



Grange Moor Primary School

DT

Curriculum Map Document

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1. Statement of Intent

As outlined in the National Curriculum, a quality Art and Design education:

Embodies some of the highest forms of human creativity. It should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

Therefore, at Birdsedge First School it is our vision to develop a range of artist skills in all children at all levels through ensuring we hold high expectations of what children can achieve. We teach a skills-based curriculum, providing children with provocations that allow them to produce high-quality end pieces that they are incredibly proud of and want to share with others.

Curriculum: We cover 5 Art units over the course of the year, each focussed on a different strand of Art (e.g. painting, drawing, 3D form, print) so that we ensure breadth of Art across the curriculum and linking in to their current topics. We focus on key artists (from a range of genres) within each unit so that we are evaluating quality pieces of work that help us strive for a similar quality from the children. The children critically evaluate artists' work and develop their skills through discursive analysis (KS1) as well as written notes in KS2.

Skills: We develop ideas in the children's own sketchbooks, where they practise, annotate, add notes to and evaluate their existing work. This is so that the children are able to review their learning journey and develop their critical analysis skills as they progress through a unit. We plan backwards from the end-product, ensuring the taught skills are developed upon each week so that the children produce a high quality final piece.

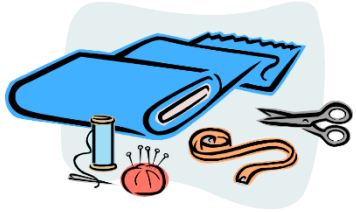
Creating Artists: We have 'Published' displays throughout school, which allow our children's high quality work to be showcased, in both our corridors and shared spaces as well as within classrooms. This is something that the children strive to be part of. High quality Art is showcased with links made to famous International and UK Artists.

Through this we allow children to develop an immense sense of pride in their work and constantly strive to be the best that they can be. This empowers those children whose work is chosen as well as motivates those children who want to be part of the next display.

We also have many opportunities for children to celebrate their learning through an annual Art gallery so that our entire school community can celebrate the fantastic achievements of the children over the course of our Creative Arts week. Alongside this, each year group plans outcomes for parents to come and see high-quality work throughout the whole curriculum over the course of the year.

2. DT at Grange Moor

3 Key Areas are taught throughout each school year with links to chosen artists/designers:



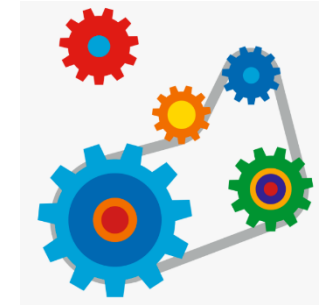
Textiles



**Food
Technology**



Construction



**Mechanical
Components**

Throughout all of these areas children should be given the opportunity to discuss and review their own and others work. Each aspect mentioned above should include the opportunity for **Design**, **Make** and **Evaluate** with Technical Knowledge wrapping around each of these.

They should develop the ability to express thoughts and feelings about artworks and explore a range of great artists, craft makers, architects and designers both current and through history.

A two-year cycle is used to ensure a broader coverage and less repetition in mixed aged classes. Art and DT as subjects are also taught in a half termly pattern to make better use of curriculum timetabling.

3. Whole School Long Term Plan

Long Term Plan: Design and Technology Cycle One

CLASS	AUTUMN 1	AUTUMN 2	SPRING ONE	SPRING TWO	SUMMER ONE	SUMMER TWO
R	Opportunities to design, make and evaluate using a range of tools within continuous provision					
C1 Year 1 and Year 2		Cooking and Nutrition – Smoothies (1)		Mechanisms – Making a moving monster (2)		Structures – Baby Bear’s Chair (2)
C2 Year 3 and Year 4	Textiles – Cushions (3)		Structures – constructing a castle (3)		Mechanical Systems – Making a slingshot car (4)	
C3 Year 5 and Year 6		Digital World – Navigating the world (6)		Cooking and Nutrition - Developing a recipe (5)		Textiles – Waistcoats (6)

