DT		
Three and Four-Year-Olds	Personal, Social and Emotional Development	• Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.
	Physical Development	• Use large-muscle movements to wave flags and streamers, paint and make marks. • Choose the right resources to carry out their own plan. • Use one-handed tools and equipment, for example, making snips in paper with scissors.
	Understanding the World	• Explore how things work.
	Expressive Arts and Design	• Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. • Explore different materials freely, to develop their ideas about how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them. • Create closed shapes with continuous lines, and begin to use these shapes to represent objects.
Reception	Physical Development	• Progress towards a more fluent style of moving, with developing control and grace. • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.
	Expressive Arts and Design	• Explore, use and refine a variety of artistic effects to express their ideas and feelings. • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills.

ELG	Physical Development	Fine Motor Skills	• Use a range of small tools, including scissors, paintbrushes and cutlery.
	Expressive Arts and Design	Creating with Materials	• 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.

Autumn 1	Autumn 2	Spring 1	Spring 1	Spring 2	Summer 2	Summer 2
People Who help Us	**Sparkle & shine** Construction Using different materials/joining materials, make fireworks, diva lamps, cards, wrapping paper, stick puppets,	**Superheroes** 2D to 3D Design and make superhero capes and masks. Using a range of resources/materials . Select tools for activity. Use colour, texture, shape, form and space in two or three dimensions to make a castle, lair or hiding place	**Winter Wonderland** Design Process Designing a sleigh Design winter clothing	**Pets** Construction Making pet homes using junk modelling. Exploring colour mixing of paints to make a favourite pet and pet home.	**Minibeasts**	**Splash** Joining materials Weaving sea and sand pictures Junk model sea creatures

Cycle A	Year 1/2	Year 3/4	Year 5/6
Autumn A	Puppets	Seasonal stockings	Burgers
Spring A	Moving Minibeasts	Light boxes	Building Bridges
Summer A	Eat More Fruit and Veg	Story books	Fashion and textiles
Cycle B	Year 1/2	Year 3/4	Year 5/6
Autumn B	Stable Structures	Seasonal Foods	Making Birdboxes
Spring B	Vehicles	Making Mini Greenhouses	Chinese Interventions
Summer B	Perfect Pizzas	Famous Inventors	Programming Pioneers

Cycle A Curriculum Statements	Year 1/2
Autumn A	**Puppets – Designer focus – Jim Henson** • investigate a range of puppets and their features • design and make a finger puppet using simple joining (gluing) • develop and practise sewing skills – running stitch and overstitch • design a glove puppet – planning joining with glue and sewing techniques (sewing a nose, mouth) • follow the design of puppet plan • self-evaluate and peer-evaluate the design
Spring A	**Moving Mini beasts – Pop up designer – Matthew Reinhart** • create a sliding mechanism • using levers and pivots to create a moving mechanism • create a wheel mechanism with the use of a pivot • design a picture using a moving mechanism using the skills of the previous lessons to determine the most appropriate mechanism • follow design process to make a mini beast moving picture • evaluate design
Summer A	**Eat more Fruit and Vegetable – Chef – Lorraine Pascal** • find out the favourite fruits and vegetable of the class using a pictogram • examine taste and describe a variety of fruit and vegetables • find out how to handle and prepare fruit and vegetables using grating, chopping and coring • design a recipe to include fruit and vegetables • make and evaluate a product using fruit and/or vegetables
Cycle B	Year 1/2
Autumn B	***Stable Structures – Designer –*** **Ove Arup** • explore the features of stable structures, including toy car garages • plan and design a stable structure • explore a range of materials (wood, cardboard, paper) and make decisions based on end product • follow design and make a product • evaluate product

Spring B	**Vehicles – Designer – Henry Ford** • investigate a variety of vehicles, their features and uses • investigate wheels, axles and chassis • investigate ways of creating and decorating the body of a vehicle • design a vehicle with wheels that move axles and have a body • make a vehicle based on a design • evaluate a finished product •
Summer B	**Perfect Pizzas – Chef – Antonio Carluccio** • Find out what the favourite pizzas in the class are • Explore what consists of a healthy diet • Examine, describe and categorise a variety of bread-based products • Examine, describe and categorise a variety of pizza toppings • Explore the five different food groups • Design a balanced menu • Make and evaluate pizzas based on a design

Cycle A Curriculum statements	Year 3/4
Autumn A	Seasonal Stockings – • Explore and analyse products – focus on joins and decoration • Explore and practise fabric joining techniques • Explore and practise fabric decoration techniques • Design and make a seasonal stocking • Evaluate design and function

