tools to manipulate ingredients (S2) • Select and use a wide range of food (S3) • Understand and use appropriate handwashing procedures (S4) 		<p>Skills taught in Spring 2</p> <ul style="list-style-type: none"> • Develop the ideas for a moving part to a carnival float based on design criteria (S5) • Explore existing carnival float designs (S6) • Appropriately use a form of pneumatics to create a moving feature on a float (S7) • Choose appropriate tools and join materials (S8) 		<p>Skills taught in Summer 1</p> <ul style="list-style-type: none"> • Generate ideas through creating annotated sketches of design (S10) • Explore existing Egyptian headdress (S11) • Select and use appropriate tools to manipulate materials for e.g. cutting and joining (S12) • Choose and use appropriate materials to create a functional, strong, and durable accessory (S13) 	

DT Skills and Knowledge Progression

		<ul style="list-style-type: none"> Evaluate carnival float addition based on design criteria (S9) 	<ul style="list-style-type: none"> Evaluate product against design criteria (S14)
Autumn 2 Cooking Afternoon Tea S1, S2, S3, S4	Aylward's Intent:	Aylward wants students to create an afternoon tea set-up, considering an understanding of ingredients that are in season and grown locally, creating a fresh and healthy set menu. Children can use previously learned skills to manipulate the ingredients in order to create recipes for an afternoon tea.	
	Suggestions for implementation:	See Yr1 Aut1 and Yr2 Sum2 for previously taught Knowledge and Skills <ul style="list-style-type: none"> Evaluate current Afternoon tea menus Taste/Sample afternoon tea recipes (cakes, sandwiches, etc.) Research ingredients and where/when they are grown Review skills; cutting, grating, peeling, etc. Create own recipes/menu for afternoon tea Create food items & present them in an appropriate form Evaluate afternoon tea menus 	
	Suggested questions to measure impact:	Where are the ingredients grown? How are you going to present your food stuffs? What will you need to do with... in order to manipulate it?	
	Possible enrichment opportunities:	Trip to the grocery shop to buy the ingredients Invite a group of children/adults (family members) to cater to	
Spring 2 Construction Carnival Float S5, S6, S7, S8, S9	Aylward's Intent:	<i>Aylward wants students to develop their understanding pneumatics to create movements. They will be able to recognise pneumatics within the wider world, explore different motions that can be created and apply their understanding to create an object to go on top of a carnival float.</i>	
	Suggestions for implementation:	See Yr1 Sum1 and Yr2 Aut2 for previously taught Knowledge and Skills <ul style="list-style-type: none"> Watching videos of carnivals in Trinidad and Tobago- getting ideas as to design Researching real life pneumatic objects Exploring how to make pneumatics Focus skills: pneumatics Design carnival feature for float Create carnival feature for float Evaluate carnival feature- peer evaluation, evaluate for function with pneumatics 	

DT Skills and Knowledge Progression

	Suggested questions to measure impact:	<i>Does your float have a strong sense of culture? Can your float function when pneumatics is tested?</i>
	Possible enrichment opportunities:	Have a parent come into school to speak about carnival
Summer 1	Aylward's Intent:	Building on their current knowledge of clothing from Year 1, students will understand some of the clothes in Ancient Egyptian times, in particular, head collars. Students will try to think about similar designs and fashion in the modern day and create a head collar that is suitable for today's user.
Textiles Egyptian Collars S10, S11, S12, S13, S14	Suggestions for implementation:	<p>See Yr1 Spr2 and Yr2 Spr2 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> • Compare clothes in modern day and ancient Egypt • Look at images of Egyptian collars- What shapes are they? What size are they? • FTP – practise different types of stitches and attaching multiple pieces of fabric together (running stitch, backstitch) • Look at forms of fasteners for collars- what can be used to ensure it stays fastened during use? • Look at Egyptian textile patterns- What colours are common in Egyptian textiles? • Design Egyptian collar • Create Egyptian collar • Evaluate collar- peer feedback, verbal feedback during process and final product
	Suggested questions to measure impact:	<i>Does your Egyptian collar have a strong representation of Ancient Egypt? Can your be worn appropriately? (Does it fasten? How strong is it?)</i>
	Possible enrichment opportunities:	Egyptian day where children can wear their collars Fashion show- get the children to show off their collars & use this as an opportunity to get peer feedback

