Curriculum Progression Map - Milestones

Design and Technology - Generating Ideas - Designing

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I can select a picture of something I would like to copy to create.	Copy, create, picture, experiment, blocks, colours, draw, marks, stacking, building, explore, balance, plan	Stay and play session + celebration of work - Parental involvement - Vocabulary. Art Gallery/Exhibition - parental involvement Occupations - Artist, designer, builder Scrapbook - End of topic farms - Parental involvement
	After 2 terms in F1	• I can experiment with blocks, colours and marks • I can test out stacking and building with different blocks and explore balancing them on top of each other.		
	By the end of F1	• I can say what I am going to make before I do it.		
F2	After 1 term in F2	• I can say what I am going to make before I do it.	Plan, design, implement, draw, tick list, resources, explore	Art Gallery/Exhibition - parental involvement - vocabulary Zaha Hadid - architect
	After 2 terms in F2	• I can think and talk about what I am going to make before I do it and carry it out.		
	By the end of F2	• I can plan what I am going to make (boat/minibeast) by drawing it first. • I can use a tick list to say what resources I am going to need to make my boat.		
Year 1		• Know that before something is made, it has to be designed. • Know that more than one design is always generated so that designers have a choice. • Know that a product has to be designed for a reason/ purpose. • Know that a product has to be designed for a target group/ key audience. • Know that the chosen design is always discussed and improved before the final design is chosen. • Know that products are usually made in factories, often by machinery but sometimes by hand (people). • Know that anyone can have a good idea that they can develop in order to make a product. • Know how to produce more than one design through discussion for a set purpose and audience and be able to discuss key design features with a partner.	designed, design, generated, designers, product, reason, purpose, target group, key audience, improved, final design, factories, machinery, manually, idea, develop, produce, key design features	Health and well-being Autumn 1 - Design a healthy snack for 'The Tiger who came to tea'. George Stephenson - invented first steam engine. Spring 1 - Disassembly and skills: Test and assemble a variety of wheels and axels to see which work best. Summer 2 - *Design a moving picture for a Traction Man scene.

Year 2	• Know that before something is made, it has to be designed. • Know that more than one design is always generated so that designers have a choice. • Know that a product has to be designed for a reason/ purpose. • Know that a product has to be designed for a target group/ key audience. • Know that there can be a number of different reasons/ purposes/ target group/ audience a product is designed for and understand the reasons why. • Know that the chosen design is always discussed and improved before the final design is chosen. • Know how to suggest ways in which a design can be improved/ modified. • Know that products are usually made in factories, often by machinery but sometimes by hand (people). • Know how to list items that they might come across that have been designed via this process. • Know how to produce more than one design through discussion or drawing for a set purpose and audience and be able to discuss key design features with a partner.	designed, design, generated, designers, reason, purpose, product, target group, key audience, improved, final design, modified, factories, machinery, manually, process, produce, key design features	
Year 3	• Know that there can be a number of different reason/ purposes/ target groups/ key audiences a product is designed for and understand the reasons why. • Know that research is used and carried out in order to inform the design of a product. • Know that from this, design criteria are created in order for the product to meet the outcomes from the research. • Know what design criteria are. • Know how to start using research to inform basic design criteria. • Know that the chosen design is always discussed and improved before the final design is chosen. • Know how to suggest ways in which a design can be improved/ modified. • Know how to produce more than one design through drawing. • Know how to use annotation in order to communicate design features and acknowledges aspects of the design criteria.	reasons, purposes, target groups, key audience, product, designed, design, design criteria, outcomes, research, final design, improved, modified, produce, annotation, design features	Autumn One- Design a magnet board game, ensuring there is a purpose to the game. Spring One- Design a stone age settlement based on knowledge and research of real stone age settlements. Summer Two - Design a healthy meal, ensuring all food categories are met. Summer Two- Design a tea pot cosy, considering the target group and criteria of the final product.
Year 4	• Know that there can be a number of different reasons/ purposes/ target group/ key audiences a product is designed for and understand the reasons why. • Know that research is used and carried out in order to inform the design of a product. • Know how to carry out own research in order to inform the design of a product. • Know that from this, design criteria are created in order for the product to meet the outcomes from the research. • Know what design criteria are. • Know how to develop own design criteria for a product. • Know that the chosen design is always discussed and improved against the design criteria before the final design is chosen. • Know how to suggest ways in which a design can be improved/ modified.	reasons, purposes, target group, key audience, product, design, designed, research, inform, product, design criteria, outcomes, improved, modified, produce, annotation, design features	Nicola Tesla and Ada Lovelace, designing inventions and computer programmes.