Long Term Plan: Design and Technology Cycle Two

CLASS	AUTUMN 1	AUTUMN 2	SPRING ONE	SPRING TWO	SUMMER ONE	SUMMER TWO
R	Opportunities to design, make and evaluate using a range of tools within continuous provision					
C1 Year 1 and Year 2		Textiles – Puppets (1)		Mechanisms – Making a Moving Story Book (1)		Cooking and Nutrition – Balanced Diet (2)
C2 Year 3 and Year 4	Digital World – Wearable Technology (3)		Cooking and Nutrition - Adapting a recipe (4)		Electrical Systems – Torches (4)	
C3 Year 5 and Year 6		Structures – bridges (5)		Mechanical Systems – Making a pop up book (5)		Electrical Systems – Steady Hand Game (6)

4. Progression of Knowledge and Skills

DT Progression of Skills KS1

<p>Designing – Understanding contexts, users and purposes</p> <ul style="list-style-type: none"> work confidently within a range of contexts, such as imaginary, storybased, home, school, gardens, playgrounds, local community, industry and the wider environment state what products they are making say whether their products are for themselves or other users describe what their products are for say how their products will work say how they will make their products suitable for their intended users use simple design criteria to help develop their ideas <p>Designing – Generating, developing, modelling and communicating ideas</p> <ul style="list-style-type: none"> generate ideas by drawing on their own experiences use knowledge of existing products to help come up with ideas develop and communicate ideas by talking and drawing model ideas by exploring materials, components and construction kits and by making templates and mockups use ICT, where appropriate, to develop and communicate their ideas 	<p>Making - Planning</p> <ul style="list-style-type: none"> plan by suggesting what to do next select from a range of tools and equipment, explaining their choices select from a range of materials and components according to their characteristics Making – Practical skills and techniques follow procedures for safety and hygiene use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components measure, mark out, cut and shape materials and components assemble, join and combine materials and components use finishing techniques, including those from art and design <p>Technical knowledge – Making products work</p> <ul style="list-style-type: none"> about the simple working characteristics of materials and components about the movement of simple mechanisms such as levers, sliders, wheels and axles how freestanding structures can be made stronger, stiffer and more stable that a 3-D textiles product can be assembled from two identical fabric shape that food ingredients should be combined according to their sensory characteristics the correct technical vocabulary for the projects they are undertaking
<p>Evaluating – Own ideas and products</p> <ul style="list-style-type: none"> talk about their design ideas and what they are making make simple judgements about their products and ideas against design criteria suggest how their products could be improved <p>Evaluating - Existing products</p> <ul style="list-style-type: none"> explore what products are and who or what they are for explore how products work and how or where they might be used explore what materials products are made from explore what they like and dislike about products 	<p>Cooking and nutrition – Where food comes from</p> <ul style="list-style-type: none"> that all food comes from plants or animals that food has to be farmed, grown elsewhere (e.g. home) or caught <p>Cooking and nutrition – Food preparation, cooking and nutrition</p> <ul style="list-style-type: none"> how to name and sort foods into the five groups in The Eatwell Plate that everyone should eat at least five portions of fruit and vegetables every day how to prepare simple dishes safely and hygienically, without using a heat source how to use techniques such as cutting, peeling and grating

DT Progression of Skills LKS2

Designing – Understanding contexts, users and purposes

- work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment
- describe the purpose of their products
- indicate the design features of their products that will appeal to intended users
- explain how particular parts of their products work
- gather information about needs and wants of particular individuals and groups
- develop their own design criteria and use these to inform their ideas

Designing - Generating, developing, modelling and communicating ideas

- share and clarify ideas through discussion
- model their ideas using prototypes and pattern pieces
- use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas
- use computer-aided design to develop and communicate their ideas
- generate realistic ideas, focusing on the needs of the user
- make design decisions that take account of the availability of resources