DT Skills and Knowledge Progression

Year 4						
Spring 1		Spring 2		Summer 1		
Cooking Making Pizza		Textiles Weaving Easter Baskets		Construction Nightlights		
Key Vocabulary		<i>Ingredients, cutting, mixing, rolling, taste, colour, texture, spices, prepare, cook, appearance, variety, aroma, design, tools, hygiene</i>		<i>Sewing, secure, stitch, embellishment, weave, design, Easter, basket, mock-up, pattern, materials, needles, diagram, tools</i>		<i>Design, materials, tools, light, series circuit, bulbs, buzzers, motors, electrical system, strong, stiff, reinforce, colours, shape, batteries, diagram</i>
Knowledge		Design: - To know the features of a recipe for the pizza dough and toppings - To know the features needed when drawing/labelling a picture of the finished product		Make: - To understand how to use tools for cutting, mixing & rolling - To know ingredients typically used in pizza recipes		Design: -To consider designs for a basket based on target audience -To know the features of drawing a mock-up of a basket/labels -To consider a simple pattern to create on the basket
Evaluate: -To recognise ingredients typically used in pizzas		Technical Language: - To understand how to use specific		Evaluate: -Evaluate product against previous products		Technical Language: -To understand how to use a sewing needle and how to secure an
				Design: -To think of a target audience -To know how to draw a labelled diagram including what materials they will be using		Make: -To know how to create a box for their lights
				Evaluate: -To think of different materials and how they could be used on their design		Technical Language: -To have an understanding of how to strengthen, stiffen

DT Skills and Knowledge Progression

	- Evaluate pizza against design criteria	preparation tools (cutting appliances, etc.) -To understand how to use cooking appliances	-Peer evaluate others' baskets	embellishment onto material		and reinforce more complex structures
<p>Suggestions for the development of greater depth:</p> <p>Spring 1: Pizza</p> <ul style="list-style-type: none"> • Create a box for the pizza- an original brand <p>Spring 2: Weaving</p> <ul style="list-style-type: none"> • Use a range of materials to create different textures <p>Summer 1: Nightlights</p> <ul style="list-style-type: none"> • Create a switch on the outside of the box to turn the light on and off • Create a door to close the batteries in and be able to replace them 						
Skills and Fieldwork	<p>Skills taught in Spr1:</p> <ul style="list-style-type: none"> • Explore existing recipes in order to create own recipe based on ingredients and health factors (S1) • Select and use appropriate ingredients according to taste, colour, and texture (S2) • Use and select appropriate tools to manipulate ingredients for e.g. cutting, rolling, chopping, spreading, and mixing (S3) 		<p>Skills taught in Spr2:</p> <ul style="list-style-type: none"> • Explore existing designs to design a basket by drawing and labelling a diagram (S5) • Select appropriate materials to use (S6) • Select appropriate tools to use (needle, glue, etc.) (S7) • Use weaving techniques to create a pattern (S8) • Evaluate product against design criteria (S9) 		<p>Skills taught in Sum1:</p> <ul style="list-style-type: none"> • Design a nightlight through a drawn and labelled diagram (S10) • Explore and evaluate existing designs (S11) • Select and use appropriate tools and materials (S12) • To use an electrical system in their product for e.g. series switches including switches, bulbs, buzzers, and motors (S13) • Evaluate final product against design criteria (S14) 	