	• Know how to produce more than one design through drawing. • Know how to use annotation in order to communicate design features and ensure design criteria has been met.		
Year 5	• Know the key audience for whom you are designing your enterprise product for. • Know and understand the target group/ key audience in order to develop a suitable product for them. • Know how to use a set of design criteria based on research surrounding the target group/ key audience. • Know what a cross sectional exploded diagram is. • Know what a prototype is. • Know how to use diagrams and prototypes in the process. • Know how Computer Aided Design can be used in the design process (the use of 2D and 3D designs). • Know how to use Computer Aided Design to make a 2D or 3D design.	key audience, designing, enterprise product, target group, product, design criteria, research, cross sectional exploded diagram, prototype, diagrams, process, Computer Aided Design, 2D designs, 3D designs	
Year 6	• Know the key audience for whom you are designing your enterprise product for. • Know and understand the target group/ key audience in order to develop a suitable product for them. • Know how to use a set of design criteria based on research surrounding the target group/ key audience. • Know what a cross sectional exploded diagram is. • Know what a prototype is. • Know how to use diagrams and prototypes in the process. • Know how Computer Aided Design can be used in the design process (the use of 2D and 3D designs). • Know how to use Computer Aided Design to make a 2D or 3D design.	key audience, designing, enterprise product, target group, product, design criteria, research, cross sectional exploded diagram, prototype, diagrams, process, Computer Aided Design, 2D designs, 3D designs	

Curriculum Progression Map - Milestones

Design and Technology - Making

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I can push two simple construction pieces together, such as, stickle bricks. • I can stack 3 blocks to balance.	Construct, construction, stack, balance, push, blocks, colours, marks, model, test, building, explore, balance, top, describe, texture,	Stay and play session + celebration of work - Parental involvement - Vocabulary. Art Gallery/Exhibition - parental involvement
	After 2 terms in F1	• I can experiment with blocks, colours and marks • I can make simple models using construction toys. • I can test out stacking and building with different blocks and explore balancing them on top of each other.		

	By the end of F1	• I can show interest in and describe the texture of things. • I can use various construction materials. • I can join construction pieces together to build and balance. • I can push and pull apart larger construction pieces, such as, Duplo. • I can explore different materials in the sand/water/messy play and talk about how they feel/what happens/how they change. • I know that some materials can change - playing and exploring with different items in the sand/water/messy play/tuff spot/paint/dough • I know the names of some materials and talk about textures.	materials, push, pull, change, feel, item	Occupations - Artist, designer, builder Scrapbook - End of topic farms - Parental involvement - Vocabulary
F2	After 1 term in F2	• I can show increasing control over an object in pushing, patting. • I can explore and test out materials. • I can explore which materials to use when building a bridge and ensuring that a goat can stand on the bridge without it falling down. • I can use junk modelling materials to make a shaker.	Push, pat, explore, test, materials, build, bridge, strong, weak, describe, texture, construct, create, resources, tools, equipment, safely, techniques, experiment, represent, plan, represent	Art Gallery/Exhibition - parental involvement Diversity - looking at buildings and structures in China Zaha Hadid - architect
	After 2 terms in F2	• I can show interest in and describe the texture of things. • I can use various construction materials. • I know the properties of materials and their suitability for a particular purpose. • I can use junk modelling materials to create a drum and a frying pan, using appropriate resources for purpose. • I can test my models fit their purpose.		
	By the end of F2	• I can choose the resources I need for my activity. • I can handle tools and equipment effectively. • I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • I can use what I have learnt about media and materials in original ways, thinking about uses and purposes. • I can represent my own ideas, thoughts and feelings through design and technology. • I can select appropriate materials to use to make a boat that will float and will be waterproof, following my plan. • I can use junk modelling materials to create an instrument to represent a sound from the seaside.		
Year 1		• Begin to make their design using appropriate techniques. • With help measure, mark out, cut and shape a range of materials • Know how to correctly hold a pair of scissors. • Know how to cut accurately along different sizes and shapes of lines. • Know that tracing (of simple lines using pencil) can be used to develop fine motor skills. • Know that there are different ways to join materials (e.g. glue, sellotape and blu-tack). • Begin to use simple finishing techniques to improve the appearance of their product.	sizes, shapes, lines, tracing, simple lines, fine motor skills, join, materials, glue, sellotape, blu-tack, thread, equipment, hole punched holes,	Autumn 1 - Make a healthy fruit salad for 'The Tiger who came to tea'. Spring 1 - Make and evaluate a moving vehicle. Summer 2 - Make and evaluate a moving picture for a Traction Man scene. Make a ball and cup toy. Make a toy peg doll.
Year 2		• Begin to select tools and materials; use correct vocabulary to name and describe them • Learn to use hand tools safely and appropriately. • Know that product designs can be made out of a range of materials.	product, designs, materials, purpose, tracing, simple lines, shapes, patterns,	

