|  | Autumn 1 ${ }^{\text {a }}$ Autumn 2 | Spring 1 | Summer 1 |
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| YEAR A |  |  |  |
| EYFS |  |  |  |
| 1/2 | Shade and shelter <br> Investigating existing products; Designing and making shelters and dens; Prototypes; Safety rules; Materials <br> Build structures, exploring how they can be made stronger, stiffer and more stable. <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Evaluate their ideas and products against design criteria. Explore and evaluate a range of existing products. 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 wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | Taxi! <br> Mechanisms - wheels, axles and chassis Build structures, exploring how they can be made stronger, stiffer and more stable. Design purposeful, functional, appealing products for themselves and other users based on design criteria. <br> Evaluate their ideas and products against design criteria. <br> Explore and evaluate a range of existing products. <br> Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products. <br> Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <br> Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | Chop, slice, mash! <br> Sources of food; Food preparation techniques; Hygiene rules; Designing and making salads and sandwiches <br> - Design purposeful, functional, appealing products for themselves and other users based on design criteria. <br> - Evaluate their ideas and products against design criteria. <br> - Explore and evaluate a range of existing products. <br> - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <br> - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). Understand where food comes from. Use the basic principles of a healthy and varied diet to prepare dishes. |
| 3/4 | Fresh food, good food <br> Food preservation techniques; Exploring food packaging; <br> Prototypes; Designing, making and packaging healthy snacks Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. <br> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> Investigate and analyse a range of existing products. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. <br> 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. <br> Understand and apply the principles of a healthy and varied diet. | Functional and fancy fabrics <br> Significant designer - William Morris; Stitching a hem; Embellishment; Designing and making patterned and embellished fabrics. <br> - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> - Investigate and analyse a range of existing products. <br> 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. <br> - Select from and use a wider range of tools and equipment to perform practical tasks (for | Tomb builders <br> Simple and compound machines <br> - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> - Investigate and analyse a range of existing products. <br> - 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. <br> - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). |


|  | - Understand how key events and individuals in design and technology have helped shape the world. <br> - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. <br> - 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. |  | example, cutting, shaping, joining and finishing), accurately. <br> - Understand how key events and individuals in design and technology have helped shape the world. <br> - 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. |  | - 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. |  |
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| 5/6 | Moving mechanisms <br> Pneumatic systems; Joining and finishing; Iterative design process; <br> Building pneumatic machine prototypes <br> - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. <br> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Investigate and analyse a range of existing products. 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. <br> Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. <br> - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). |  | Eat the Cooking <br> - Prepare and cook a savoury dishes using techniques. <br> - Understand and app and varied diet. <br> - Understand seasono how a variety of ingr caught and process | easons <br> Nutrition ariety of predominantly range of cooking <br> the principles of a healthy <br> , and know where and lients are grown, reared, | Archi <br> Architecture over time; G support, stiffness and stab design; Building design <br> - Apply their understandin and reinforce more com <br> - Evaluate their ideas and design criteria and cons improve their work. <br> - Generate, develop, mo ideas through discussion sectional and exploded pieces and computer-a Investigate and analyse Select from and use a w components, including and ingredients, accord and aesthetic qualities. Understand how key ev and technology have $h$ Use research and devel design of innovative, fun that are fit for purpose, groups. | cture <br> ek architecture; Structural <br> y; Computer-aided <br> of how to strengthen, stiffen ex structures. <br> roducts against their own er the views of others to <br> and communicate their annotated sketches, cross- <br> agrams, prototypes, pattern d design. <br> range of existing products. er range of materials and nstruction materials, textiles g to their functional properties <br> ts and individuals in design ped shape the world. design criteria to inform the ional, appealing products ed at particular individuals or |
| YEAR B |  |  |  |  |  |  |
| EYFS | Colourful homes <br> Explore and create using a wide range of materials and components, including upcycled materials, construction kits, textiles and ingredients. Knowledge Reception Different materials have different properties and can be used for different purposes. Construct simple structures and models using a range of materials <br> Fantasy worlds Safely use and explore a variety of materials, tools and techniques, | Machine art <br> Create art in different ways on a theme, to express their ideas and feelings. <br> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <br> Build it <br> Explore, build and play with a range of resources and construction kits with wheels and axles. <br> Explore and create using a wide range of materials and components, including upcycled materials, construction kits, textiles and ingredients. | Letters and cards <br> Create art in different ways on a theme, to express their ideas and feelings. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <br> Toys from the past Construct simple structures and models using a range of materials. <br> Explore and create using a wide range of materials and components, including upcycled materials, | Fruit Art <br> Work as a group to create a fruit face or fruit basket picture. Display fruits and provide paper and pastels for the children to make observational drawings. Invite the children to choose a fruit to draw. | Feathered Friends <br> Share their creations, explaining the process they have used. Communicate their ideas as they are creating artwork. <br> Animal Masks <br> Explore and create using a wide range of materials and components, including upcycled materials, construction kits, textiles and ingredients. Select appropriate materials when constructing and making. | Under the sea Invite the children to talk about the different images in the picture, and ask them to describe the sea plants and animals they would like to add to their artwork. Model how to draw and cut out the shapes of different sea animals and plants. |