DT Skills and Knowledge Progression

	<ul style="list-style-type: none"> Demonstrate how to use and stay safe around cooking appliances (S4) 		
Spring 1 Cooking Pizza S1, S2, S3, S4	Aylward's Intent:	<i>Aylward intends to ensure children retain an understanding of how to apply the principles of a healthy and varied diet by learning how to prepare and cook a pizza. Students will build upon their previous learning about healthy foods to create a pizza using various preparation and cooking techniques.</i>	
	Suggestions for implementation:	See Yr1 Aut1, Yr2 Sum2 and Yr3 Aut2 for previously taught Knowledge and Skills <ul style="list-style-type: none"> Explore pizza recipes- looking at ingredients, texture, appearance, taste, and aroma Choose and taste a variety of different pizzas and ingredients Look at the importance of hygiene and food handling. Choose ingredients that they will use in their recipe & design a recipe Introduce different tools to cut and prepare ingredients. Discuss which are the most appropriate (i.e. cheese grater, knives, etc.) Create their pizza discussing their choice of ingredients, tools, hygiene practises and choices to do so. Evaluate their pizza against design criteria 	
	Suggested questions to measure impact:	<i>Does the pizza look appealing?</i> <i>Does it taste appealing? Do the ingredients work together?</i> <i>Is it cooked correctly?</i>	
	Possible enrichment opportunities:	Cook a pizza for an audience- at home? Invite parents into the classroom and encourage the children to cook and serve their pizzas to their family	
Spring 2 Textiles Weaving S5, S6, S7, S8, S9	Aylward's Intent:	<i>Aylward intends to ensure children build upon their previous sewing skills to design and create a fabric Easter basket through weaving techniques. Students will learn and apply weaving techniques to create a pattern on their baskets and securing embellishments onto them through stitching techniques.</i>	
	Suggestions for implementation:	See Yr1 Spr2, Yr2 Spr2 and Yr3 Sum1 for previously taught Knowledge and Skills <ul style="list-style-type: none"> Research different types of baskets/designs (does not have to specifically be Easter baskets) Look at a variety of materials to use (i.e. felt, foam, etc.) Practise different weaving techniques; practise tacking embellishments onto fabric Design basket (labelled diagram) & choose materials and tools needed 	

DT Skills and Knowledge Progression

		<ul style="list-style-type: none"> • Create Easter basket • Evaluate basket based on design criteria (peer evaluation? Self-evaluation?)
	Suggested questions to measure impact:	<p>Why did you choose that material? How did you tack on the embellishments? Is your basket strong enough to carry an egg? Who is your target audience?</p>
	Possible enrichment opportunities:	<p>Use of basket for the annual Egg rolling competition. Deconstructing baskets to look at weaving techniques.</p>
Summer 1	Aylward's Intent:	<i>Aylward intends to develop students understanding of the various purpose of lights and begin to develop products based on user needs. They will think beyond using recyclables for creating the body of their light and what materials will be most appropriate for their product. Students will build upon their knowledge and confidence of using their tools.</i>
Construction		
Nightlights		
S10, S11, S12, S13, S14	Suggestions for implementation:	<p>See Yr1 Sum1, Yr2 Aut2 and Yr3 Spr2 for previously taught Knowledge and Skills</p> <p>Lesson 1 – Research different lights. Evaluate; who is the user, how they have met the user needs, what is the light for, how has it achieved its purpose Lesson 2 – Research different materials and how they use light Lesson 3 – research user – asking year ½ what they want in a light; colours, shapes etc. Develop success criteria. (be able to change batteries, be certain size etc) Lesson 4: Design their light by drawing a labelled diagram with materials they will use. Lesson 5 (double session/full day) : create their products Lesson 6- Evaluate their product and get feedback from year the group they did research with Cross-curricular: Science create switches, create circuits</p>
	Suggested questions to measure impact:	<p><i>Did your product appeal to the user? Did your product work? Can you change the battery? Does your product look appealing?</i></p>
	Possible enrichment opportunities:	<p>Science museum- looking at circuits and energy</p>