	• Know that certain materials are used for a specific purpose and are chosen for those reasons. • Know that tracing (of simple lines, shapes and patterns using pencil) can be used to make a template. • Know how to create differently shaped templates (using tracing and scissors). • Know how to cut accurately along lines and around template shapes using scissors. • Start to choose and use appropriate finishing techniques based on own ideas.	template, create, cut, scissors, investigate, methods, joining, equipment,	
Year 3	• Know what reclaimed and recycled materials are. • Know how to cut, fold, trace and shape accurately in order to produce a finished product. • Know how to create a simple lever slider for a pop-up book/card. • Know how to join and finish accurately by selecting and using a wide range of tools and equipment. • Explain their choice of tools and equipment in relation to the skills and techniques they will be using. • Measure, mark out, cut, score and assemble components with more accuracy. • Start to work safely and accurately with a range of simple tools. • Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work	Reclaimed, recycled, cut, fold, trace, shape, product, create, simple lever slider, pop-up book/card, join, finish, lever, measure, score, components	Autumn One- Create a magnet board game, ensuring they have all the equipment and resources needed. Spring One- Create a stone age settlement, ensuring they have all the equipment and resources needed. Summer Two – Create a healthy meal, ensuring they have all the equipment and resources needed. Summer Two- Create a tea pot cosy, ensuring they have all the equipment and resources needed.
Year 4	• Select a wider range of tools and techniques for making their product safely. • Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. • Continue to learn how to program a computer to monitor changes in the environment and control their products • Understand how to reinforce and strengthen a 3D framework • Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT. • Know how to cut, fold, trace and shape accurately in order to produce a finished product. • Know how to create a simple lever slider for a pop-up book/card. • Know how to join and finish accurately by selecting and using a wide range of tools and equipment.	cut, fold, trace, shape, produce, product, create, simple lever slider, pop-up book/card, join, finish, tools, equipment, make, equipment, techniques, reinforce, strengthen,	Nicola Tesla and Ada Lovelace, designing inventions and computer programmes.
Year 5	• Know how to consider functional and aesthetic properties. • Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately. • Begin to measure and mark out more accurately • Demonstrate how to use skills in using different tools and equipment safely and accurately with growing confidence cut and join with accuracy to ensure a good-quality finish to the product.	designs, investigate, investigations, thread materials, tools, components, functional, aesthetic properties	

	• Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.		
Year 6	• Confidently select appropriate tools, materials, components and techniques and use them. • Know how to consider functional and aesthetic properties. • Use tools safely and accurately. • Aim to make and to achieve a quality product. • Demonstrate when make modifications as they go along. • Know how to reinforce and strengthen a 3D framework. • Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.	designs, investigate, investigations, tools, components, functional, aesthetic properties	

Curriculum Progression Map - Milestones

Design and Technology - Evaluating

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1		Creation, thought, good, bad, improve, different, change	Stay and play session + celebration of work - Parental involvement - Vocabulary. Art Gallery/Exhibition - parental involvement Scrapbook - End of topic farms - Parental involvement - Vocabulary
	After 2 terms in F1	• I can say if something I have made is good or not or if I like it.		
	By the end of F1	• I can say what I like about a creation when asked.		
F2	After 1 term in F2	• I can say what I like about a creation when asked and if it works.	Creation, good, bad, like, dislike, change, improve, alteration, evaluate, model, test	Art Gallery/Exhibition - parental involvement
	After 2 terms in F2	• I can make alterations to a creation to make it fit a purpose. • I can evaluate my drum creation.		
	By the end of F2	• I can evaluate my model of a boat, after testing it and say what I could do to improve it.		

Year 1	• Know what it means to evaluate something in terms of strengths. • Know how to make suggestions in order to make the product even better. • Know how to kindly make suggestions without causing offence.	evaluate, strengths, suggestions, product	Autumn 1 - Evaluate a healthy fruit salad for 'The Tiger who came to tea'. Spring 1 - Evaluate a moving vehicle. Create vehicle exhibition for parents to see. Summer 2 - Evaluate a moving picture for a Traction Man scene.
Year 2	• Know what it means to evaluate something in terms of strengths. • Know how to make suggestions in order to make the product even better. • Know how to kindly make suggestions without causing offence.	evaluate, strengths, suggestions, product	
Year 3	• Know what a net is. • Know and explore how to disassemble a range of different packaging to discover a variety of nets and shapes. • Know how nets and shapes form different packaging. • Know how to make their own net for their own packaging. • Know how to add strength to a net by using different materials. • Know how to evaluate own work and suggest changes.	net, disassemble, packaging, shapes, strength, materials, evaluate, suggestions	Autumn One- Create a magnet board game, evaluating during use of game at parent café. Summer Two - Create a healthy meal, evaluating whether it covers all food groups. Shared at parent café. Summer Two- Create a tea pot cosy, evaluating it's ability to keep a tea pot warm during the parent café.
Year 4	• Know what a net is. • Know and explore how to disassemble a range of different packaging to discover a variety of nets and shapes. • Know how nets and shapes form different packaging. • Know how to evaluate different nets according to durability in order to influence their own net design. • Know how to make their own net for their own packaging. • Know how to test different ways of adding strength to a net by using different materials. • Know how to evaluate own work in terms of strength and make suggestions.	net, disassemble, packaging, shapes, evaluate, durability, net design, strength, materials, suggestions	Parent café and invitation of children from other year groups to evaluate final product.
Year 5	• Know that there can be a number of different decorative techniques to complete a project. • Know how to explore a range of finishing techniques to decide which is most effective. • Know what triangulation is. • Know and understand how triangles add strength. • Know how to demonstrate this through triangulation. • Know how to evaluate critically and effectively in order to improve own work. • Know how to make suggestions considering a different design criteria/target group in the future.	decorative techniques, project, finishing techniques, triangulation, strength, evaluate, critically, improve, suggestions, design criteria/target group	
Year 6	• Know that there can be a number of different decorative techniques to complete a project.	decorative techniques, project,	

