Stanhope Primary School

Progression of Knowledge and Skills in Design Technology

Subject	Design Technology **Intent** Through our curriculum here at Stanhope Primary, we aim to excite and ignite our children's interest in Design and Technology and prepare them to take part in the development of a rapidly changing world. Our curriculum will combine skills, knowledge, concepts and values which will enable our children to tackle real life problems. Through a variety of creative and practical activities, pupils are taught the knowledge, understanding and skills needed to engage in a process of designing and making. In addition to this, our children will acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art.						
Year Group	**EYFS** **** Children are supported by teachers in engaging in a holistic approach in achieving the ELG by the end of EYFS:***	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Designing							
Understanding contexts, users and purposes	***Characteristics:*** Experiment to create different textures. Understand that different media can be	To work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment. Use senses to explore a wide range of familiar products.	To work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise and the wider environment. Use research to develop design criteria that are fit for purpose and use these to inform their own plans.	To work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise and the wider environment. Link discussions about design, investigation, disassembly and evaluation of a range of products describing in detail their parts and their function.			

	combined to create new effects. ***ELG:*** ***Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.*** ***Begin to show accuracy and care when drawing.***	Talk about and/or use construction materials, pictures and words to plan and design. Describe, explore and investigate products that have been disassembled To state what products, they are designing and making. To use simple design criteria to help develop their ideas. To say whether their products are for themselves or other users. To describe what their products are for. To say how their products will work. To say how they will make their products suitable for their intended users.		Disassemble products and describe in detail their functions and possible appeal. To indicate the design features of their product that will appeal to intended users. To gather information about the needs and wants of particular individuals and groups. To develop their own design criteria and use them to inform their ideas.		Take account of the users' views and the intended purpose. To indicate the design features of their product that will appeal to intended users. To carry out research, using surveys, interviews, questionnaires and web-based resources. To identify the needs, wants, preferences and values of particular individuals and groups .	
Generating, developing, modelling and communicating ideas	***Characteristics:*** Show curiosity about objects, events and people. Questions why things happen. Thinking of ideas. Use senses to explore the world around them. ***ELG*** ***Explore the natural world around them, making observations and drawing pictures of animals and plants.***	To generate ideas by drawing on their own experiences. To use knowledge of existing products to help come up with ideas and support their own plans. To develop and communicate ideas by talking and drawing. To model ideas by exploring materials, components and construction kits and by making templates and mock-ups. To use information technology where appropriate, to develop and communicate their ideas.		To share and clarify ideas through discussion. To describe the purposes of their products, explaining how particular parts work- use annotated sketches, cross-sectional drawings and diagrams to develop and communicate their ideas. To model their ideas using prototypes and pattern pieces. To use computer-aided design to develop and communicate their ideas. To generate realistic ideas, focusing on the needs of the user.		Clarify and justify plans, designs and ideas by drawing upon and using a range of relevant sources of information. To describe the purposes of their own products in depth, explaining how particular parts of their products work by using detailed annotated sketches, cross-sectional drawings and diagrams to develop and communicate their ideas. Produce detailed designs and plans drawn to scale from a range of viewpoints, using pattern pieces and computer-aided design packages effectively To model their ideas using prototypes. Discuss ways in which ideas, plans and designs are formed and modified to ensure that the design criteria are met effectively- generating realistic and innovative ideas, focusing on the needs of the user.	
Making							
Planning	***Characteristics:*** Plan and construct with purpose in mind. Planning, making decisions about how to	Use the senses to explore and talk about materials. To plan by suggesting intention and why and	To explain my design and intention explaining why it fits the purpose. Make suggestions of what to do next.	To select tools and equipment suitable for the task. To explain their choice of tools and equipment in relation to the skills	To select tools and equipment suitable for the task. To explain their choice of tools and equipment in relation to the skills and	To select tools and equipment with a good level of precision. To explain their choice of tools and equipment in relation to the skills	To use selected tools and equipment precisely. To explain their choice of tools and equipment in relation to the skills