Spring A	Lightboxes – Inventor – Thomas Edison • Discuss and explore illuminated signs • Create a circuit with a lightbulb • Draw and label a circuit diagram • Understand LEDs can be used in a circuit • Identify purpose and audience of illuminated signs • Plan and design a lightbox • Identify, select and use appropriate tools, equipment and materials to make a lightbox • Construct a working circuit to fit inside the box with one or more light • Test and review product
Summer A	Storybooks – Designer focus – Robert Sabuda • Investigate and evaluate linkage and lever products • Experiment with techniques to create a range of moving mechanisms • Explore and experiment with a range of fonts and graphics • Plan and design a storybook • Incorporate moving mechanisms • Evaluate product
Cycle B	Year 3/4
Autumn B	Seasonal Foods – Chef focus - Jamie Oliver • Explore seasonal British foods • Know how seasonal fruits and vegetables are grown and produced in Britain • Know how seasonal meats and fish are processed and how they form part of a varied diet • Know what a healthy and varied diet consists of • Design and review a menu incorporating seasonal produce
Spring B	Making Mini-Greenhouses – Designer – Sir Joseph Paxton • Explore existing greenhouses • Investigate stable structures • Investigate materials for mini- greenhouses • Design a mini- greenhouse • Make a mini- greenhouse • Test, review, evaluate

Summer B	British Inventors – Alexander Graham Bell • Investigate the invention of the telephone • Investigate the invention of the World Wide Web • Explore how reinforced concrete works • Investigate the invention of the Mackintosh • Reflect on the impact inventions have on our lives

Cycle A Curriculum statements	Year 5/6
Autumn A	Burgers - Creator – Janie and Jerry Murre • Explore different types of burgers and compare nutrition facts • Explore how to make burger patties • Explore sauces and side dishes • Explore buns and review suitability • Plan and design a burger • Make and evaluate
Spring	Building Bridges – Designer – Thomas Telford • Explore ways in which pillars and beams span gaps • Explore how trusses can strengthen bridges • Explore ways in which arches strengthen bridges • Explore how suspension bridges can span long distances • Develop criteria and design prototype bridge for a purpose • Analyse and evaluate products according to design criteria
Summer A	Fashion and Textiles –Designer - Vivienne Westwood • Investigate and analyse items made using textiles, materials and how they are made • Explore ways in which textiles are joined and decorated • Design item using textiles and draw pattern pieces • Use pattern pieces to measure, mark and cut fabric • Join fabric pieces by hand sewing • Sew, hem and add design details • Review product
Cycle B	Year 5/6

Autumn B	Making Birdboxes – Inventor – Edward Michel • Explore purpose and appearance of birdboxes • Investigate the materials and features of bird houses and how to draw diagrams • To investigate and practise woodwork skills. • To be able to design a bird house for a specific bird. • To be able to make a bird house by following a plan • To evaluate, make predictions and promote a completed bird house.
Spring B	Chinese Inventions – Inventors – Mozi and Lu Ban • To understand how the four great inventions of China shaped the world • To investigate water-powered machines • To build and test prototype kites • To design a kite based on design criteria. • To make and evaluate a kite
Summer B	Programming pioneers – IT - Steve Jobs • To explain how computers and computer programs are used in a variety of products • To develop ideas for a product with an embedded computer system that controls it. • To develop, model and communicate ideas for an embedded system which monitors and controls a door, a room or both. • To develop ideas for a product and start to write programs to monitor and control them. • To model and communicate ideas, using either prototype models or computer-aided design • To evaluate your design for a computer-controlled system and consider the views of others to improve your work

Progression of Skills in Design Technology

Skill Progression	KS1	LKS2	UKS2
Design	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing. Children design purposeful, functional, appealing products for themselves and other users based on design criteria. They generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Children can: a use their knowledge of existing products and their own experience to help generate their ideas; b design products that have a purpose and are aimed at an intended user; c explain how their products will look and work through talking and simple annotated drawings d work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing. Children 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. They generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Children can: a identify the design features of their products that will appeal to intended customers; b use their knowledge of a broad range of existing products to help generate their ideas; c design innovative and appealing products that have a clear purpose and are aimed at a specific user; d explain how particular parts of their products work; e use annotated sketches to develop and communicate their ideas; f when designing, explore different initial ideas before coming up with a final design; g when planning, start to explain their choice of materials and components including function and aesthetics; h test ideas out through using prototypes i develop and follow simple design criteria;	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing. Children 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. They generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design. Children can: a use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market; b use their knowledge of a broad range of existing products to help generate their ideas; c design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user; d explain how particular parts of their products work; e use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas; f generate a range of design ideas and clearly communicate final designs; g consider the availability and costings of resources when planning out designs;