	• Know how to explore a range of finishing techniques to decide which is most effective. • Know what triangulation is. • Know and understand how triangles add strength. • Know how to demonstrate this through triangulation. • Know how to evaluate critically and effectively in order to improve own work. • Know how to make suggestions considering a different design criteria/target group in the future.	finishing techniques, triangulation, strength, evaluate, critically, improve, suggestions, design criteria/target group	

Curriculum Progression Map - Milestones

Design and Technology - Structures

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I can push two simple construction pieces together, such as, stickle bricks. • I can stack 3 blocks to balance.	Push, construction, stack, balance, blocks, model, build, bridge, test, different, explore, top, turn, order, enclosure, space, create, join, pull, apart,	Health and Wellbeing and Vocabulary - Outdoor learning opportunities and constructing Stay and play session + celebration of work - Parental involvement - Vocabulary. Occupations - Artist, designer, builder Diversity - Farms - Looking at buildings, farms around the world.
	After 2 terms in F1	• I can experiment with blocks. • I can make simple models using construction toys. • I can stack up to 6 blocks to balance. • I can balance blocks to build a bridge. • I can test out stacking and building with different blocks and explore balancing them on top of each other. • I know that they can balance some blocks together and not others. • I know that some blocks need to be put in a certain way when building in order to balance them.		
	By the end of F1	• I can begin to construct stacking blocks vertically and horizontally, making enclosures and creating spaces. • I can join construction pieces together to build and balance. • I can balance blocks to build a bridge. • I can push and pull apart larger construction pieces, such as, Duplo.		
F2	After 1 term in F2	• I can balance blocks to build a bridge. • I can show increasing control over an object in pushing, patting. • I can push and pull apart larger construction pieces, such as, Duplo. • I can test out materials for building houses and castles. • I can explore materials for building houses. • I can explore which materials to use when building a bridge and ensuring that a goat can stand on the bridge without it falling down.	Balance, blocks, bridge, object, push, pat, pull, apart, test, material, building, explore, weight, strong, weak, stack, enclosure, create, space, join,	Health and Wellbeing and Vocabulary - Outdoor learning opportunities and constructing Art Gallery/Exhibition - parental involvement Diversity - looking at buildings and structures in China
	After 2	• I can use various construction materials.		

	terms in F2	• I can begin to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces. • I can join construction pieces together to build and balance. • I can use blocks to build structures with balance and symmetry. • I can construct with larger bricks (such as Duplo) to build models and add in details. • I know the properties of materials and their suitability for a particular purpose. • I can use blocks and construction pieces to create a replica Chinese building.	structure, symmetry, model, detail	Artist Paul Klee – studying different ways to create and represent structures Barbara Hepworth – different structures and sculptures Zaha Hadid – architect
	By the end of F2	• I can use blocks to build structures with balance, symmetry and with smaller detailed features. • I can construct with smaller bricks (such as Lego) to build models and add in details. • I can represent my own ideas, thoughts and feelings through design and technology. • I can build a castle.		
Year 1		• Construct a range of simple structures using simple construction kits. • Make a structure more stable by widening the base. • Make a square frame from strip wood using triangular card joints. • Make a simple card hinge.	construction, explore, slider, simple moving image	Summer 2 - Design, make and evaluate a moving picture for a Traction Man scene. Explore and evaluate a range of existing moving books. Test and assemble a variety of levers, sliders, flaps and ways to make parts 'pop' out or move. *Use mechanisms [for example, levers, sliders], in their products.
Year 2		• Deconstruct and assemble the net of basic 3D shapes. • Strengthen 2D frames by adding diagonal bracing struts. • Make a rectangular frame from strip wood. • Use materials to make simple joints, glue, tape and paper clips. • Know how to investigate different methods for joining materials	Structure, stable, rigid, cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder	
Year 3		• Deconstruct and assemble the net of a range of basic 3D shapes. • Join 2D frames to create 3D structures. • Make rectangular frames of different sizes using strip wood, reinforcing with cross braces. • Use a range of materials to make joints. • Know that certain reclaimed/ recycled materials can be used for a specific purpose in order to make a structure.	reclaimed, recycled materials, purpose, structure,	Spring One- Create a stone age settlement based on knowledge and research of real stone age settlements.

Year 4	• Create nets of increasingly complex 3D shapes which include the addition of gluing tabs. • Reinforce and strengthen 3D framework using the concept of 'triangulation'. • Explain in detail why some structures fail. • Use a range of materials to make joints e.g., card strips, elastic bands, thread and ties, and plastic tubing. • Know what reclaimed and recycled materials are. • Know that certain reclaimed/ recycled materials can be used for a specific purpose in order to make a structure.	reclaimed, recycled, materials, purpose, Girder, rafter, strut shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision	Looking at buildings and structures across the Mediterranean for Geography. Gaudi- architect in Spain.
Year 5	• Create nets and templates accurately in a range of sizes. • Use a range of increasing methods to strengthen 3D structures and frames. • Investigate measure and record the load tolerance of different structures and find ways of improving a structures loadbearing capacity. • Build a range of structures using a wide range of effective materials.	reclaimed, recycled, materials, purpose, Girder, rafter, strut shell structure, Net, template, structure, frame. Measure, record, strengthen, load, capacity, loadbearing, materials	
Year 6	• Make use of specialist equipment to mark out materials. • Select the most appropriate method to strength 3D structures and frames. • Apply a range of finishing techniques, including those from art and design, to a broad range of materials including textiles, metals, polymers and woods. • Use a wider more complex range of materials, components and ingredients, taking into account their properties.	Member, cross brace, cantilever, frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent	

