



Design Technology Disciplinary Knowledge

Practical Skills - Food		
EYFS	Y1/2 Cycle A	Y1/2 Cycle B
<ul style="list-style-type: none"> Handle food hygienically Learn why people eat healthy food Learn the benefits of healthy food 	<p>Dips and Vegetables</p> <ul style="list-style-type: none"> Use basic principles of a healthy and varied diet to prepare dishes Understand where food comes from <ul style="list-style-type: none"> Cut, peel or grate ingredients safely Measuring in teaspoons and tablespoons <p>Additional learning – making leek and potato soup from harvested vegetables</p> <ul style="list-style-type: none"> Chopping and preparing vegetables Understand where food comes from Tasting 	<p>Pizza</p> <ul style="list-style-type: none"> Select foods to complement one another Understand why you need different food groups in a meal <ul style="list-style-type: none"> Cut, slice, peel, grate or tear ingredients safely Measure or weigh using measuring cups or electronic scales Assemble ingredients using equipment given



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Practical Skills - Food

Y3/4 Cycle A	Y3/4 Cycle B	Y5/6 Cycle A	Y5/26 Cycle B
<p>Ratatouille</p> <ul style="list-style-type: none"> • Prepare ingredients hygienically using appropriate utensils. • Follow a recipe • Assemble or cook ingredients • Measure ingredients to the nearest gram accurately <p>Additional learning – part of Jamie Oliver Big Cook Event – make pasta and uncooked tomato sauce</p> <ul style="list-style-type: none"> - chopping/preparing vegetables - Making/cooking pasta - Dough/rolling 	<p>Pasta</p> <ul style="list-style-type: none"> • Follow a recipe • Weigh/measure using scales, teaspoons and tablespoons • Chopping, peeling, pressing – using a knife claw method 	<p>Mezze</p> <ul style="list-style-type: none"> • Follow a recipe • Weigh/measure multiple ingredients using scales • Using a knife bridge and claw method • Use a variety of utensils for squeezing, grating, pressing, chopping 	<p>Honey Cake</p> <ul style="list-style-type: none"> • Follow a recipe • Weigh/Measure using scales and measuring jug • Beating, drizzling, mixing, cracking an egg, baking



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Practical Skills - Construction		
EYFS	Y1/2 Cycle A	Y1/2 Cycle B
<ul style="list-style-type: none"> • Construct with a purpose in mind, using a variety of resources • Use simple tools and techniques competently and appropriately • Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary • Select the tools and techniques they need to shape, assemble and join materials they are using 	<p>Vehicles</p> <ul style="list-style-type: none"> • Use materials to make a vehicle with wheels and axles; cutting; different ways of joining, decorating; finishing • Select from a range of tools in order to perform practical task, cutting, shaping, joining and finishing. 	<p>Sculpture</p> <ul style="list-style-type: none"> • Select from a range of tools in order to perform practical task, cutting, shaping, joining and finishing. • Select tools/materials, making paper templates/ drawing/cutting shapes, gluing, joining fabric, dyeing



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Practical Skills - Construction

Y3/4 Cycle A	Y3/4 Cycle B	Y5/6 Cycle A	Y5/6 Cycle B
<p>Pop-Up Books</p> <ul style="list-style-type: none"> • Select tools/materials, learn about and make mechanical systems: linkages, moving pivot, fixed pivot, types of motion, levers and sliders • Use a range of tools and equipment to cut, shape, join, finish a wide range of materials and components 	<p>Playgrounds</p> <ul style="list-style-type: none"> • Select tools/materials for making a moving toy with gears and an electrical circuit, cutting, different ways of joining, decorating, finishing • Select and use a wider range of materials and components according to their functional properties and aesthetic qualities • Create series and parallel circuits • Mechanical systems including gears 	<p>Water Walls</p> <ul style="list-style-type: none"> • Select tools and materials including recycled materials/objects, cutting, tying knots, sticking, making holes, screwing, drilling, nailing, • Making prototypes • Mechanisms – pulleys, Archimedes' screw 	<p>Cam Toys</p> <ul style="list-style-type: none"> • Convert rotary motion to linear using cams. • Choose the cams based on the motion required, followers, sliders, camshaft • Adapt the products made using knowledge of cams



Design Technology Disciplinary Knowledge

Practical Skills - Textiles		
EYFS	Y1/2 Cycle A	Y1/2 Cycle B
<ul style="list-style-type: none">• Thread beads through a string• Develop fine motor skills, using string, thread, beads and other materials.	<ul style="list-style-type: none">• Select from and use a range of tools, cutting, shaping, joining and finishing• Shape textiles using templates• Colour and decorate using different techniques (dyeing, gluing, printing)	<ul style="list-style-type: none">• Select from and use a range of tools, cutting, shaping, joining and finishing• Shape textiles using templates• Threading a needle, tying a knot, using running stick, adding decoration



