DT Skills Progression – Term 1 & 2

Skill	Year Group	Activity ideas	Key Vocabulary
	By the end of the year, children will be able to:		
Design *Christmas Healthy Biscuit & Packaging* *Fabric Christmas Card*	Year 1 • I can create a simple design for my product. • I can use pictures and words to describe what I want to do.	Begin sketchbooks to design Christmas Healthy Biscuit & Packaging Continue sketchbooks to design fabric Christmas card.	Planning, investigating design, evaluate, make, user, purpose, ideas, product Fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish
Design ***T1:*** *Moon Buggies* ***T2:*** *Space Cooking & Bread*	Year 2 • I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT. • I can design useful, pleasing products for myself and other users based on a design brief.	Begin sketchbooks to design Moon Buggies Continue sketchbooks to design recipe for bread/space cooking.	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients
Design ***T1:*** *Bronze Age Beakers (clay)*	Year 3 • I can use my knowledge of existing products to design my own functional product.	Begin sketchbooks to design Bronze Age Beakers Continue sketchbooks to design magnetics maze.	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing

T2: *Magnetics Maze*	• I can create designs using annotated sketches, cross-sectional diagrams and simple computer programmes. • I can make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them		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
Design *Moving Monsters (Iron Man – Space Bat Angel Dragon)*	Year 4 • I can use my knowledge of existing products to design a functional and appealing product for a particular purpose and audience. • I can create designs using exploded diagrams. • I can use my knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.	Begin sketchbooks to design Moving Monster.	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating
Design ***T1:*** *Sewing of the Bayeux Tapestry* ***T2:*** *Complex Structures*	Year 5 • I can use my research into existing products and my market research to inform the design of my own innovative product. • I can produce step by step plans to guide my making, demonstrating that I can apply my knowledge of	Begin sketchbooks to design Sewing of the Bayeux Tapestry. Continue sketchbooks to design their reinforced complex structure.	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,

	different materials, tools and techniques.		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,
Design *Invention of Hugo Cabret*	Year 6 • I can use research I have done into famous designers and inventors to inform my designs. • I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.	Begin sketchbooks to design invention of Hugo Cabret.	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype 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

Skill	Year Group	Activity Ideas	Key Vocabulary
	By the end of the year, children will be able to:		
Make *Christmas Healthy Biscuit & Packaging* *Fabric Christmas Card*	Year 1 • I can use a range of simple tools to cut, join and combine materials and components safely. • I can select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing.	Make packaging and Christmas healthy biscuit. Make fabric Christmas card.	Planning, investigating design, evaluate, make, user, purpose, ideas, product Fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish
Make *Moon Buggies* *Space Cooking & Bread*	Year 2 • I can choose tools I would like to use and select materials based on my knowledge of their properties. • I can safely measure, mark out, cut and shape materials and components using a range of tools.	Make Moon Buggies Use recipe for making bread/space cooking.	joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients
Make *Bronze Age Beakers (clay)*	Year 3 • I can safely measure, mark out, cut, assemble and join with some accuracy.	Using clay, make Bronze Age Beakers Using magnets and bottles, make magnetics maze.	cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved,

Magnetics Maze			metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder, clay, magnets
Make *Moving Monsters (Iron Man – Space Bat Angel Dragon)*	Year 4 • I can use techniques which require more accuracy to cut, shape, join and finish my work e.g. Cutting internal shapes, slots.	Use levers and pulleys to make Moving Monster.	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating
Make *Sewing of the Bayeux Tapestry* *Complex Structures*	Year 5 • I can create prototypes to show my ideas. • I can make careful and precise measurements so that joins, holes and openings are in exactly the right place.	Sewing of the Bayeux Tapestry. Build their reinforced complex structure.	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, 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,
Make *Invention of Hugo Cabret*	Year 6 • I can apply my knowledge of materials and techniques to refine and rework my product to improve its functional properties and aesthetic qualities.	Use cogs and mechanisms to make invention of Hugo Cabret.	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

	• I can use my technical knowledge and accurate skills to problem solve during the making process.		