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I can thread large beads onto a pipe cleaner.	Thread, big, beads, pipe cleaner, small, string, push, in, out	Stay and play session + celebration of work – Parental involvement – Vocabulary. Occupations – Designer Diversity – Looking at clothes that people wear in China and India when celebrating festivals.
	After 2 terms in F1	• I can thread smaller beads onto a pipe cleaner.		
	By the end of F1	• I can thread larger beads on to string. • I can push string in and out of a threading card.		
F2	After 1 term in F2	• I can show increasing control over an object in pushing. • I can thread larger beads on to string. • I can push string in and out of a threading card.	Control, object, push, thread, large, string, beads, pull, weave, wool	
	After 2 terms in F2	• I can push smaller beads on to a string. • I can weave string in and out on a threading card.		
	By the end of F2	• I can thread with wool.		
Year 1		• Talk about and begin to select textiles based on characteristics of an increasing range of materials. • Use a simple template. Join fabrics using glue, staples and thread. • Apply an increasing range of finishing techniques, e.g. painting and printing. • Know how to create a picture with peg board and pegs, using fine motor skills.	joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, thread, equipment, hole punched holes, cotton reels, shoelaces, create, peg board, pegs	Summer 2 - Use a range of materials to make a toy peg doll. Occupations – clothes designer Diversity – Looking at clothes that people used to wear in the past and comparing with now, looking at clothes people wear in different countries and when celebrating festivals or getting married or different religions.
Year 2		• Talk about the similarities and differences between textiles based on the characteristics of an increasing range of materials. • Use a simple pattern with increasing accuracy. • Cut and join fabrics using running stitch, buttons and bond web. • Decorate fabric by applying beads and sequins. • Know how to develop string threading skills using a threading board.	joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish	

	• Know how to thread using smaller equipment (e.g. hollow pasta, beads, buttons and string) to create an item for an identified purpose (e.g. a counting aid or jewellery). •	threading, threading board,	
Year 3	• Give reasons for the selection of fabrics and techniques based on knowledge of characteristics. • Make and use a simple paper pattern. • Join fabrics in a range of different ways using zips, tie clasp, toggles, press-studs and buttons. • Use a wide range of simple finishing techniques. • Know how to thread a wide eyelet needle using thread. • Know how to use the threading grids to create simple threading patterns- cross stitch and running stitch.	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, thread, wide eyelet needle, threading grids, threading patterns, cross stitch, running stitch	Summer Two- Create a tea pot cosy, using the correct fabrics for design purposes as well as warming abilities.
Year 4	• Support reasons for selections with justifiable evidence and facts. • Make and use a paper pattern that includes a seam allowance. • Sew using a range of stitches including, backward running stitch and over sewing. • Use a wide range of techniques to add colour, texture and pattern to fabric. • Know how to thread a wide eyelet needle using thread. • Know how to use binka to create a simple sewing product- cross stitch, running stitch, back stitch and whipping stitch. • Now sew using a range of different stitches, to weave and knit.	thread, wide eyelet needle, binka, simple sewing product, cross stitch, running stitch, back stitch, whipping stitch, weaving, loom, knit, casting on/off	Looking at simple Celtic fabric work and patterns during study of the Romans.
Year 5	• Select appropriate materials to create a product. • Create increasingly complex patterns and templates with more than one part that are accurately measured. Use a sewing machine to join and decorate fabric. • Identify the most effective finishing technique in order to maximise the aesthetic value of the product. • Know how to thread a small eyelet needle using thread. • Know how to choose a type of stitch for a purpose (e.g. cross stitch, running stitch, back stitch and whipping stitch).	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, thread, pinking shears, fastenings, , small eyelet needle, stitch, purpose, cross stitch, running stitch, back stitch, whipping stitch,	
Year 6	• Know how to thread a small eyelet needle using thread. • Know how to choose a type of stitch for a purpose (e.g. cross stitch, running stitch, back stitch and whipping stitch). • Use a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives. • Investigate and develop skills in modifying the appearance of materials including textiles and other manufactured materials e.g. dying and applique	thread, small eyelet needle, stitch, purpose, cross stitch, running stitch, back stitch, whipping stitch, materials,	

	• Use CAD/CAM to produce and apply surface finishing techniques, e.g. using dye sublimation	dying, applique, CAD/CAM	