Evaluating – Own ideas and products

identify the strengths and areas for development in their ideas and products

Making – Planning

- select tools and equipment suitable for the task
- explain their choice of tools and equipment in relation to the skills and techniques they will be using
- select materials and components suitable for the task
- explain their choice of materials and components according to functional properties and aesthetic qualities
- order the main stages of making

Making – Practical skills and techniques

- follow procedures for safety and hygiene
- use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components
- measure, mark out, cut and shape materials and components with some accuracy assemble, join and combine materials and components with some accuracy
- apply a range of finishing techniques, including those from art and design, with some accuracy

Technical knowledge – Making products work

- how to use learning from science and maths to help design and make products that work
- that materials have both functional properties and aesthetic qualities
- that materials can be combined and mixed to create more useful characteristics that mechanical and electrical systems have an input, process and output
- use the correct technical vocabulary for the projects they are undertaking
- how mechanical systems such as levers and linkages or pneumatic systems create movement
- how simple electrical circuits and components can be used to create functional products
- how to program a computer to control their products
- how to make strong, stiff shell structures
- that a single fabric shape can be used to make a 3D textiles product
- that food ingredients can be fresh, pre-cooked and processed

Cooking and nutrition – Where food comes from

consider the views of others, including intended users, to improve their work
refer to their design criteria as they design and make
use their design criteria to evaluate their completed products

Evaluating – Existing products Pupils will be taught to investigate and analyse:

- how well products have been designed and made
- why materials have been chosen
- what methods of construction have been used
- developed ground-breaking products
- how well products work to achieve their purposes
- how well products meet user needs and wants
- who designed and made the products
- where and when products were designed and made
- whether products can be recycled or reused

Evaluating – Key events and individuals

- about inventors, designers, engineers, chefs and manufacturers who have made significant contributions.

- that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world

Cooking and nutrition – Food preparation, cooking and nutrition

- how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
- how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
- that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate
- that to be active and healthy, food and drink are needed to provide energy for the body

DT Progression of Skills UKS2

Designing – Understanding contexts, users and purposes

- work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment
- describe the purpose of their products
- indicate the design features of their products that will appeal to intended users
- explain how particular parts of their products work
- carry out research, using surveys, interviews, questionnaires and web-based resources
- identify the needs, wants, preferences and values of particular individuals and groups
- develop a simple design specification to guide their thinking

Designing - Generating, developing, modelling and communicating ideas

- share and clarify ideas through discussion
- model their ideas using prototypes and pattern pieces
- use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas
- use computer-aided design to develop and communicate their ideas
- generate realistic ideas, focusing on the needs of the user
- make design decisions that take account of the availability of resources

Making – Planning

- select tools and equipment suitable for the task
- explain their choice of tools and equipment in relation to the skills and techniques they will be using
- select materials and components suitable for the task
- explain their choice of materials and components according to functional properties and aesthetic qualities
- produce appropriate lists of tools, equipment and materials that they need
formulate step-by-step plans as a guide to making

Making – Practical skills and techniques

- follow procedures for safety and hygiene
- use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components
- accurately measure, mark out, cut and shape materials and components
- accurately assemble, join and combine materials and components
- accurately apply a range of finishing techniques, including those from art and design
- use techniques that involve a number of steps
- demonstrate resourcefulness when tackling practical problems

Technical knowledge – Making products work

- how to use learning from science and maths to help design and make products that work
- that materials have both functional properties and aesthetic qualities
- that materials can be combined and mixed to create more useful characteristics
- that mechanical and electrical systems have an input, process and output
- the correct technical vocabulary for the projects they are undertaking
- how mechanical systems such as cams or pulleys or gears create movement
- how more complex electrical circuits and components can be used to create functional products
- how to program a computer to monitor changes in the environment and control their products
- how to reinforce and strengthen a 3D framework
- that a 3D textiles product can be made from a combination of fabric shapes