	approach a task, test their ideas, solve a problem and reach a goal. Build / construct with a wide range of objects. ***ELG:*** ***Know some similarities and differences between things in the past and now.*** ***Share their creations, explaining the process they have used.***	consider what to do next. To select from a range of tools and equipment, explaining their choices. To select from a range of materials and components according to their characteristics.	To select and use from a range of tools, equipment and materials, explaining their choices. To select from a range of materials and components according to their characteristics.	and techniques they will be using. To explain their choice of materials and components according to functional and aesthetic properties.	techniques they will be using. To explain their choice of materials and components according to functional and aesthetic properties.	and techniques they will be using. To select materials and components suitable for the task. To explain their choice of materials and components according to functional and aesthetic properties. To produce appropriate lists of tools, equipment and materials. Formulate set-by-step plans as a guide to make the product, explaining how the product will appeal to an audience.	and techniques they will be using. To select materials and components suitable for the task. To explain their choice of materials and components according to functional and aesthetic properties. To produce appropriate lists of tools, equipment and materials considering constraints. Formulate set-by-step plans as a guide to make the product, follow and adapt details where necessary.
Practical skills and techniques	***Characteristics:*** Manipulates materials to achieve a planned effect. Selects appropriate resources and adapts work where necessary. Selects tools and techniques needed to shape, assemble and join materials they are using. Replicate structures with materials / components. Discuss how to make an activity safe and hygienic. To understand different media can be combined for a purpose. Changing strategy as needed. ***ELG***	To follow procedures for safety and hygiene. To choose a suitable range of materials and components, beginning to explain their choices; including construction materials and kits, textiles, food ingredients and mechanical components: ***- Be able to create a sliding mechanism.*** ***-Be able to use levers to create a moving mechanism*** ***-Investigate and create wheel mechanisms.*** ***-Be able to design a picture with a moving mechanism.*** To measure, mark out, cut and shape materials and components. To assemble, join and combine materials and components with simple tools.	To follow procedures for safety and work hygienically. To use a wider range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components: ***-Investigate a variety of vehicles and their uses and features.*** ***-Investigate wheels, axles and chassis.*** ***-Be able to investigate ways of creating and decorating the body of a vehicle.*** ***-Be able to design a vehicle.*** ***-Be able to make a vehicle based on a design.*** To measure, mark out, cut and shape materials and components.	To follow procedures for safety and work hygienically. To work through a plan in order. Make simple paper models, prototypes and templates. Select appropriate materials fit for purpose. To use an increasing range of tools to measure, mark out, cut, join and shape materials and components with some accuracy: ***-Explore existing greenhouses.*** ***-Investigate stable structures.*** ***-Investigate materials for making a mini greenhouse.*** ***-Design a mini greenhouse.*** ***-Make a mini greenhouse.***	To follow procedures for safety and work hygienically. To work through a plan in order. Make increasingly complex paper models, prototypes and templates. Select appropriate materials, fit for purpose; explaining choices. To use an increasing range of tools to measure, mark out, cut, join and shape materials and components with some accuracy: ***-Be able to plan and design a storybook.*** ***-Be able to make a storybook with moving mechanisms using a design.*** ***-Making a light up sign with electrical components.***	To follow procedures for safety and work hygienically. Make a range of increasingly complex paper models, prototypes and templates. Select appropriate materials, fit for purpose; explain choices, considering functionality: ***-Explore ways in which pillars and beams are used to span gaps.*** ***-Explore ways in which trusses can be used to strengthen bridges.*** ***-Explore ways in which arches are used to strengthen bridges.*** ***-Understand how suspension bridges are able to span long distances.***	To follow procedures for safety and work hygienically. Make a range of increasingly complex paper models, prototypes and templates and adapt where necessary. Explain how the product will appeal to an audience; make changes to improve quality. To use a computer to design a pattern template. Select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics: ***-Investigate and analyse different types of cushions.***