Curriculum Progression Map - Milestones

Design and Technology - Mechanisms/Mechanical Systems

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I can push two simple construction pieces together, such as, stickle bricks.	together, make, model, materials, use, join, build, push, pull	Occupations - Car mechanic, construction worker
	After 2 terms in F1	• I can make simple models using construction toys.		
	By the end of F1	• I can use various construction materials. • I can join construction pieces together to build. • I can push and pull apart larger construction pieces, such as, Duplo.		
F2	After 1 term in F2	• I can show increasing control over an object in pushing, patting. • I can push and pull apart larger construction pieces, such as, Duplo. • I can twist to put something on or off, such as, a lid.	Control, push, pull, pat, object, apart, twist, on, off, lid, materials, create, moving, creation, split pin, open, close, safely, explore, tools, experiment, texture, represent	
	After 2 terms in F2	• I can use various construction materials, such as Mobilo to create moving creations. • I know the properties of materials and their suitability for a particular purpose. • I can use a split pin to create an egg that open and closes.		
	By the end of F2	• I can safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • I can use what I have learnt about media and materials in original ways, thinking about uses and purposes. • I can represent my own ideas, thoughts and feelings through design and technology.		
Year 1		• Deconstruct a simple slider and describe how it works. • Construct a simple slider independently. • Make a lever by joining card strips with paper fasteners. • Understand that different mechanisms produce different types of movement. • Know and use technical vocabulary relevant to the project.	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards	Occupation - designer, car mechanic/manufacturer Spring 1 - Design, make and evaluate a moving vehicle. Disassembly and skills: *Test and assemble a variety of wheels and axels to see which work best.

Year 2	• Deconstruct a range of sliders and describe how they work. • Construct increasing complex sliders. • Join levers to make linkages to create moving parts. • Construct a simple pneumatic system with one moving part. • Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles. • Know and use technical vocabulary relevant to the project. • Know how to explore a range of simple levers for a specific purpose. • Know how to create a simple moving image using a lever.	vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used, simple levers, simple moving image, lever	
Year 3	• Deconstruct and reconstruct a range of sliders and levers. • Vary the position of the pivot point to lift a load using a lever. • Construct a pneumatic with two moving parts. • Identify the cam within a simple mechanism and explain how movement is changed. • Understand and use lever and linkage mechanisms. • Distinguish between fixed and loose pivots. • Know and use technical vocabulary relevant to the project.	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating	
Year 4	• Create a range of sliders and levers to produce horizontal and vertical movement. • Combine sliders and levers to produce a range of movements. • Generate questions to investigate and compare the efficiency of pneumatic systems. • Describe the way in which a cam changes rotary motion into linear motion.	Slider, lever, horizontal, vertical, pneumatic, cam, rotary, motion, linear	
Year 5	• Use a range of technical vocabulary to describe the properties and functions of mechanisms. • Choose and use a range of sliders and levers accurately to create a range of effects. • Analyse and evaluate the efficiency of pneumatic systems. • Discuss the relationship between a cam and follower, an off-centre cam, a peg cam, a pear-shaped cam and a snail cam. • Know what a simple pulley system consists of. • Know that there can be different designs of pulley systems. • Know how to investigate different pulley systems. • Know how to use these investigations to make own simple pulley system.	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output designs, investigate, investigations,	
Year 6	• Know what a simple pulley system consists of. • Know that there can be different designs of pulley systems. • Know how to investigate different pulley systems. • Know how to use these investigations to make own simple pulley system. • Make adjustments to the settings of equipment and machinery such as sewing machines and drilling machines. • Construct and use compound gear trains to drive mechanical systems from a high revving motor.	simple pulley system, designs, investigate, investigations, mechanical, motor, drill,	

Curriculum Progression Map - Milestones

Design and Technology - Electrical Systems

Year group	Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
Year 3	• Explore and describe how an electric motor can be used in a circuit. • Identify key features of electrical safety. • Use a remote-controlled device to switch lights on and off. (including computer control packages) • Know how to make a simple electrical circuit using a buzzer, a battery, a bulb and wires. • Know that a simple circuit consists of a buzzer, a battery, a bulb and wires and that knowledge of a circuit can be applied for a specific D and T purpose.	tools, equipment, make, simple electrical circuit, buzzer, battery, bulb, wires	
Year 4	• Know how to make a simple electrical circuit using a buzzer, a battery, a bulb and wires. • Know that a simple circuit consists of a buzzer, a battery, a bulb and wires and that knowledge of a circuit can be applied for a specific D and T purpose. • Explore and describe how electrical circuits can be created and controlled. • Discuss in depth the hazards and safety issues associated with electricity. • Explore and explain how the direction and speed of an electrical motor can be controlled. • Explore and program a simple control device.	series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device,	Nicola Tesla and Ada Lovelace, designing inventions and computer programmes.
Year 5	• Explore and describe how switches can be used in a range of circuits to control components, e.g. lights in a lighthouse, a movement sensor in a burglar alarm. • Apply appropriate safety measures when constructing circuits. • Explore and discuss ways in which electricity can be used to control movement. • Explore and use an increasing range of complex control system, e.g., a light sensor.	Switch, circuit, current, component, light, sensor, electricity, , fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device,	

Year 6	• Use computer-based systems to control an increasing range of components • Apply computing and use of electronics to embed intelligence in products that respond to inputs. • Control outputs such as actuators and motors. • Make use of sensors to detect heat, light, sound and movement.	reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit	