DT Skills and Knowledge Progression

DT Skills and Knowledge Progression

		Year 5					
		Autumn 2		Spring 2		Summer 2	
		Construction Bridges		Cooking African Food		Textiles Sewing Bags & Purses	
Key Vocabulary	<i>Diagram, computer-aided design, structure, cutting, shaping, joining, finishing, strong, stable, stiff, mechanical systems; cams, pulleys, levers</i>		<i>Ingredients, recipe, appearance, texture, design, taste, cutting, peeling, cooking techniques, safety, hygiene, aroma</i>		<i>Running stitch, back stitch, blanket stitch, sewing, bags/purses, design, measure, materials, colour, tacking, user</i>		
Knowledge	Design: -To know the features needed to draw a labelled diagram with what materials they will be using -To consider designs for a bridge based on product criteria- computer aided design	Evaluate: -To know different types of bridges -Evaluate their bridges compared to existing bridges	Design: - To understand how to create a recipe - To know the features needed to draw a labelled diagram	Evaluate: - Evaluate their final product against design criteria - Evaluate final dish for appearance, texture, & taste	Design: -To know how to make a detailed labelled drawing of a design (including measurements, colour, materials, etc.)	Evaluate: -To understand the use of different purses -Evaluate their products against a success criteria	
	Make: - To know use of a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing]	Technical Language: -Show an understanding of how to strengthen, stiffen and reinforce a complex structure	Make: -To understand appropriate tools to use (cutting, peeling) - To know how to use different cooking techniques (stove, hob, etc.)	Technical Language: - Understand how to use specific preparation tools (cutting appliances, etc.) -Understand how to use cooking appliances	Make: -To know about different purse designs in order to create a purse for a specific user and purpose	Technical Language: -To know different stitches; running stitch, back stitch, blanket stitch -To know different tacking techniques; buttons, material, sequins	

DT Skills and Knowledge Progression

	-To recognise strong and stable materials	-Understand and use mechanical systems in their products (cams, pulley, levers, etc.)		appropriately and safely		
<p>Suggestions for the development of greater depth:</p> <p>Aut2: Bridges</p> <ul style="list-style-type: none"> • Creating a moving bridge using more than one mechanism <p>Spr2: African Food</p> <ul style="list-style-type: none"> • Create two dishes; one heated dish, one cold dish <p>Sum2: Sewing Bags & Purses</p> <ul style="list-style-type: none"> • Thinking of additional ways to close the purse; poppers, zips • Create different compartments within the purse by adding another layer of material 						
Skills and Fieldwork	<p>Skills taught in Aut2:</p> <ul style="list-style-type: none"> • Explore current bridge designs in order to design original bridge using a computer aided design program (S1) • Select and use a wide range of tools to cut, shape, join, and finish materials (S2) • Select and use appropriate materials to create a strong and stable structure (S3) • Understand and use mechanical systems in their products (cams, pulley, levers, etc.) (S4) • Evaluate final product based on design criteria (S5) 		<p>Skills taught in Spr2:</p> <ul style="list-style-type: none"> • Explore existing African food dishes and recipes in order to create an original African food recipe, drawing a labelled picture based on appearance and texture (S6) • Select appropriate ingredients in line with theme (S7) • Select appropriate cooking techniques making sure to follow through with appropriate safety procedures (S8) • Evaluate dish for it's appearance, texture and taste (S9) 		<p>Skills taught in Sum2:</p> <ul style="list-style-type: none"> • Explore existing purse designs (S10) • Draw a labelled diagram of purse design based on given criteria (S11) • Select and implement appropriate sewing tools and techniques to add embellishments to purse for e.g. sequins and buttons (S12) • Evaluate product against design criteria (S13) 	