	Negotiate space and obstacles safely, with consideration for themselves and others. ***Demonstrate strength, balance and coordination.*** ***Use a range of small tools, including scissors, paint brushes and other.*** ***Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.***	***-Explore different types of houses and identify shapes and features.*** ***-Design and create a house.*** ***-Investigate and combine shapes to make a house*** ***-Investigate ways of creating the interior features of a house.*** To use finishing techniques including those from Art & Design in order to make the product look good.	To assemble, join and combine materials and components together in different ways. ***-Investigate a range of puppets and their features.*** ***-Develop and practise sewing skills.*** ***-Be able to work with fabric to create a finger puppet.*** ***-Be able to design a glove puppet.*** ***-Be able to follow a design to make a puppet.*** To use and apply a range of finishing techniques including those from Art & Design to improve the appearance of a finished product.	To assemble, join and combine materials and components with some accuracy: ***-Investigate a range of pencil cases.*** ***-Practise and compare sewing stitches.*** ***-Investigate ways of opening and closing pencil cases.*** ***-Be able to design a pencil case.*** ***-Be able to make and evaluate a pencil case based on a design.*** ***-Be able to sew embellishments onto a piece of fabric.*** To use and apply a range of finishing techniques including those from Art & Design with some accuracy considering how good the product will be: ***-Investigate a range of packaging.*** ***-Be able to construct nets for 3-D shaped packages.*** ***-Explore the use of graphics on packaging.*** ***-Be able to design a packaging box for a particular purpose.*** ***-Be able to make a packaging box by following a design.***	To assemble, join and combine materials and components with increasing accuracy: ***-Investigate and evaluate products with lever and linkage systems.*** ***-Experiment with a range of techniques to create moving mechanisms.*** ***-Light up signs- joining different materials and making components work together.*** To use and apply a range of finishing techniques including those from Art & Design with some accuracy whilst considering an enhanced appearance and practicality of the product: ***-Explore and experiment with a range of different fonts and graphic techniques (with and without computer software).*** ***-Creating a light up sign of their own that is appealing and practical.***	***-Develop criteria and design a prototype bridge for a purpose.*** To accurately measure, mark out, cut and shape materials and components. To accurately assemble, join and combine materials and components. Join and combine materials and components in permanent and temporary ways: ***-Investigate and analyse items made using textiles: the materials used and how they are made.*** ***-Explore some ways in which textiles are joined and decorated.*** ***-Design an item made using textiles, and draw pattern pieces.*** To use and apply a range of finishing techniques that involve a small number of steps, including those from Art & Design with increasing accuracy: ***-Use pattern pieces to measure, mark and cut fabric; to sew design elements according to a design.*** ***-Join fabric pieces by hand sewing.*** ***-Sew hems on an item made using textiles; to add design details.*** Begin to be resourceful with practical problem solving.	***-Explore different ways to join fabric using sewing skills.*** ***-Explore different ways to decorate fabric using sewing skills and a range of resources.*** ***-Explore different ways to create fastenings.*** ***-Design a cushion cover.*** ***-Make and evaluate a cushion cover.*** ***-Investigate a range of fairground rides.*** ***-Be able to design their own fairground ride, thinking about materials and joining techniques. to build for strength.*** To use an increasing range of tools and equipment to accurately measure, mark out, cut and shape materials and components. To assemble, join and combine materials and components with accuracy and precision: ***-Investigate existing edible houses to inspire a design.*** ***-Construct a house out of edible resources.*** ***-Construct and decorate a house out of edible resources using a variety of tools.*** To accurately apply a range of finishing techniques including those from Art & Design to ensure a high quality end product. To explore how to join and combine materials

						Produce a well finished product that fulfils the functional and aesthetic design criteria.	and components using the most effective permanent and temporary ways: ***-Find out how to reinforce structures.*** ***-Find suitable textiles for the purpose of making a cushion.*** ***-Find suitable materials for the creation of their fairground ride.*** ***-Look at a range of possibilities when joining materials, choosing ways for strength and sturdiness.*** To test and improve a design; being able to think through problems and attempt to give solutions.
Evaluating							
Own ideas and products as well as existing products	***Characteristics***: Say what products are for and what they like or dislike about them. Say what they like about their own constructed piece. Reviewing how well the approach worked. ***ELG:*** ***Invent, adapt and recount.*** ***Share their creations, explaining the process they have used.***	Use the senses to explore a wide range of familiar products. Talk about familiar products and what they do. To make simple judgements about products against a simple design criterion. To suggest how to improve.	Talk about and describe key features of a range of products. Explore and evaluate a range of existing products. Begin to evaluate the success of the product in terms of function and aesthetic criteria.	To learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products. Investigate and compare a range of similar existing products; using design criteria and considering how well they have been made, materials, fit for purpose, begin to understand by whom, when and where the products were designed/constructed. Compare and contrast the similarities and	To learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products. Research whether products can be recycled or reused- impact on the environment. Investigate and begin to analyse a range of existing products; using design criteria and considering how well they have been made, materials, fit for purpose, begin to understand by whom, when and where the products were designed/constructed.	To learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products. Research how sustainable materials are. Investigate and use analysis of existing products, including evaluations of quality of the design to inform own work. Evaluate ideas and finished product against specification, considering purpose and appearance,	To learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products. Research and discuss how sustainable materials are and the impact they have on the environment. Consider the impact of products beyond their intended purpose. Test and evaluate products against specification and if it is fit for purpose, including identifying the variants