Curriculum Progression Map - Milestones

Design and Technology - Food

Year group		Key skills and 'sticky' knowledge	Key vocabulary	Links to curriculum drivers VOCABULARY DIVERSITY ASPIRATION HEALTH AND WELL BEING (Including aspirational figures to be studied)
F1	After 1 term in F1	• I have my own likes and dislikes in food and drink. • I am willing to try new food textures and tastes. • I can hold a cup with both hands and drink without much spilling. • I can squash and pinch dough. • I can use larger jugs and spades with some accuracy.	Like, dislike, food, healthy, drink, try, new, texture, taste, hold, cup, spill, squash, pinch, dough, jugs, spades, spoon, fork, knife, squeeze, poke, punch, roll, pour, fill, equipment, tools, safely, wash, dry, ball, spiral, in between, shake, measuring cylinder, measure	Health and Wellbeing - Knowledge of how to keep healthy and eating a healthy range of foods Health and Wellbeing -Visit from Asda to sample fruits from around the World, Cooking and Baking opportunities - scones, bread, pancakes, fruit crumble, making sandwich's and salad
	After 2 terms in F1	• I can feed myself competently with a spoon. • I can drink well without spilling. • I can squeeze, poke (using every finger), punch (hulk smash), roll into a sausage. • I can pour from a jug with accuracy into a container or use a spade to fill a bucket.		
	By the end of F1	• I understand that equipment and tools have to be used safely. • I can usually manage washing and drying hands. • I can ball dough, roll it out and spiral it (snail) and squeeze dough in between the back of my fingers (buckeroo) and shake the dough. • I can pour from a jug into a larger measuring cylinder without spilling.		

F2	After 1 term in F2	• I can use a knife to spread. • I can talk about putting some ingredients together to make food when making porridge, bread • I know I need to use equipment to weigh/measure ingredients. • I can stir to mix ingredients together. • I know people enjoy different types of foods. • I know there are different flavours of food and can describe some of these. • I understand that equipment and tools have to be used safely. • I can usually manage washing and drying hands. • I can show increasing control over an object in pushing and patting. • I can pour from a jug into a larger measuring cylinder without spilling. • I can eat my dinner with a knife and fork.	Fork, knife, spread, ingredients, make, porridge, equipment, weigh, measure, stir, mix, describe, equipment, tools, safely, wash, dry, control, object, push, pour, measuring cylinder, measure, spill, flour, dough, sticky, surface, chop, soft, instruction, create, fruit salad, pancake, sauce, melt, chocolate, risk, scoops, dry, cutter, healthy, mark, beaker	Health and Wellbeing -Visit from Asda to sample fruits from around the World Cooking and Baking opportunities – fruit salad, milkshakes – Health and Wellbeing Healthy foods work Lunchtime support
	After 2 terms in F2	• I know to put flour down to stop dough sticking to the work surface. • I can use a knife to chop up some soft foods. • I can follow instructions to create a fruit salad. • I can add flavour to a pancake by spreading on sauce or squeezing on juice. • I know how to melt chocolate. I can choose to eat a healthy range of foodstuffs and understand the need for variety in food. • I can show some understanding about good practices with regard to eating and hygiene. • I can show understanding of the need for safety when tackling new challenges and consider and manage some risks. • I can control finer tools when playing with dough. • I can spread with a knife. • I can use jugs/scoops/spoons with more accuracy into smaller containers without spilling.		
	By the end of F2	• I know to add more flour when dough is too sticky or more water when it is too dry. • I can follow instructions to make biscuits. • I can roll out dough. • I can use biscuit cutters. • I know the importance for good health, a healthy diet, and talk about ways to keep healthy. • I can use a knife to cut up some of my dinner. • I can use jugs/scoops/spoons with accuracy to get to a mark on a measuring cylinder/beaker/jug.		
Year 1		• Know that meat comes from animals and fish comes from the sea. • Know that vegetables and fruit come from plants in the earth. • Know that dairy products such as yoghurt, cheese and milk come from animals. • Know that some foods are bad because they contain lots of sugar or fat and can give some examples. • Know how to suggest healthy and unhealthy snacks and be able to say whether these are good or bad for you.	meat, animals, fish, vegetables, fruit, plants, dairy products, yoghurt, cheese, milk, foods, sugar, fat, healthy, unhealthy, eat well	Occupation – chef, baker Aspirational - Children's Bake off Health and well-being Science Autumn 1 - Design, make and evaluate a healthy fruit salad for 'The Tiger who came to tea'.