DT Skills and Knowledge Progression

<p>Autumn 2</p> <p>Construction Bridges</p> <p>S1, S2, S3, S4, S5</p>	<p>Aylward's Intent:</p>	<p><i>We intend to allow students to apply their knowledge of strong and stable structures to create a bridge. Students will conduct their own research about current bridges and what makes them strong and stable to use in creating their own bridge. Students will build upon previous construction knowledge by using strong materials and mechanisms that will allow them to create a functional bridge replica.</i></p>
	<p>Suggestions for implementation:</p>	<p>See Yr1 Sum1, Yr2 Aut2, Yr3 Spr2 and Yr4 Sum1 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> • Conduct research on current bridges- materials used, mechanisms used, etc. • Evaluate materials- strong materials? Stable materials? • Evaluate mechanisms- cams, pulleys, levers, etc. • Design own bridge- sketch, materials needed, etc. • Create own bridge • Evaluate bridge- against other bridges, peer evaluation
	<p>Suggested questions to measure impact:</p>	<p><i>What makes your bridge strong and stable? What mechanisms have you used to make your bridge functional?</i></p>
	<p>Possible enrichment opportunities:</p>	<p>Class trip to look at bridges- London bridge, Tower bridge, etc.</p>
<p>Spring 2</p> <p>Cooking African Food</p> <p>S6, S7, S8, S9</p>	<p>Aylward's Intent:</p>	<p><i>Aylward intends to ensure children retain an understanding of how to apply the principles of a healthy and varied diet by learning how to prepare and cook an African dish. Students will build upon their previous learning about healthy foods, creating a recipe, and preparation and cooking techniques to plan, prepare and create an African dish using a range of baking and cooking techniques. Students will need to ensure they are using the correct storing and handling procedures of ingredients.</i></p>
	<p>Suggestions for implementation:</p>	<p>See Yr1 Aut1, Yr2 Sum2, Yr3 Aut2 and Yr4 Sp1 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> • Explore African dish recipes- looking at ingredients, texture, appearance, taste, and aroma • Choose and taste a variety of different African foods and ingredients • Look at the importance of hygiene and food handling practices • Choose ingredients that they will use in their recipe & design a recipe • Introduce different tools to cut and prepare ingredients. Discuss which are the most appropriate (l.e. vegetable peeler, knives, etc.) • Look at different cooking techniques (oven, stove top, etc.)

DT Skills and Knowledge Progression

		<ul style="list-style-type: none"> • Create their African dish discussing their choice of ingredients, tools, hygiene practises and choices to do so. • Evaluate their dish against design criteria
	Suggested questions to measure impact:	<p><i>Are the dishes cooked based on the recipes?</i></p> <p><i>Were the ingredients stored and handled correctly?</i></p> <p><i>Does the dish look and taste appealing?</i></p>
	Possible enrichment opportunities:	<p>Cooking for an audience- at home? Bring family members into school?</p> <p>Encourage someone of African descent to come and talk about or bring in African food</p>
Summer 2	Aylward's Intent:	<p><i>We intend to allow students to create a purse and understand how the use of purses has developed and changed over time. Children will conduct their own research of purses and evaluate how they were designed in order to achieve their purpose. They will develop a product that is aesthetically appealing and serves a particular function. We want students to continue to develop their understanding that products must appeal to a target audience.</i></p>
Textiles		
Sewing Bags & Purses		
S10, S11, S12, S13	Suggestions for implementation:	<p>See Yr1 Spr2, Yr2 Spr2, Yr3 Sum1 and Yr4 Spr2 for previously taught Knowledge and Skills</p> <p><i>To explore features of a range of purses</i></p> <p><i>Focused skills: To practise different sewing skills; running stitch, backstitch, blanket stitch</i></p> <p><i>To test designs using templates</i></p> <p><i>To create an annotated design and sketch</i></p> <p><i>To create product (x 2 lessons)</i></p> <p><i>To evaluate and reflect on product</i></p>
	Suggested questions to measure impact:	<p><i>Does your purse keep money inside it?</i></p> <p><i>Can your purse open and close?</i></p> <p><i>Is your purse appealing for your target audience?</i></p>
	Possible enrichment opportunities:	<p>Bringing in a variety of purses and designs for students to explore (different stitching, embellishments, etc.)</p>