	Make use of props and materials when role playing characters in narratives and stories.			differences of products with the same function. Evaluate ideas and products against design criteria; and suggest ways in which products can be improved.	Use knowledge of similarities and differences between products with the same function to support identification of the most effective product. Evaluate ideas and products against design criteria, taking into account the views of others.	stating if it is fit for purpose. Give reasons, supported by factual evidence for the success of aspects of a product. Begin to evaluate how much products cost to make and how innovative they are.	which may affect the function of a product. Give reasons, supported by factual evidence for the success of aspects of a product and provide considered solutions to resolve those parts that could be improved. Begin to evaluate how much products cost to make and how innovative they are.
Technical Knowledge							
Making products work	Handles tools, objects, construction and malleable materials safely and with increasing control.	Use the senses to explore and talk about materials. Use simple tools with support. Begin to measure and join materials with some support. Describe differences in materials. Suggest ways to make material/product stronger. Be able to choose suitable textiles.	Explore and discuss the characteristics of an increasing range of materials. Select and use simple tools to cut and join a range of materials in different ways. -measure -joining -rolling or -folding to make construction stronger. Begin to understand how to use levers, wheels and axles. Measure textiles, being able to carefully cut to produce accurate pieces. Join textiles to make a product, explaining how it was created.	Select from and use a wide range of materials and components considering appearance, functionality and aesthetic qualities. Select and use appropriate tools, equipment and techniques. Work accurately to measure, mark out and shape materials and components. Review product, adapt after checking in order to make improvements/ make stronger. Be confident in exploring new ideas/techniques	Select from and use a wide range of materials and components considering appearance, functionality and aesthetic qualities Select and use appropriate tools, equipment and techniques. Persevere in making a strong product; continuing even if original not to plan. Be confident in adapting ideas, explaining alterations/adaptations. Measure materials carefully to avoid mistakes, including creating templates to support design. Explore movement: - levers - linkages - electrical components	Select materials carefully, considering intended use of product, appearance and aesthetics. Be able to explain how a product meets its design criteria. Be confident in exploring new/ different ideas, even after the product has been started; including adapting after reviewing to refine the product. Create own templates to support the final product. Use an increasing range of tools to join materials. Measure accurately to ensure precision. Explore movement; - cams - pulleys - gears - fabric shapes	Select materials carefully, considering intended use of the product, the aesthetics and functionality. Explain how the product meets design criteria. Be confident in exploring new/ different ideas, even after the product has been started; including adapting after reviewing to refine the product. Explore movement to reinforce or strengthen designs: - 3D frames - hydraulics - pneumatics - cams - pulleys - gears - fabrics Create a prototype. Evaluation of final product:

						- 3D frames	- What would improve the product? - How might the product be sold?
Food Technology Cooking and Nutrition							
Where food comes from	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe. Begin to understand that eating well contributes to good health.	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe Begin to understand that eating well contributes to good health. To explore where some food comes from (i.e. plant or animal, where in the world). Find out about favourite fruits and vegetables.	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe To explain where food comes from (animal, underground etc). Describe how food is farmed, home-grown, caught.	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe Think about how to grow plants to use in cooking. Begin to understand that food comes from the UK and the wider world.	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe. Begin to understand about food being grown, reared or caught in the UK or wider world. To find out about the diversity of foods grown in America's diverse climates, and develop cooking skills while following a recipe for a traditional American food. To discover some ways in which indigenous Americans grew, caught, gathered, prepared, and cooked, food. To find out about important, traditional staple foods in America, and how the slave trade	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe Understand seasonality, know where and how a variety of ingredients are grown, reared, caught and processed.	Understand the importance of good health and physical exercise and a healthy diet. Discuss the different ways to keep healthy and safe. Explain seasonality of foods. Name some types of food that are grown, reared or caught in the UK or wider world.