	<ul style="list-style-type: none"> ● that a recipe can be adapted by adding or substituting one or more ingredients
<p>Evaluating – Own ideas and products</p> <ul style="list-style-type: none"> ● identify the strengths and areas for development in their ideas and products ● consider the views of others, including intended users, to improve their work critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make ● evaluate their ideas and products against their original design specification <p>Evaluating – Existing products</p> <ul style="list-style-type: none"> ● Pupils will be taught to investigate and analyse: ● how well products have been designed and made ● why materials have been chosen ● what methods of construction have been used ● how well products work to achieve their purposes ● how well products meet user needs and wants ● how much products cost to make ● how innovative products are ● how sustainable the materials in products are ● what impact products have beyond their intended purpose <p>Evaluating – Key events and individuals</p> <ul style="list-style-type: none"> ● about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products 	<p>Cooking and nutrition – Where food comes from</p> <ul style="list-style-type: none"> ● that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world ● that seasons may affect the food available ● how food is processed into ingredients that can be eaten or used in cooking <p>Cooking and nutrition – Food preparation, cooking and nutrition</p> <ul style="list-style-type: none"> ● how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source ● how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking ● that recipes can be adapted to change the appearance, taste, texture and aroma ● that different food and drink contain different substances – nutrients, water and fibre – that are needed for health

CLASS	TOPIC ONE	TOPIC TWO	TOPIC THREE
C1	Opportunities to design, make and evaluate using a range of tools within continuous provision.		
C1	<p style="text-align: center;">Cooking and Nutrition – Smoothies (1)</p> <p>Substantive Knowledge</p> <p>That a blender is a machine which mixes ingredients together into a smooth liquid. That a fruit has seeds and a vegetable does not. That fruits grow on trees or vines. That vegetables can grow either above or below ground. That vegetables are any edible part of a plant.</p> <p>Disciplinary Knowledge</p> <p>Designing smoothie carton packaging by hand. Chopping fruit and vegetables safely to make a smoothie. Juicing fruits to make a smoothie. Identifying if a food is a fruit. Learning where and how fruits and vegetables grow. Tasting and evaluating different foods. Describing appearance, smell and taste. Suggesting information to be included on packaging.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • blend • blender • chopping board • compare • cut • design • evaluate • flavour • fork • fruit • healthy • ingredients • juice • juicer • leaf • plant • recipe • root 	<p style="text-align: center;">Mechanisms – Making a moving monster (2)</p> <p>Substantive Knowledge</p> <p>To know that mechanisms are a collection of moving parts that work together as a machine to produce movement. To know that there is always an input and an output in a mechanism. To know that an input is the energy that is used to start something working. To know that an output is the movement that happens as a result of the input. To know that a lever is something that turns on a pivot. To know that a linkage mechanism is made up of a series of levers.</p> <p>Disciplinary Knowledge</p> <p>Creating a design criteria for a moving monster as a class. Designing a moving monster for a specific audience in accordance with a design criteria. Making linkages using card for levers and split pins for pivots. Experimenting with linkages adjusting the widths, lengths and thicknesses of card used. Cutting and assembling components neatly. Evaluating own designs against design criteria. Using peer feedback to modify a final design.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • axle • design criteria • input • linkage • mechanical • output • pivot • wheel 	<p style="text-align: center;">Structures – Baby Bear’s Chair (2)</p> <p>Substantive Knowledge</p> <p>To know that shapes and structures with wide, flat bases or legs are the most stable. To understand that the shape of a structure affects its strength. To know that materials can be manipulated to improve strength and stiffness. To know that a structure is something which has been formed or made from parts. To know that a ‘stable’ structure is one which is firmly fixed and unlikely to change or move. To know that a ‘strong’ structure is one which does not break easily. To know that a ‘stiff’ structure or material is one which does not bend easily.</p> <p>Disciplinary Knowledge</p> <p>Generating and communicating ideas using sketching and modelling. Learning about different types of structures, found in the natural world and in everyday objects. Making a structure according to design criteria. Creating joints and structures from paper/card and tape. Building a strong and stiff structure by folding paper. Exploring the features of structures. Comparing the stability of different shapes. Testing the strength of their own structures. Identifying the weakest part of a structure. Evaluating the strength, stiffness and stability of their own structure.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • design criteria • man-made • natural • properties • structure