Design Technology Disciplinary Knowledge

Practical Skills - Textiles

Y3/4 Cycle A	Y3/4 Cycle B	Y5/6 Cycle A	Y5/26 Cycle B
<ul style="list-style-type: none"> Joining fabric using running stitch and backstitch Adding fabric applique decoration using overcast stitch 	<ul style="list-style-type: none"> Understand the need for a seam allowance. Join textiles with appropriate, blanket stitching. Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). 	<ul style="list-style-type: none"> Joining fabric to create a seam using backstitch Creating a hem using backstitch Adding fabric applique decoration using overcast stitch Adding embroidery decoration using backstitch 	<ul style="list-style-type: none"> Choosing from skills already practised to create an upcycled t-shirt Running stitch – to create seams, hems or an embroidered line Backstitch – to create seams, hems or an embroidered line Applique – to create decoration using overcast stitch Sewing on a button



Design Technology Disciplinary Knowledge

Designing and Evaluating		
EYFS	Y1/2 Cycle A	Y1/2 Cycle B
<ul style="list-style-type: none">• Think about what the product will look like before making.• Describe products after they have been made.	<ul style="list-style-type: none">• Design purposeful, functional, appealing products. Generate, develop, model and communicate ideas through talking, drawing and mock ups• Understand criteria; generate/innovate/develop ideas	<ul style="list-style-type: none">• Design products that have a clear purpose and an intended user.• Make products, refining the design as work progresses• Evaluate against criteria• Explore and evaluate, identify likes and dislikes



Design Technology Disciplinary Knowledge

Designing and Evaluating

Y3/4 Cycle A	Y3/4 Cycle B	Y5/6 Cycle A	Y5/26 Cycle B
<ul style="list-style-type: none"> • Make products by carefully selecting materials • Use research to inform design of innovative, functional and appealing products that are fit for purpose. Develop, model ideas, discuss, annotate sketches and make prototypes • Investigate and analyse existing products, evaluate own product, consider views of others and ways to improve work 	<ul style="list-style-type: none"> • Refine techniques as work progresses, continually evaluating the effect on product design. • Devising criteria (user, purpose, function, appeal); generate/innovate/develop ideas; create annotated drawings and exploded diagrams • Evaluate against criteria and existing products, improve upon existing designs giving reasons for choices 	<ul style="list-style-type: none"> • Design with the user in mind. • Devise criteria (user, purpose, function, appeal) • Ensure products have a high-quality finish, using art skills where appropriate. • Making prototypes – create annotated drawings • Evaluate end product, is it suitable for purpose, can it be improved 	<ul style="list-style-type: none"> • Make products through stages of prototypes, making continual refinements. • Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.



Design Technology Disciplinary Knowledge

DT in the Real World		
EYFS	Y1/2 Cycle A	Y1/2 Cycle B
<ul style="list-style-type: none">• Look at similar objects before making yours.• Explain why you want yours to be similar/different.	<ul style="list-style-type: none">• Explore objects and designs to identify likes and dislikes of the designs• Build structures, exploring mechanisms• Make a moving vehicle• Knowing where food comes from• To make own food• Making something for use by self or a friend at home/school	<ul style="list-style-type: none">• Suggest improvements to existing designs.• Explore how products have been created.• Making something for use by self or a friend in home/school• Knowing where food comes from• To make own food



Design Technology Disciplinary Knowledge

DT in the Real World

Y3/4 Cycle A	Y3/4 Cycle B	Y5/6 Cycle A	Y5/26 Cycle A
<ul style="list-style-type: none"> • Improve upon existing designs, giving reasons for choices • Analyse existing products • Understand how key events and individuals in design and technology have shaped the world. • Understand and apply principles of a healthy and varied diet • Prepare and cook a variety of dishes using a range of cooking techniques • Know where and how a variety of ingredients are grown, reared, caught and processed 	<ul style="list-style-type: none"> • Improve upon existing designs, giving reasons for choices • Disassemble products to understand how they work • Understand and apply principles of a healthy and varied diet • Prepare and cook a variety of dishes using a range of cooking techniques • Know where and how a variety of ingredients are grown, reared, caught and processed 	<ul style="list-style-type: none"> • Understand and apply principles of a healthy and varied diet • Prepare and cook a variety of dishes using a range of cooking techniques • Know where and how a variety of ingredients are grown, reared, caught and processed • Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. • Create innovative designs that improve upon existing products. • Explore objects and designs to identify likes and dislikes of the designs. 	<ul style="list-style-type: none"> • Understand and apply principles of a healthy and varied diet • Prepare and cook a variety of dishes using a range of cooking techniques • Know where and how a variety of ingredients are grown, reared, caught and processed • Compare different inventors, their products and impacts. • State opinions on the designs and designers studied. • Evaluate self-produced products with next steps to improve the final product.