|  | experimenting with colour, design, texture, form and function. Begin to show accuracy and care when drawing. <br> Knowledge Reception <br> A painting of a place is called a landscape. <br> Draw or paint a place from observation or imagination. | construction kits, textiles and ingredients. |  |  |
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| 1/2 | Remarkable recipes <br> Sources of food; Kitchen tools; Reading recipes; Hygiene rules; Making a school meal <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Evaluate their ideas and products against design criteria. Explore and evaluate a range of existing products. 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 (for example, cutting, shaping, joining and finishing). <br> Understand where food comes from. <br> Use the basic principles of a healthy and varied diet to prepare dishes. | Beach hut <br> Structures - strengthening and joining <br> - Build structures, exploring how they can be made stronger, stiffer and more stable. <br> - Design purposeful, functional, appealing products for themselves and other users based on design criteria. <br> - Evaluate their ideas and products against design criteria. <br> - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <br> - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). <br> - Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | Cut, stitch, join <br> Everyday fabric products; Significant designer - Cath Kidston; Sewing patterns; Running stitch; Adding embellishments; Designing and making a bag tag <br> - Design purposeful, functional, appealing products for themselves and other users based on design criteria. Evaluate their ideas and products against design criteria. <br> Explore and evaluate a range of existing products. <br> Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <br> - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | Push and pull <br> Machines and mechanisms; Sliders, levers and linkages; Designing and making greetings cards with moving parts <br> - Build structures, exploring how they can be made stronger, stiffer and more stable. <br> - Design purposeful, functional, appealing products for themselves and other users based on design criteria. <br> - Evaluate their ideas and products against design criteria. <br> - Explore and evaluate a range of existing products. <br> - Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products. <br> - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <br> - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). <br> - Select from and use a wide range of materials |


|  |  |  | and components, including construction materials, textiles and ingredients, according to their characteristics |
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| 3/4 | Cook well, eat well <br> Food groups; Eatwell guide; Methods of cooking; Cooking appliances; Hygiene rules; <br> Making taco fillings <br> - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. <br> - Understand and apply the principles of a healthy and varied diet. <br> - Understand how key events and individuals in design and technology have helped shape the world. <br> - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. <br> - 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. | Making it move <br> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> - Investigate and analyse a range of existing products. <br> - 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. <br> - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. <br> - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). <br> - 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. | Green house <br> Features of greenhouses; Significant designers - Sir Joseph Paxton and Sir Nicholas Grimshaw: Strengthening techniques; Using tools and safety rules; Properties of materials; Constructing strong frameworks. <br> - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. <br> Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> Investigate and analyse a range of existing products. 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. <br> - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. <br> - Understand how key events and individuals in design and technology have helped shape the world. 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. |
| 5/6 | Food for life <br> Whole foods; Processed foods; Making healthy meals; Hygiene and safety <br> - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. <br> - Understand and apply the principles of a healthy and varied diet. <br> - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. | Engineer <br> Significant engineers and bridges; Features of bridges; Strengthening techniques; Iterative design; Building prototypes <br> - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. <br> Investigate and analyse a range of existing products. <br> Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to | Make do and mend <br> Investigating clothing; Sewing - running stitch, whip stitch and blanket stitch; Repairing clothes; Making products from recycled materials <br> - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Investigate and analyse a range of existing products. <br> 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. <br> Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. |


|  |  | $\bigcirc$ | their functional properties and aesthetic qualities. <br> Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. <br> Understand how key events and individuals in design and technology have helped shape the world. <br> 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. |
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