	<ul style="list-style-type: none"> • seed • select • smoothie • stem • table knife • taste • tree • vegetable • vine 		<ul style="list-style-type: none"> • stable • shape • model • test
C2	<p style="text-align: center;">Textiles – Cushions (3)</p> <p>Substantive Knowledge</p> <p>To know that appliqué is a way of mending or decorating a textile by applying smaller pieces of fabric.</p> <p>To know that when two edges of fabric have been joined together it is called a seam.</p> <p>To know that it is important to leave space on the fabric for the seam.</p> <p>To understand that some products are turned inside out after sewing so the stitching is hidden.</p> <p>Disciplinary Knowledge</p> <p>Designing and making a template from an existing cushion and applying individual design criteria.</p> <p>Following design criteria to create a cushion.</p> <p>Selecting and cutting fabrics with ease using fabric scissors.</p> <p>Threading needles with greater independence.</p> <p>Tying knots with greater independence.</p> <p>Sewing cross stitch to join fabric.</p> <p>Decorating fabric using appliqué.</p> <p>Completing design ideas with stuffing and sewing the edges.</p> <p>Evaluating an end product and thinking of other ways in which to create similar items.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • appliqué • cross-stitch • design • equipment • fabric • patch • running stitch 	<p style="text-align: center;">Structures – constructing a castle (3)</p> <p>Substantive Knowledge</p> <p>To understand that wide and flat based objects are more stable.</p> <p>To understand the importance of strength and stiffness in structures.</p> <p>To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse – and their purpose.</p> <p>To know that a façade is the front of a structure.</p> <p>To understand that a castle needed to be strong and stable to withstand enemy attack.</p> <p>Disciplinary Knowledge</p> <p>Designing a castle with key features to appeal to a specific person/purpose.</p> <p>Drawing and labelling a castle design using 2D shapes.</p> <p>Designing and/or decorating a castle tower on CAD software.</p> <p>Constructing a range of 3D geometric shapes using nets.</p> <p>Creating special features for individual designs.</p> <p>Making facades from a range of recycled materials.</p> <p>Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design.</p> <p>Suggesting points for modification of the individual designs.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • 2D • 3D • castle • design 	<p style="text-align: center;">Mechanical Systems – Making a slingshot car (4)</p> <p>Substantive Knowledge</p> <p>To understand that all moving things have kinetic energy.</p> <p>To understand that kinetic energy is the energy that something (object/person) has by being in motion.</p> <p>To know that air resistance is the level of drag on an object as it is forced through the air.</p> <p>To understand that the shape of a moving object will affect how it moves due to air resistance.</p> <p>Disciplinary Knowledge</p> <p>Designing a shape that reduces air resistance.</p> <p>Drawing a net to create a structure from.</p> <p>Choosing shapes that increase or decrease speed as a result of air resistance.</p> <p>Personalising a design.</p> <p>Measuring, marking, cutting and assembling with increasing accuracy.</p> <p>Making a model based on a chosen design.</p> <p>Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • chassis • energy • kinetic • mechanism • air resistance • design • structure • graphics • research • model