		work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.	work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.
Make	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making. Children select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. They select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Children can: Planning a with support, follow a simple plan or recipe; b begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer; c select from a range of materials, textiles and components according to their characteristics; Practical skills and techniques d learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures; e use a range of materials and components, including textiles and food ingredients; f with help, measure and mark out; g cut, shape and score materials with some accuracy; h assemble, join and combine materials, components or ingredients; i demonstrate how to cut, shape and	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making. Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately. They 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. Children can: Plan a with growing confidence, carefully select from a range of tools and equipment, explaining their choices; b select from a range of materials and components according to their functional properties and aesthetic qualities; c place the main stages of making in a systematic order; Practical skills and techniques d learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures; e use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components; f with growing independence, measure and mark out to the nearest cm and millimetre; g cut, shape and score materials	Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making. Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. They 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. Children can: Planning a independently plan by suggesting what to do next; b with growing confidence, select from a wide range of tools and equipment, explaining their choices; c select from a range of materials and components according to their functional properties and aesthetic qualities; d create step-by-step plans as a guide to making; Practical skills and techniques e learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures; f independently take exact measurements and mark out, to within 1 millimetre; g use a full range of materials and components, including construction materials and kits, textiles, and mechanical components; h cut a range of materials with precision and accuracy;

	join fabric to make a simple product; j manipulate fabrics in simple ways to create the desired effect; k use a basic running stich; l cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups; m begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.	with some degree of accuracy; h assemble, join and combine material and components with some degree of accuracy; i demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product; j join textiles with an appropriate sewing technique; begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics.	i shape and score materials with precision and accuracy; j assemble, join and combine materials and components with accuracy; k demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product; l join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch; refine the finish using techniques to improve the appearance of their product, such as sanding or a more precise scissor cut after roughly cutting out a shape.
Evaluate	**KS1 Design and Technology National Curriculum** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Children explore and evaluate a range of existing products. They evaluate their ideas and products against design criteria. Children can: a explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations; b explain positives and things to improve for existing products; c explore what materials products are made from; d talk about their design ideas and what they are making; e as they work, start to identify strengths and possible changes they might make to refine their existing design; f evaluate their products and ideas	**KS2 Design and Technology National Curriculum** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Children investigate and analyse a range of existing products. They evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. They understand how key events and individuals in design and technology have helped shape the world. Children can: a explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose; b explore what materials/ingredients products are made from and suggest reasons for this; c consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to	**KS2 Design and Technology National Curriculum** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. Children investigate and analyse a range of existing products. They evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. They understand how key events and individuals in design and technology have helped shape the world. Children can: a complete detailed competitor analysis of other products on the market; b critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make; evaluate their ideas and products against the original design criteria, making changes as needed.

	against their simple design criteria; start to understand that the iterative process sometimes involves repeating different stages of the process.	improve their product; d evaluate their product against their original design criteria; evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.	
Technical	Children build structures, exploring how they can be made stronger, stiffer and more stable. They explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Children can: a build simple structures, exploring how they can be made stronger, stiffer and more stable; b talk about and start to understand the simple working characteristics of materials and components; explore and create products using mechanisms, such as levers, sliders and wheels.	Children apply their understanding of how to strengthen, stiffen and reinforce more complex structures. They understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. They apply their understanding of computing to program, monitor and control their products. Children can: a understand that materials have both functional properties and aesthetic qualities; b apply their understanding of how to strengthen, stiffen and reinforce more complex structures to create more useful characteristics of products; c understand and demonstrate how mechanical and electrical systems have an input and output process; d make and represent simple electrical circuits, such as a series and parallel, and components to create functional products; e explain how mechanical systems such as levers and linkages create movement; use mechanical systems in their products.	Children apply their understanding of how to strengthen, stiffen and reinforce more complex structures. They understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. They apply their understanding of computing to program, monitor and control their products. Children can: a apply their understanding of how to strengthen, stiffen and reinforce more complex structures to create more useful characteristics of products; b understand and demonstrate that mechanical and electrical systems have an input, process and output; c explain how mechanical systems, such as cams, create movement and use mechanical systems in their products; apply their understanding of computing to program, monitor and control a product.
Cooking and Nutrition	Children use the basic principles of a healthy and varied diet to prepare dishes. They understand where food comes from. Children	Children understand and apply the principles of a healthy and varied diet. They prepare and cook a variety of predominantly savoury dishes using a	Children understand and apply the principles of a healthy and varied diet. They prepare and cook a variety of predominantly savoury dishes using a

	can: a explain where in the world different foods originate from; b understand that all food comes from plants or animals; c understand that food has to be farmed, grown elsewhere (e.g. home) or caught; d name and sort foods into the five groups e understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain howto design and prepare dishes.	range of cooking techniques. They understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Children can: a start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world; b understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically; c with support, use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven; d use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking; e explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes; f understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body; g prepare ingredients using appropriate cooking utensils; h measure and weigh ingredients to the nearest gram and millilitre; i start to independently follow a recipe; start to understand seasonality.	range of cooking techniques. They understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Children can: a know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world; b understand about seasonality, how this may affect the food availability and plan recipes according to seasonality; c understand that food is processed into ingredients that can be eaten or used in cooking; d demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source; e demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling; f explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes; g adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma; h alter methods, cooking times and/or temperatures; i independently follow a recipe.