					influenced American cuisine. To learn about the cultural significance of chillies in Mexican cooking, and about how American food is heavily influenced by food from other cultures.		
Food preparation, cooking and nutrition	Begin to understand some food preparation processes, tools and techniques e.g know that it is important to wash their hands before handling food. Discuss use of senses when preparing/ cooking/ eating food. To be confident in naming the different foods when preparing them, understanding the need for a variety in food. Discuss and practice how to handle equipment and tools effectively and hygienically.	Understand the importance of washing hands and cleaning surfaces for food preparation. Examine the taste and describe a variety of fruits and vegetables - visually- size - shapes - colours - textures - differences in taste (sweet, sour) Sort fruit and vegetables by taste, size, colour, texture and simple food groups such as meat, vegetables. To be confident in naming the different foods when preparing them, understanding the need for a variety in food. Discuss the changes that can take place with food when it is shaped, mixed, cooked etc. Discuss how fruits and vegetables are healthy. Discuss and practise how to handle equipment and tools effectively and hygienically; - cut (and/or cutters)	Practice and explain good hygiene procedures. To be able to keep a hygienic kitchen; - washing hands before handling food - washing surfaces - wearing an apron - hair tied back - jewellery removed Describe 'five a day'. Describe the properties and importance of a varied diet. They can handle equipment and tools effectively. Discuss and practise how to handle equipment and tools effectively and hygienically; - cut - peel - grate - slice with increasing confidence and skill. Measure and weigh accurately using cups, spoons and basic scales.	Sort and classify an increasing range of food according to specific food groups, e.g. proteins, carbohydrates, fats etc. Describe how a healthy diet= variety/balance of food/drinks. Develop confidence when using some of the following techniques: - peeling - chopping - slicing - grating - mixing - spreading - kneading - baking	Prepare and cook some dishes safely and hygienically. Identify what needs to be done in order to work safely and hygienically when working on a range of tasks. Describe how a healthy diet= variety/balance of food/drinks. Discuss the way in which food processing can affect the taste, appearance, texture and colour of food. Develop confidence when using some of the following techniques: - peeling - chopping - slicing - grating - mixing - spreading - kneading - baking Convert measure and weigh using standard and imperial units. Gain an understanding of the ways in which specific food groups apply to the principles of a health and varied diet. To consider why certain foods are unhealthy if	Explain how to be safe/hygienic. Explain how there are different substances in food / drink that are needed for different health reasons. Talk about the impact of changing proportions within a recipe and use knowledge of food and cooking to generate their own recipes. Talk in scientific terms about the physical and chemical changes that take place when food is cooked, e.g. heated and cooled. With confidence, use some of the following techniques: - peeling - chopping - slicing - grating - mixing - spreading - kneading - baking To understand a recipe can be adapted by adding / substituting ingredients. Learn about food processing methods. Describe some of the different substances in	Explain how to be safe/hygienic. With confidence, use some of the following techniques: - peeling - chopping - slicing - grating - mixing - spreading - kneading - baking Select the appropriate methods and equipment for measuring, e.g. time, dry goods, liquids etc. Compare commercial and domestic processes for producing food, e.g. gingerbread.

		- peel - grate - slice - shape - mix (by hand or whisk) Design a recipe to include fruit and/or vegetables. Think of interesting ways to decorate food.	Draw the 'eat well' plate; explain the different groups of food and begin to sort food into vegetables, pulses, carbohydrates, dairy etc. Discuss and explore what happens to food when it is heated and cooled. Design a recipe for a healthy balanced pizza.		eaten regularly; discuss fresh, pre-cooked and processed foods. Give reasons for the way in which food processing can affect the taste, appearance, texture and the colour of the food. Recognise the value of eating food together. Prepare and cook some dishes safely and hygienically	food and drink, and how they can affect health. To learn about and make some national English savoury dishes. To know about and make some traditional English sweet dishes. To learn about and make some national Scottish dishes. To learn about and make some national Welsh dishes. To learn about the influences of and similarities between cuisines from other countries. To know how to plan and shop for a meal.	
Vocabulary	Fruit and vegetable names including 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. Names of equipment and utensils: apron, fork, knife, mix, spoon. Build, tool, paper, cut, fold, draw, shape, join. Bead, button, fabric, felt, scissors, sew, tape, glue, masking tape, paper clip, plasticine,	Recipe, utensils, instruction, peeler, grater, knife, rolling pin, cut, peel, grate, ingredients, knife, cutlery, hygienic, safety. Measure, weigh, scale, accuracy, grams, pounds (LB), ounces (OZ), millilitres (ML), teaspoon, tablespoon, dessert spoon. Material, tool, cut, curl, safely, glue, fold, tear. Measure, centimetre, mark, ruler, tape measure, shaping, range, hinges, combine, strengthen, technique, scale. Shape, textile, template, running stitch, techniques, dyeing, sequins, printing, decorate. Glue, product, materials, drill, screw, nail, strengthen, ingredients, characteristics, joining, finishing, cutting, shaping, structures, stronger, stiffer, stable. Design, explore, improvement, evaluate,		Recipe, utensils, instruction, peeler, grater, knife, rolling pin, cut, peel, grate, ingredients, knife, cutlery, hygienic, safety, oven, hob, grill. Measure, weigh, scale, accuracy, grams (G), kilogram (KG), pounds (LB), ounces (OZ), millilitres (ML), teaspoon, tablespoon, dessert spoon. Temperature, Celsius, gas mark, boiling point, simmer, lukewarm, melting point, freezing point. Seasonality, savoury, reared, caught, grown, processed. Material, tool, cut, curl, safely, centimetre, glue, fold, tear, measure, mark, ruler, tape measure, shaping, range, hinges, combine, strengthen, technique, scale, slots, cut outs. Glue, product, materials, drill, screw, nail, strengthen, construct, repair, techniques, cutting, joining, shaping, aesthetic, functional. Materials, refine, product design, software, product, purpose, user, refine, progress, software, innovative, prototypes, cross-sectional, annotated, exploded diagrams, pattern pieces, analyse .		