DT Skills and Knowledge Progression

		Year 6					
		Autumn 2		Summer 1		Summer 2	
		Textiles		Cooking		Construction	
		Upcycle an Item of clothing		2-Course Dinner		Victorian Toys- Pulleys and Levers	
Key Vocabulary		<i>Upcycle, recycle, reuse, sketch, design, mechanism, sewing machine, joining, tacking, straight blind stitch, zig zag stitch</i>		<i>Ingredients, prepare, cook, recipe, equipment, utensils, design, safety, hygiene, cutting, blending, mixing, chopping, temperature, ratio, appearance, taste, texture, aroma</i>		<i>Design, sketch, functionality, toy prototype, mechanisms; cams, pulleys, levers, materials, strengthen, reinforce, movement, durability</i>	
Knowledge	Design: -To know products that are overused and is currently not recycled/reused - unused clothes, plastic bags -To know how to complete an annotated sketch	Evaluate: -Evaluate their products -Evaluate peers' products	Design: -To know what ingredients to use in recipe - To know the features needed to write a step-by-step recipe, including a list of ingredients, equipment, and utensils	Evaluate: - Evaluate a range of relevant products- previously created 2-course dinners - Evaluate final products with reference to the design brief and specification	Design: -To develop a design criterion for a toy aimed at a specific target group -To understand the features needed to complete a detailed annotated sketch of toy design	Evaluate: -Evaluate Victorian toys versus modern day toys -Evaluate materials -Evaluate mechanisms used	
	Make: -To know of and select a suitable item of clothing to upcycle -To know of appropriate tools/mechanisms to create the	Technical Language: -Have an understanding of how to join materials together -Have an understanding of	Make: - To know which tools and equipment are suitable for cooking specific food items - To know how to prepare and cook	Technical Language: - Understand how to use specific preparation tools (cutting appliances, etc.) -Understand how to use cooking	Make: -To know use of a range of materials -To know and understand use of tools and equipment suitable for the task	Technical Language: -To know how to reinforce/strengthen a 3D framework -To understand how certain mechanisms, create movement (pulleys and levers)	

DT Skills and Knowledge Progression

	product (Sewing machine)	how to tack things on	dishes safely and hygienically	appliances (oven, stove top, etc.)		
<p>Suggestions for the development of greater depth:</p> <p>Aut2: Upcycle an item of clothing</p> <ul style="list-style-type: none"> - Create a new outfit (2 piece) <p>Sum1: 2-course dinner</p> <ul style="list-style-type: none"> - Can they create their own menu for the meal- name the restaurant- brand it <p>Sum2: Victorian toys</p> <ul style="list-style-type: none"> - Use more than one mechanism in the toy 						
Skills and Fieldwork	<p>Skills taught in Aut2:</p> <ul style="list-style-type: none"> • Explore existing upcycled clothing items and the importance around it (S1) • Generate annotated sketch of product (S2) • Select and use appropriate tools e.g. sewing machine for basic stitching and sewing needle and thread for embellishments (S3) • Select and use appropriate techniques to use for e.g. type of stitching (S4) • Evaluate product against design criteria (S5) 		<p>Skills taught in Sum1:</p> <ul style="list-style-type: none"> • Design a 2-course meal by selecting a theme and creating a recipe (S6) • Select and implement appropriate and safe cooking techniques (S7) • To prepare and cook dishes safely and hygienically, using appropriate and hygienic food handling procedures (S8) • Use specific preparation tools safely and appropriately e.g. cutting appliances (S9) 		<p>Skills taught in Sum2:</p> <ul style="list-style-type: none"> • Explore existing Victorian toys in order to design an annotated sketch of a new idea (S10) • Select and use appropriate materials (S11) • Select and use tools appropriately in order to reinforce and strengthen materials (S12) • To successfully use pulleys and levers in order to create movement (S13) • Evaluate toy against design criteria (S14) 	
Autumn 2:	Aylward's Intent:	<p><i>Aylward intends for children to recognise that products are being made every day and there are alternative, environmentally friendly ways to dispose of products that are no longer needed. Children will understand the positive impact of up-cycling products and build upon previously taught skills within textiles.</i></p>				
Textiles						

