

Greenvale Primary School DT Skills Progression KS1



Objective

Year 1

Year 2

Design

Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Design appealing products based on a very simple design criteria.

Design purposeful and appealing products using their own experience as a guide.

Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication.

Make simple drawings of their ideas and talk about their plans. Write simple labels on a diagram.

Draw diagrams of their products, make simple mock ups and use the computer to share their ideas.

Make

Select from and use a range of tools and equipment to perform practical tasks.

Select and use simple utensils for cutting, making and joining.

Select and use a wider range of tools and explain why they have chosen the tool they have.

Select from and use a wide range of materials and components, including construction materials, textiles and ingredients according to their characteristics.

Select which materials would be best to use for a purpose from a limited range of suitable materials.

Describe simple characteristics of different materials and use this knowledge to make careful selections. Know how to use a range of recycled/reclaimed materials.

Evaluate

Explore and Evaluate a range of existing products.

Test a range of products and talk about what they like and don't like about them.

Explore a range of existing products related to their design criteria.

Evaluate their ideas and products against design criteria.

Make simple comments about the effectiveness of their design or product using the design criteria.

Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.



Greenvale Primary School DT Skills Progression KS1



Objective

Year 1

Year 2

Technical Knowledge

Build structures, exploring how they can be made stronger, stiffer & more stable.

Design and build structures adding support and choosing materials to ensure the structure is strong enough to withstand tests.

Explore and use mechanisms in their products.

Learn about and use a range of levers, spinners and pull tabs to make images that move.

Cooking

Use the basic principles of a healthy and varied diet to prepare dishes.

Understand the importance of eating a variety of different fruits and vegetables. Prepare dishes involving vegetables.

Understand the importance of a varied and healthy diet. Prepare dishes involving healthy snacks.

Understand where food comes from.

Identify where basic fruit and vegetables come from in this country.

Identify other ingredients that they use in their dips and where they come from.



Greenvale Primary School DT Skills Progression KS2

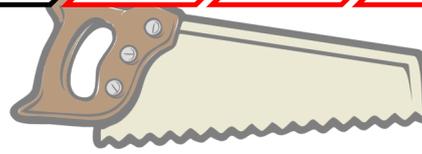
Objective

Year 3

Year 4

Year 5

Year 6



Design

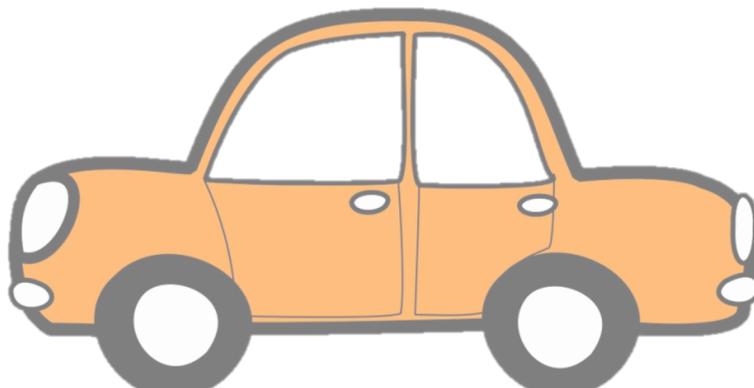
Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.	Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user.	Generate and clarify ideas through discussion with peers to develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.	Generate innovative ideas through research including surveys, interviews and questionnaires and discussion with peers to develop a design brief and criteria for a design specification.	Use research using surveys, interviews, questionnaires and web-based resources to develop a design specification for a range of functional products.
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.	Use annotated sketches, prototypes, final product sketches and pattern pieces; communication technology, such as web-based recipes, to develop and communicate ideas.	Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.	Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views, and, where appropriate, computer-aided design.	Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.

Make

Select from and use a wider range of tools and equipment to perform practical tasks, accurately.	Select from and use a range of appropriate utensils, tools and equipment with some accuracy related to their product.	Select and use appropriate combinations of tools with some accuracy related to their products.	Write a step-by-step plan, including a list of resources required.	Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.
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.	Select from a limited range of suitable materials considering their functional properties.	Explain their choice of materials according to functional properties and aesthetic qualities.	Compare different materials that might be suitable for the purpose (including those that might be used for a specialist purpose e.g. strengthening).	Select and justify reasons for their choice of materials based on their qualities including those for specialist purposes e.g. electrical equipment & gears.

