



Coverage Map – Hope Federation - DT

Year A						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R/1/2	Through The Keyhole: Design and make a home for a pet <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles, according to their characteristic explore and evaluate a range of existing products evaluate their ideas and products against design criteria build structures, exploring how they can be made stronger, stiffer and more stable <p>Can you design and make a home for a pet? <i>Stable structures</i></p>		Wacky Races: Design and make a moving vehicle. <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textile, according to their characteristic explore and evaluate a range of existing products evaluate their ideas and products against design criteria explore and use mechanisms [e.g. levers, sliders, wheels and axles], in their products <p>Can you design and make a vehicle that moves? <i>Mechanisms, axles, wheels</i></p>		Animal Mania: Design and make a moving animal picture <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textile, according to their characteristic explore and evaluate a range of existing products evaluate their ideas and products against design criteria explore and use mechanisms [e.g. levers, sliders, wheels and axles], in their products <p>Can you design and make a picture with a moving minibeast? <i>Mechanisms, pivots, wheels, sliders, levers</i></p>	
3/4	India: Design and make puppets <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, products that are fit for purpose generate, develop, model and communicate their ideas through discussion, annotated sketches, 		Chocolate: Design packaging for a new chocolate product <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes investigate and analyse a range of existing products 		The Stone Age: Design and make a Stone Age needle pouch <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, products that are fit for purpose generate, develop, model and communicate their ideas through discussion, annotated sketches, cross- 	



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	<p>cross-sectional and exploded diagrams, prototypes, and computer-aided design</p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world apply their understanding of how to strengthen, stiffen and reinforce more complex structures <p>How can you design and make shadow puppets to retell the story of Rama and Sita? <i>Design and make a functioning product</i></p>	<ul style="list-style-type: none"> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>Can you design appealing packaging for a new chocolate product? <i>Design a new product for target consumer/marketing</i></p>	<p>sectional and exploded diagrams, prototypes, and computer-aided design</p> <ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world <p>Can you design and make a pouch to hold a flint stone? <i>Textiles</i></p>
5/6	<p>Life on the home front: Design and make a Morse Code machine.</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities 	<p>Stocks and Dungeons: Design a picnic shelter for visitors to the Tower of London</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, computer-aided design investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world apply their understanding of computing to program, monitor and control their products 	<p>Extreme Earth: Design and build a structure to withstand an earthquake</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and according to their functional properties and aesthetic qualities investigate and analyse a range of existing products



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	<ul style="list-style-type: none"> ● evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ● understand how key events and individuals in design and technology have helped shape the world ● understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors] <p>Can you design and make a Morse Code machine to send a message? <i>Electrical systems, circuits and buzzers</i></p>	<p>Can you design a picnic shelter for visitors to the Tower of London? <i>Tinkercad/3D Computer Aided Design</i></p>	<ul style="list-style-type: none"> ● evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ● understand how key events and individuals in design and technology have helped shape the world ● apply their understanding of how to strengthen, stiffen and reinforce more complex structures <p>Can you design and make a structure to withstand and earthquake? <i>Stable structures</i></p>
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Year B					
	Autumn 1	Autumn 2	Spring 1	Summer 1	Summer 2
R/1/2	<p>Colours of the World: Designing and Making Lanterns</p> <ul style="list-style-type: none"> ● Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ● Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <ul style="list-style-type: none"> ● 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 ● design purposeful, functional, appealing products for themselves and other users based on design criteria ● generate, develop, model and communicate their ideas through talking, drawing, templates, mock- 		<p>Fruitastic: Where does food come from?</p> <ul style="list-style-type: none"> ● Use a range of small tools, including cutlery ● use the basic principles of a healthy and varied diet to prepare dishes ● understand where food comes from ● select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, slicing, grating, mixing] ● select from and use a wide range of materials and components, including ingredients, according to their characteristic <p>Where does the food you have prepared come from? <i>Cooking and Nutrition</i></p>	<p>Superheroes and Princesses: Design and make a superhero puppet.</p> <ul style="list-style-type: none"> ● Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ● Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ● Make use of props and materials when role playing characters in narratives and stories. <ul style="list-style-type: none"> ● design purposeful, functional, appealing products for themselves and other users based on design criteria ● generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology 	



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	<p>ups and, where appropriate, information and communication technology</p> <ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles, according to their characteristic explore and evaluate a range of existing products evaluate their ideas and products against design criteria <p>Can you design and make a lantern that will glow in the dark? <i>Design and make a functioning product</i></p>		<ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles, according to their characteristic explore and evaluate a range of existing products evaluate their ideas and products against design criteria <p>Can you design and make a superhero puppet? <i>Textiles</i></p>
3 / 4	<p>Secrets of the Pyramids: Design and make a shaduf to carry water</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, products that are fit for purpose generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] <p>How can you design and make a model shaduf to water the plants?</p>	<p>Roman on the Rampage: Design and make a Roman Mosaic</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, products that are fit for purpose generate, develop, model and communicate their ideas through discussion, annotated sketches and computer-aided design apply their understanding of computing to program, monitor and control their products select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world <p>How can you design and make a decorative mosaic for a specific purpose? <i>Design an appealing product fit for purpose/Computer Programming</i></p>	<p>Off to The Beach! Design and Make a Healthy Picnic</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques <p>How can you make a healthy picnic for a trip to the beach? <i>Cooking and Nutrition</i></p>



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	<i>Mechanisms/Pulleys, levers</i>		
5/6	<p>Life in Norfolk: Plan and prepare a dish to represent Norfolk</p> <ul style="list-style-type: none"> understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed <p>Can you plan and prepare a dish to represent Norfolk? <i>Cooking and Nutrition</i></p>	<p>Titanic: Design and make a cushion cover</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, pattern pieces and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including, textiles according to their functional properties and aesthetic qualities investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>Can you design and make a cushion cover for a first class cabin on a ship? <i>Textiles</i></p>	<p>Longboats and Invaders: Design and make a Viking themed moving toy (cam mechanism)</p> <ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes and computer-aided design select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties and aesthetic qualities investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] <p>Can you design and make a Viking themed moving toy with a cam mechanism? <i>Mechanisms/cams</i></p>

Year B



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Rudham Barn Owls	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
2/3	<p>Lift Off: Design and make a kite</p> <ul style="list-style-type: none"> · design purposeful, functional, appealing products for themselves and other users based on design criteria · generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups. · select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] · select from and use a wide range of materials and components, including construction materials, and textiles, according to their characteristics · explore and evaluate a range of existing products · evaluate their ideas and products against design criteria <p>Can you design a kite for a customer in the kite shop? <i>Design and make a new product for target consumer</i></p>		<p>Planet Earth: Making Mini Greenhouses</p> <ul style="list-style-type: none"> ● use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ● generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes ● select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ● select from and use a wider range of materials and components, including construction materials, textiles, according to their functional properties and aesthetic qualities ● investigate and analyse a range of existing products ● evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ● apply their understanding of how to strengthen, stiffen and reinforce more complex structures <p>What is the best design for a mini greenhouse? <i>Stable Structures</i></p>		<p>Ship Ahoy! Design and make a seaside snack/ice lolly</p> <ul style="list-style-type: none"> ● use the basic principles of a healthy and varied diet to prepare dishes ● understand where food comes from ● understand and apply the principles of a healthy and varied diet ● prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ● understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed ● investigate and analyse a range of existing products ● evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>Can you design and make a seaside snack to sell on the pier? <i>Cooking and Nutrition</i></p>	