DT Skills and Knowledge Progression

Upcycle an item of clothing S1, S2, S3, S4, S5	Suggestions for implementation:	<p>See Yr1 Spr2, Yr2 Spr2, Yr3 Sum1, Yr4 Spr2 and Yr5 Sum2 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> -Research products that have been upcycled – establish user and purpose -FPT using sewing machines at Bentley wood – understanding the machines and the stitches; straight blind stitch, zigzag stitch -FPT join materials using sewing machines -Design product -Create product -Evaluate product
	Suggested questions to measure impact:	<p><i>Have you been able to create a new product from an old product?</i></p> <p><i>Is your product aesthetically appealing?</i></p> <p><i>What would you change if you were to do it again?</i></p>
	Possible enrichment opportunities:	<p>Children to go to Bentley Wood to use sewing machines</p>
Summer 1 Cooking 2-Course dinner S6, S7, S8, S9	Aylward’s Intent:	<p><i>Aylward intends for children to design, prepare and cook a 2-course dinner based on their previous cooking knowledge. Students will build upon their previous learning about baking and cooking techniques and storing and handling procedures by measuring ingredients accurately and creating and refining their recipes based on appearance, taste, texture, and aroma.</i></p>
	Suggestions for implementation:	<p>See Yr1 Aut1, Yr2 Sum2, Yr3 Aut2, Yr4 Sp1 and Yr5 Sp2 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> -Research various 2-course meals- looking at different themed meals (specific cultural food?) - Choose and taste a variety of different ingredients based on chosen theme - Look at the importance of hygiene and food handling practices (especially raw meat practices) - Demonstrate use of different cooking techniques (stove top, oven, etc.) and food preparing techniques (knives, peelers, scissors, etc.) - Create and refine recipe, based on methods, cooking times and temperature - Create 2-course meal- Measuring ingredients accurately and calculating ratios based on amount - evaluate 2-course meal against design criteria
	Suggested questions to measure impact:	<p><i>Were the ingredients measured correctly?</i></p> <p><i>Do the dishes look appealing?</i></p> <p><i>Do the dishes taste appealing?</i></p>

DT Skills and Knowledge Progression

		<i>Do the dishes smell appealing?</i>
	Possible enrichment opportunities:	To create and prepare their dishes for their family then take pictures and do a write up about the experience.
Summer 2 Construction Victorian Toy S10, S11, S12, S13, S14	Aylward's Intent:	<i>Aylward intends for students to evaluate, design and create a Victorian toy aimed at a specific audience. Students will build upon their previous mechanical knowledge to use a mechanism accurately in order to create a 3D moving toy. Students will evaluate and select strong and durable materials to create a Victorian toy.</i>
	Suggestions for implementation:	<p>See Yr1 Sum1, Yr2 Aut2, Yr3 Spr2, Yr4 Sum1 and Yr5 Aut2 for previously taught Knowledge and Skills</p> <ul style="list-style-type: none"> • Conduct research on current Victorian toys • Evaluate materials-durability • Evaluate mechanisms- cams, pulleys, levers, etc. • Design own toy- sketch, materials needed, etc. • Create own toy • Evaluate toy- against other toys, peer evaluation
	Suggested questions to measure impact:	<p>How durable is your toy?</p> <p>What mechanisms have you used? How do they function?</p> <p>What age is your toy targeted at?</p>
	Possible enrichment opportunities:	<p>British toy museum</p> <p>Taking apart and looking at modern toys-what mechanisms used, etc.</p>