Evaluate

Investigate and analyse a range of existing products.	Investigate a range of 3-D textile products, ingredients and lever and linkage products relevant to their project.	Investigate and evaluate a range of products including the ingredients, materials, components and techniques that are used.	Investigate and analyse products linked to their final product.	Investigate and analyse critically a range of products linked to their final product.
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	Test their product against the original design criteria and with the intended user.	Test and evaluate their own products against design criteria and the intended user and purpose.	Test products with intended users and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.	Continually evaluate, test and modify the working features of the product to match the initial design specification.
Understand how key events and individuals in design and technology have helped shape the world.		Explore the history of a big producer of a popular product and how the product has changed over time.	Explore the history of a key moment in history when new technology was invented ie. Computer systems.	Critically discuss the development of a product over time and discuss how it has changed our world.



Greenvale Primary School DT Skills Progression KS2

Objective

Year 3

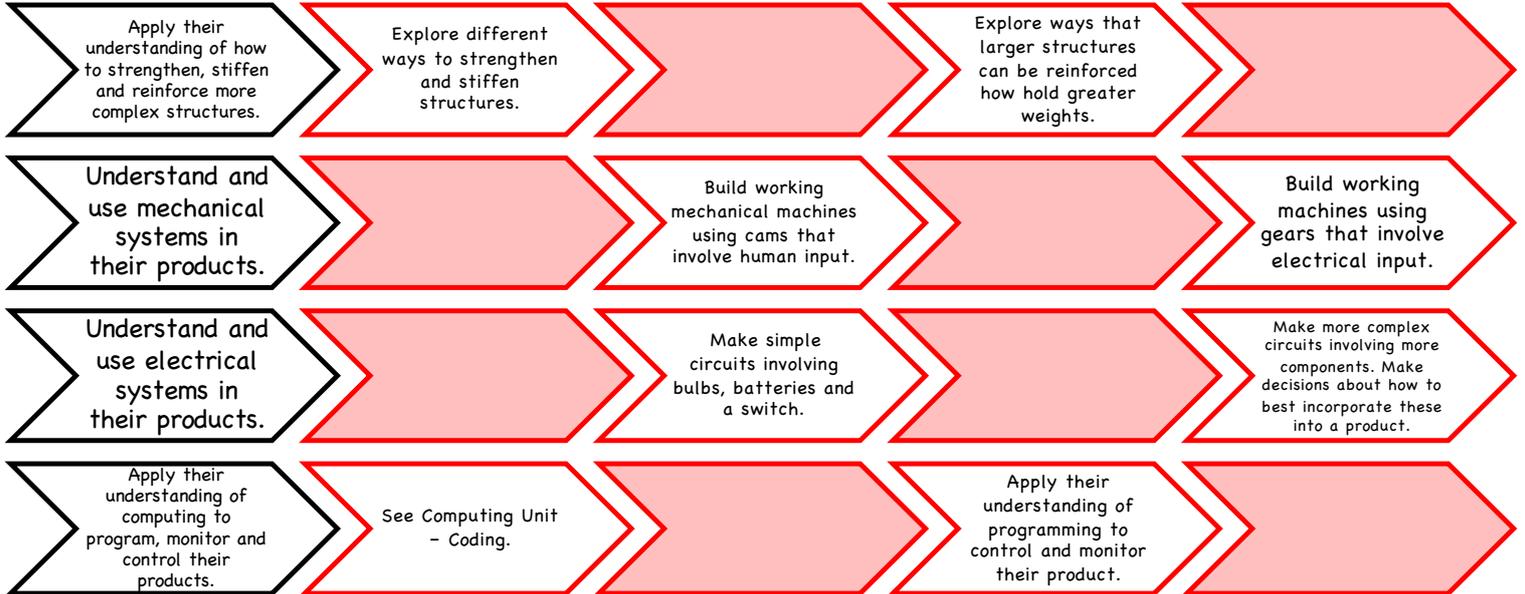
Year 4

Year 5

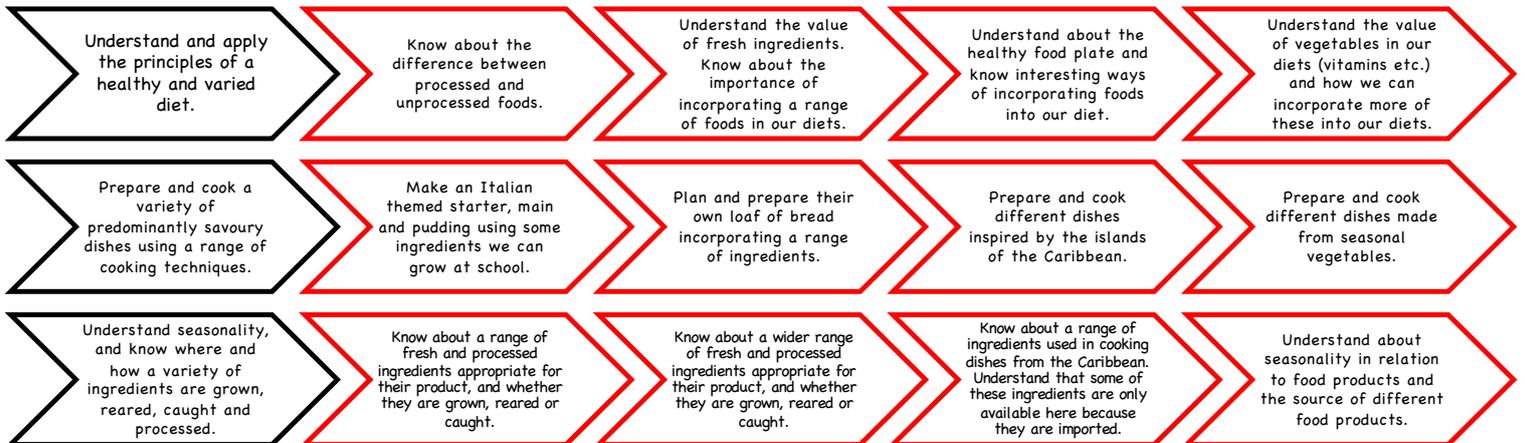
Year 6



Technical Knowledge



Cooking



Greenvale Primary School - DT Skills Vocabulary

1	<p>Design/Make/Evaluate: planning, investigating design, evaluate, make, user, purpose, ideas, product</p> <p>Technical Knowledge: joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards</p> <p>Cooking: 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,</p>
2	<p>Design/Make/Evaluate: investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function</p> <p>Technical Knowledge: 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, cylinders</p> <p>Cooking: Hygiene, blend, grate, crush, mix, peel, chop, slice, layered, The Bridge, The Claw, The Fork secure, Protein, dairy, fruit, vegetables, carbohydrate, balanced, diet, varied, equipment, method, design, improvements, appealing.</p>
3	<p>Design/Make/Evaluate: user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing</p> <p>Technical Knowledge: 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, fabric, names of fabrics, fastening, compartment, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam</p> <p>Cooking: name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught</p>
4	<p>Design/Make/Evaluate: evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations</p> <p>Technical Knowledge: mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating, series circuit, fault, connection, 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</p> <p>Cooking: frozen, tinned, processed, seasonal, harvested healthy/varied diet, design, brand, industry, product, market research. texture, appearance, flavour, design criteria, shape, knot, evaluate, original, ingredients, yeast, knead, dough, rise</p>
5	<p>Design/Make/Evaluate: design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype</p> <p>Technical Knowledge: architecture, cross sectional drawings, prototypes, frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent</p> <p>Cooking: fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, savoury, source, seasonality, utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, The claw, The Bridge, The Fork Secure</p>
6	<p>Design/Make/Evaluate: function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, innovation, functional, mock-up, prototype</p> <p>Technical Knowledge: toggle switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit, pulley, drive belt, gear, rotation, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, 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,</p> <p>Cooking: spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, savoury, source, seasonality utensils, The claw, The Bridge, The Fork Secure</p>