	<ul style="list-style-type: none"> • thread • seam • texture • knot 	<ul style="list-style-type: none"> • key features • net • scoring • shape • stable • stiff • strong • structure • tab 	<ul style="list-style-type: none"> • template
C3	<p>Digital World – Navigating the world (6)</p> <p>Substantive Knowledge</p> <p>To know that accelerometers can detect movement. To understand that sensors can be useful in products as they mean the product can function without human input. To know that designers write design briefs and develop design criteria to enable them to fulfil a client’s request. To know that ‘multifunctional’ means an object or product has more than one function. To know that magnetometers are devices that measure the Earth’s magnetic field to determine which direction you are facing.</p> <p>Disciplinary Knowledge</p> <p>Writing a design brief from information submitted by a client. Developing design criteria to fulfil the client’s request. Developing a product idea through annotated sketches. Placing and manoeuvring 3D objects, using CAD. Changing the properties of, or combine one or more 3D objects, using CAD. Considering materials and their functional properties, especially those that are sustainable and recyclable (for example, cork and bamboo). Explaining material choices and why they were chosen as part of a product concept. Programming an N,E, S,W cardinal compass. Explaining how my program fits the design criteria and how it would be useful as part of a navigation tool. Developing an awareness of sustainable design. Explaining the key functions and features of my navigation tool to the client as part of a product concept pitch.</p>	<p>Cooking and Nutrition - Developing a recipe (5)</p> <p>Substantive Knowledge</p> <p>That beef comes from cows reared on farms. That recipes can be adapted to suit nutritional needs and dietary requirements. That nutritional information is found on food packaging. That coloured chopping boards can prevent cross-contamination. That food packaging serves many purposes.</p> <p>Disciplinary Knowledge</p> <p>Explaining the farm-to-fork process. Researching existing recipes. Suggesting alternative ingredients. Analysing nutritional content. Writing an alternative recipe. Understanding cross-contamination. Using preparation skills. Designing a jar label. Making a developed recipe.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • abattoir • adaptation • balanced • beef • brand • cook • cross-contamination • cut • design • enhance • equipment • evaluate • farm 	<p>Textiles – Waistcoats (6)</p> <p>Substantive Knowledge</p> <p>To understand that it is important to design clothing with the client/target customer in mind. To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric. To understand the importance of consistently sized stitches.</p> <p>Disciplinary Knowledge</p> <p>Designing a waistcoat in accordance with a specification and design criteria to fit a specific theme. Annotating designs. Using a template when pinning panels onto fabric. Marking and cutting fabric accurately, in accordance with a design. Sewing a strong running stitch, making small, neat stitches and following the edge. Tying strong knots. Decorating a waistcoat – attaching objects using thread and adding a secure fastening. Learning different decorative stitches. Sewing accurately with even regularity of stitches. Evaluating work continually as it is created.</p> <p>Key Vocabulary</p> <ul style="list-style-type: none"> • annotate • decorate • design criteria • fabric • target customer • waistcoat • waterproof

Demonstrating a functional program as part of a product concept.

Key Vocabulary

- smart
- smartphone
- equipment
- navigation
- cardinal compass
- application (apps)
- pedometer
- GPS tracker
- design brief
- design criteria
- client
- function
- program
- duplicate
- replica
- loop
- variable
- value
- if statement
- boolean
- corrode
- mouldable
- lightweight
- sustainable design
- environmentally friendly
- biodegradable
- recyclable
- product lifecycle
- product lifespan

- grate
- hygiene
- ingredients
- label
- measure
- nutrient
- nutrition
- nutritional value
- preference
- press
- process
- recipe
- safety
- theme