	• Know that unhealthy foods can make you feel bad and damage your teeth. • Know which foods are healthy/ unhealthy on the eat well plate. • Know that the healthy foods outweigh the unhealthy foods on the eat well plate. • Know how to hold a knife correctly using a simple bridge hold. • Know how to peel, cut, chop and spread soft items such as bread, bananas, strawberries etc. • Know how to make a sandwich and a fruit salad.	plate, hold, knife, simple bridge hold, peel, cut, chop, spread, make	Visit from Asda to sample fruits for healthy fruit salad Baking opportunities – scones when learning about England in Spring 1,
Year 2	• Know the main sources of food (e.g. meat and dairy from animals, fruit and vegetables from plants etc.). • Know that some foods are farmed, grown or caught (giving examples) and that these are natural food items. • Know that some foods are bad because they contain lots of sugar or fat and can give some examples. • Know that some foods are man-made (giving examples) and that these are artificial. • Know how to suggest healthy and unhealthy snacks and be able to say whether these or good or bad for you. • Know that unhealthy foods can make you feel bad and damage your teeth. • Know which foods are healthy/ unhealthy on the eat well plate and can state healthier food swap alternatives. • Know that the healthy foods outweigh the unhealthy foods on the eat well plate. • Know the proportions of each food group on the eat well plate and why this is important. • Know how to hold a knife correctly using a simple bridge hold. • Know how to evaluate a food product- healthy dip against certain aspects (e.g. taste, smell, appearance). • Know how to peel, cut and chop firmer foods (such as apples, carrots, cheese and tomatoes etc.) in order to make a dip.	sources, food, meat, dairy, animals, fruit, vegetables, plants, farmed, grown, caught, natural food items, sugar, fat, man-made, artificial, healthy, unhealthy, snacks, teeth, eat well plate, healthier food swap alternatives, proportions, food group, hold, knife, simple bridge hold, peel, cut, chop, evaluate, food product, aspects, taste, smell, appearance	
Year 3	• Know the importance of hand washing in terms of food health, safety and hygiene. • Know the key health and safety rules when cooking (e.g. hair tied up, wash hands, no jewellery and cleaned work station/ utensils). • Know the difference between savoury and sweet foods. • Know where different food products come from and how they are made using research to inform own planning (e.g. where foods are grown, farmed or caught). • Know how to plan a savoury meal using knowledge of the eat well plate (containing carbohydrate and vegetables). • Know how to plan a healthy sweet meal using knowledge of the eat well plate (containing fruit/s). • Know the key aspects of planning a dish (e.g. equipment, ingredients and instructions). • Know the importance of planning before preparing and cooking a food dish. • Know how to prepare and cook a dish following a pre-made plan or recipe. • Know how to demonstrate and use a range of cooking techniques when preparing and cooking dishes (e.g. chopping, kneading, grating and mixing).	food health, safety, hygiene, health and safety rules, cooking, savoury foods, sweet foods, food products, research, plan, planning, grown, farmed, caught, eat well plate, carbohydrates, vegetables, fruits, key aspects, equipment, ingredients, instructions, preparing, cooking, prepare, cook, cooking techniques,	Summer Two – Create a healthy meal for a tea party, covering all food group areas. This food will be shared with others, therefore food safety and hygiene is an important area for discussion.

		chopping, kneading, grating, mixing	
Year 4	• Know the importance of hand washing in terms of food health, safety and hygiene. • Know the key health and safety rules when cooking (e.g. hair tied up, wash hands, no jewellery and cleaned work station/ utensils). • Know the difference between savoury and sweet foods. • Know where different food products come from and how they are made using research to inform own planning (e.g. where foods are grown, farmed or caught). • Know how to plan a savoury meal using knowledge of the eat well plate (containing carbohydrate and vegetables). • Know how to plan a healthy sweet meal using knowledge of the eat well plate (containing fruit/s). • Know the key aspects of planning a dish (e.g. equipment, ingredients and instructions). • Know the importance of planning before preparing and cooking a food dish. • Know how to prepare and cook a dish following a pre- made plan or recipe. • Know how to demonstrate and use a range of cooking techniques when preparing and cooking dishes (e.g. chopping, kneading, grating and mixing).	food health, safety, hygiene, health and safety rules, cooking, savoury foods, sweet foods, food products, research, inform, planning, grown, farmed, caught, eat well plate, carbohydrates, vegetables, fruits, key aspects, equipment, ingredients, instructions, preparing, cooking, prepare, cook, pre-made plan, recipe, cooking techniques, chopping, kneading, grating, mixing	Massimo Bottura- Number 1 ranked chef in the world, analysis of his skills and recipes when working on Mediterranean diets.
Year 5	• Know how to demonstrate correct preparation of food products. • Know how raw meats should be safely stored e.g. bottom of the fridge). • Know how to prepare raw meat (e.g. different chopping board/ utensils and washing hands before and after). • Know the importance of this health advice when handling more than one type of meat. • Know the importance of cooking meat for the correct amount of time, based on packaging advice. • Know and check when a meat has been properly cooked (e.g. juices run clear and chicken is white not pink). • Know how to create, plan, prepare and cook a healthy evening meal using a heat source. • Know how to select and use appropriate cooking techniques for a healthy evening meal (e.g. chopping, kneading, grating and mixing).	preparation, food products, raw meats, stored, prepare, cooking, packaging, cooked, create, plan, prepare, cook, heat source, cooking techniques, chopping, kneading, grating, mixing	
Year 6	• Know how to demonstrate correct preparation of food products. • Know how raw meats should be safely stored e.g. bottom of the fridge). • Know how to prepare raw meat (e.g. different chopping board/ utensils and washing hands before and after). • Know the importance of this health advice when handling more than one type of meat. • Know the importance of cooking meat for the correct amount of time, based on packaging advice. • Know and check when a meat has been properly cooked (e.g. juices run clear and chicken is white not pink).	preparation, food products, raw meats, stored, prepare, cooking, packaging, cooked, create, plan, prepare, cook, heat source, cooking techniques, chopping, kneading, grating, mixing	

	• Know how to create, plan, prepare and cook a healthy evening meal using a heat source. • Know how to select and use appropriate cooking techniques for a healthy evening meal (e.g. chopping, kneading, grating and mixing).		