	ruler, straws, build, make.	objects, products.	
Events within school	Planning will be based on PlanBee for year group specific topics and Learning Objectives. We will also link Design & Technology to other cross curricular activities where possible, some including the following whole school events: - Mental Health Day/week (October, December, May) - Harvest Festival (October) - Halloween (October) - Diwali Celebrations (November) - Firework Night (November) - Friendship week (November) - International Children's Day (November) - Christmas Crafts (December) - Rainbow Day (January) - Health Week- Bee Happy (February) - FairTrade Week (February) - World Book Day (March) - Eggsters (March/April) - Transition Time (July)		
End Points EYFS	***Characteristics of learning*** ● Show curiosity about objects, events and people. ● Questions why things happen. ● Engage in open-ended activity. ● Thinking of ideas. ● Find ways to solve problems / find new ways to do things / test their ideas. ● Use senses to explore the world around them. ● Create simple representations of events, people and objects. ● Planning, making decisions about how to approach a task, solve a problem and reach a goal. ● Checking how well their activities are going. ● Changing strategy as needed. ● Reviewing how well the approach worked ● Choose the resources they need for their chosen activities. ● Handle equipment and tools effectively. ● Children know the importance for good health of a healthy diet. ● They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ● Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. ● They represent their own ideas, thoughts and feelings through design and technology. ***Early Learning Goals*** ● Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. ● Begin to show accuracy and care when drawing. ● Explore the natural world around them, making observations and drawing pictures of animals and plants. ● Know some similarities and differences between things in the past and now. ● Share their creations, explaining the process they have used. ● Negotiate space and obstacles safely, with consideration for themselves and others. ● Demonstrate strength, balance and coordination. ● Use a range of small tools, including scissors, paint brushes and other. ● Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ● Invent, adapt and recount. ● Share their creations, explaining the process they have used. ● Make use of props and materials when role playing characters in narratives and stories.		

End points by the end of Key Stage 1	When designing and making, pupils should be taught to: ***Design*** ● Design purposeful, functional, appealing products for themselves and other users based on design criteria. ● Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. ***Make*** ● Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. ● Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. ***Evaluate*** ● Explore and evaluate a range of existing products. ● Evaluate their ideas and products against design criteria. ***Technical knowledge*** ● Build structures, exploring how they can be made stronger, stiffer and more stable. ● Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products ***Cooking & Nutrition*** ● Use the basic principles of a healthy and varied diet to prepare dishes. ● Understand where food comes from.

End Points by the end of Key Stage 2	When designing and making, pupils should be taught to: ***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, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. ***Make*** ● Select from and use a wider range of tools and equipment to perform practical tasks accurately [for example, cutting, shaping, joining and finishing]. ● Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. ***Evaluate*** ● Investigate and analyse a range of existing products. ● Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. ● Understand how key events and individuals in design and technology have helped shape the world. ***Technical knowledge*** ● Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. ● Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. ● Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. ● Apply their understanding of computing to program, monitor and control their products. ***Cooking & Nutrition*** ● Apply their understanding of computing to program, monitor and control their pro understanding and apply the principles of a healthy and varied diet. ● Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. ● Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.