Skill	Year Group	Activity Ideas	Key Vocabulary
	By the end of the year, children will be able to:		
Evaluate *Christmas Healthy Biscuit & Packaging* *Fabric Christmas Card*	Year 1 • I can ask simple questions about existing products and those that I have made.	Evaluate packaging and Christmas healthy biscuit. Evaluate fabric Christmas card.	planning, investigating design, evaluate, make, user, purpose, ideas, product,
Evaluate *Moon Buggies* *Space Cooking & Bread*	Year 2 • I can evaluate and assess existing products and those that I have made using a design criteria.	Evaluate Moon Buggies Evaluate recipe and end product of bread/space cooking.	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function
Evaluate *Bronze Age Beakers (clay)* *Magnetics Maze*	Year 3 • I can investigate and analyse existing products and those I have made, considering a wide range of factors.	Evaluate Bronze Age Beakers Evaluate magnetics maze.	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing
Evaluate *Moving Monsters (Iron Man – Space Bat Angel Dragon)*	Year 4 • I can consider how existing products and my own finished products might be improved and how well they meet the needs of the intended user.	Evaluate Moving Monster.	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations

Evaluate *Sewing of the Bayeux Tapestry* *Complex Structures*	Year 5 • I can make detailed evaluations about existing products and my own considering the views of others to improve my work.	Evaluate the sewing of the Bayeux Tapestry. Evaluate their reinforced complex structure.	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype
Evaluate *Invention of Hugo Cabret*	Year 6 • I can use my knowledge of famous designs to further explain the effectiveness of existing products and products I have made.	Evaluate their own invention of Hugo Cabret.	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype

Skill	Year Group	Activity Ideas	
	By the end of the year, children will be able to:		
Technical Knowledge *Christmas Healthy Biscuit & Packaging* *Fabric Christmas Card*	Year 1 *Not Applicable to Terms 1 & 2*		
Technical Knowledge *Moon Buggies* *Space Cooking & Bread*	Year 2 • I can investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable. • I can explore and use mechanisms such as levers, sliders, wheels and axles in products.	Moon Buggies Space Cooking & Bread	vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used
Technical Knowledge *Bronze Age Beakers (clay)* *Magnetics Maze*	Year 3 *Not Applicable to Terms 1 & 2*		
Technical Knowledge *Moving Monsters (Iron Man –*	Year 4 • I can apply techniques I have learnt to strengthen structures and explore my own ideas.	Moving Monsters (Iron Man – Space Bat Angel Dragon)	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating

Space Bat Angel Dragon)	• I can understand and use electrical systems in my products.		
Technical Knowledge *Sewing of the Bayeux Tapestry* *Complex Structures*	Year 5 • I can build more complex 3D structures and apply my knowledge of strengthening techniques to make them stronger or more stable. • I can understand how to use more complex mechanical and electrical systems.	Sewing of the Bayeux Tapestry Complex Structures	seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, 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,
Technical Knowledge *Invention of Hugo Cabret*	Year 6 • I can use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately • I can apply my understanding of computing to program, monitor and control my products.	Invention of Hugo Cabret	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

Skill	Year Group	Activity Ideas	Key Vocabulary
	By the end of the year, children will be able to:		
Cooking & Nutrition *Christmas Healthy Biscuit & Packaging* *Fabric Christmas Card*	Year 1 • I can talk about what I eat at home and begin to discuss what healthy foods are. • I can say where some food comes from and give examples of food that is grown. • I can use simple tools with help to prepare food safely.	Christmas Healthy Biscuit & Packaging	Fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients
Cooking & Nutrition *Moon Buggies Space Cooking & Bread*	Year 2 • I can understand the need for a variety of food in a diet. • I can understand that all food has to be farmed, grown or caught. • I can use a wider range of cookery techniques to prepare food	Space Cooking & Bread	fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients
Cooking & Nutrition *Bronze Age Beakers (clay)* *Magnetics Maze*	Year 3 *Not Applicable to Terms 1 & 2*		
Cooking & Nutrition *Moving Monsters (Iron Man –*	Year 4 *Not Applicable to Terms 1 & 2*		

Space Bat Angel Dragon)			
Cooking & Nutrition *Sewing of the Bayeux Tapestry* *Complex Structures*	Year 5 *Not Applicable to Terms 1 & 2*		
Cooking & Nutrition *Invention of Hugo Cabret*	Year 6 *Not Applicable to Terms 1 & 2*		