Year	R	Y1	Y2	Y3	Y4	Y5	Y6
Cooking and Nutrition		<p>Can they cut food safely?</p> <p>Can they describe the texture of foods?</p> <p>Do they wash their hands and make sure that surfaces are clean?</p> <p>Can they think of interesting ways of decorating food they have made, e.g. cakes?</p>	<p>Can they describe the properties of the ingredients they are using?</p> <p>Can they explain what it means to be hygienic?</p> <p>Are they hygienic in the kitchen?</p>	<p>Can they choose the right ingredients for a product?</p> <p>Can they use equipment safely?</p> <p>Can they make sure that their product looks attractive?</p> <p>Can they describe how their combined ingredients come together?</p> <p>Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?</p>	<p>Do they know what to do to be hygienic and safe?</p> <p>Have they thought what they can do to present their product in an interesting way?</p>	<p>Can they describe what they do to be both hygienic and safe?</p> <p>How have they presented their product well?</p>	<p>Can they explain how their product should be stored with reasons?</p> <p>Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?</p>
Textiles		<p>Can they describe how different textiles feel?</p> <p>Can they make a product from textile by gluing?</p>	<p>Can they measure textiles?</p> <p>Can they join textiles together to make something?</p> <p>Can they cut textiles?</p> <p>Can they explain why they chose a certain textile?</p>	<p>Can they join textiles of different types in different ways?</p> <p>Can they choose textiles both for their appearance and also qualities?</p>	<p>Do they think what the user would want when choosing textiles?</p> <p>Have they thought about how to make their product strong?</p> <p>Can they devise a template?</p>	<p>Textiles</p> <p>Do they think what the user would want when choosing textiles?</p> <p>How have they made their product attractive and strong?</p>	<p>Textiles</p> <p>Have they thought about how their product could be sold?</p> <p>Have they given considered thought about what would improve their product even more?</p>

					Can they explain how to join things in a different way?	Can they make up a prototype first? Can they use a range of joining techniques?	
Electrical and Mechanical components		Can they make a product which moves? Can they cut materials using scissors? Can they describe the materials using different words? Can they say why they have chosen moving parts?	Can they join materials together as part of a moving product? Can they add some kind of design to their product?	Do they select the most appropriate tools and techniques to use for a given task? Can they make a product which uses both electrical and mechanical components? Can they use a simple circuit? Can they use a number of components?	Can they add things to their circuits? How have they altered their product after checking it? Are they confident about trying out new and different ideas?	Can they incorporate a switch into their product? Can they refine their product after testing it? Can they incorporate hydraulics and pneumatics?	Can they use different kinds of circuits in their product? Can they think of ways in which adding a circuit would improve their product?
Stiff and flexible sheet materials		Use of materials Can they make a structure/model using different materials? Is their work tidy? Can they make their model stronger if it needs to be?	Use of materials Can they measure materials to use in a model or structure? Can they join material in different ways? Can they use joining, folding or rolling to make materials stronger?	Stiff and flexible sheet materials Do they use the most appropriate materials? Can they work accurately to make cuts and holes? Can they join materials?	Stiff and flexible sheet materials Can they measure carefully so as to make sure they have not made mistakes? How have they attempted to make their product strong?	Stiff and flexible sheet materials Are their measurements accurate enough to ensure that everything is precise? How have they ensured that their product is strong and fit for purpose?	Stiff and flexible sheet materials Can they justify why they selected specific materials? Can they work within a budget? How have they ensured that their work is precise and accurate?

							Can they hide joints so as to improve the look of their product?
Mouldable materials and construction		<p>Can they talk with others about how they want to construct their product?</p> <p>Can they select appropriate resources and tools for their building projects?</p> <p>Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building?</p>	<p>sensible choices as to which material to use for their constructions?</p> <p>Can they develop their own ideas from initial starting points?</p> <p>Can they incorporate some type of movement into models?</p> <p>Can they consider how to improve their construction?</p>	<p>Do they select the most appropriate materials?</p> <p>Can they use a range of techniques to shape and mould?</p> <p>Do they use finishing techniques?</p>	<p>Do they take time to consider how they could have made their idea better?</p> <p>Do they work at their product even though their original idea might not have worked?</p>	<p>Are they motivated enough to refine and improve their product?</p> <p>Do they persevere through different stages of the making process?</p>	<p>Did they consider the use of the product when selecting materials?</p> <p>Does their product meet all design criteria?</p>