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| **Design Technology** | | | | | |
| **Intent**  The intent of our design technology curriculum is to deliver a curriculum which is accessible to all and that will maximize the outcomes for every child so that they know more, remember more and understand more. At Springvale Primary School, design technology education enables our children to become problem solvers and risk takers. We intend to build a design technology curriculum which develops learning and results in the acquisition of knowledge, understanding and skills needed to engage within the process of designing and making. The children will work in a range of contexts including the school, playground, gardens and within the local community.  **Aims**  The national curriculum for design technology aims to ensure that all pupils:   * develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world * build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users * critique, evaluate and test their ideas and products and the work of others * understand and apply the principles of nutrition and learn how to cook | | | | | |
| **National Curriculum**  **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   **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 [for example, cutting, shaping, joining and finishing], accurately * 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   **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 and nutrition**  As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.  Pupils should be taught to:  **Key stage 1**   * use the basic principles of a healthy and varied diet to prepare dishes * understand where food comes from.   **Key stage 2**   * understand 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. | | | | | |
| **Year 1 – Cycle A** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that some materials are waterproof but some are not. | | I can sort materials. | | | |
| I know that products are designed using materials for specific purposes. | | I can explain what my product is for and how it will work. | | | |
| I know that it is important to keep food preparation areas safe and hygienic to prevent illness. | | I can wash hands and clean surfaces. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Waterproof  Product  Material  Structure  Joining  Trace  Template | | |
| I can work as part of a group to come up with ideas.  With help I can explain what my product is for, and how it will work.  I can sort materials. | I have my own ideas.  I can explain what my product is for, and how it will work.  I can describe differences in materials | I have my own ideas and can plan what to do next  I can explain the purpose of a product, how it will work and how it will be suitable for the user  I describe some different characteristics of materials |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Tab  Score  fold  Centimetres  Evaluate  Repeat  Improve | | |
| I can join materials with support  I can adapt work if necessary | I am beginning to measure and join materials, with some support  I can begin to talk about what could make a product better | I can measure materials  I can join materials in different ways  I can talk about what I would do differently if I were to do it again and why |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** |  | | |
| I can discuss how to make an activity safe and hygienic  I am beginning to understand that eating well contributes to good health  I am beginning to understand some food preparation tools, techniques and processes | I wash hands & clean surfaces  I can discuss how fruit and vegetables are healthy  I can cut, peel and grate safely, with support | I can explain hygiene and keep a hygienic kitchen  I can describe “five a day”  I can cut, peel and grate with increasing confidence | Hygiene  Bacteria  Anti bacteria  Sanitise  ‘Five a day’  Grate  Peel  Slice  Chop  Healthy / unhealthy  Diet | | |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| [Healthy Eating video](https://www.bing.com/videos/search?q=healthy+eating+for+kids&&view=detail&mid=C0A0E40F6470165CC645C0A0E40F6470165CC645&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dhealthy%2Beating%2Bfor%2Bkids%26FORM%3DHDRSC3)  [Dr Raj Why do we need to eat and sleep healthily](https://www.bing.com/videos/search?q=healthy+eating+for+kids&ru=%2fvideos%2fsearch%3fq%3dhealthy%2beating%2bfor%2bkids%26FORM%3dHDRSC3&view=detail&mid=C01AAF23A8B5DF41BD0AC01AAF23A8B5DF41BD0A&&FORM=VDRVRV) | | |  |  | |
| **Year 2 – Cycle A** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that some materials have different qualities, ie: strength, flexibility, transparency etc. | | I can describe the properties of different materials and select materials according to their functionality. | | | |
| I know different mechanisms for moving parts in books. | | I can use simple levers and sliders to create movement. | | | |
| I know how to join fabrics using a needle and thread. | | I can join textiles to make a product with some help. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Waterproof  Product  Material  Structure  Joining  Trace  Template | | |
| I have my own ideas.  I can explain what my product is for, and how it will work.  I can describe differences in materials | I have my own ideas and can plan what to do next  I can explain purpose of product, how it will work and how it will be suitable for the user  I describe some different characteristics of materials | I have at least one idea about how to create product  I can describe the purpose of a product in detail  I can show that my design meets a range of requirements  I use appropriate materials |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
| [Hedgehog dos and donts](https://www.sttiggywinkles.org.uk/hedgehog-fact-sheet/)  [Woodland trust Hedgehogs](https://www.woodlandtrust.org.uk/blog/2019/08/how-to-make-hedgehog-house/) | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Lever / slider / linkage  Score  Motion : Push / pull  Action  Reinforce  Thread  Mechanism  Guide / Bridge  Slot | | |
| I am beginning to use levers or slides  I can begin to talk about what could make a product better | I can use levers and slides  I can talk about what I would do differently if I were to do it again and why | I use simple lever and linkages to create movement  I alter my product after checking, to make it better  I say what I would change to make my design better |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:**  [**Pop up book instructions**](https://dandtfordandt.files.wordpress.com/2013/01/popupbooky4.pdf)  [**Twinkl Moving Picture resources**](https://www.twinkl.co.uk/resources/planit-design-and-technology-primary-teaching-resources/planit-design-and-technology-primary-teaching-resources-ks1/planit-design-and-technology-primary-teaching-resources-ks1-moving-pictures-traditional-tales) | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  |  | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** |  | | |
| I can measure, cut and join textiles to make a product, with some support  I can choose suitable textiles | I can measure textiles  I can join textiles together to make a product, and explain how I did it  I carefully cut textiles to produce accurate pieces | I can join different textiles in different ways  I can choose textiles considering their appearance and functionality | Fabric  Template  Taught  Snip  Pattern  Tack  Pin  Fray  Durable  Delicate | | |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| [English Heritage Box Model Tudor House](https://www.english-heritage.org.uk/members-area/kids/kids-rule-things-to-make-and-do/build-a-model-tudor-house/)  [Cereal Box House Video](https://www.youtube.com/watch?v=i0Kjzviprwk) | | |  | | |
| **Year 3 – Cycle A** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that meat comes from animals. | | I can say where food comes from. | | | |
| I know how to safely use a bench hook and a handsaw to cut wood. | | I can cut wood with a handsaw safely under supervision. | | | |
| I know how to create a simple circuit. | | I can incorporate a simple circuit into a product with support. | | | |
| **Autumn Assessment Statements** | | | **Autumn Vocabulary** | | |
| **Emerging** | **Expecting** | **Exceeding** | Healthy / unhealthy  Diet  Nutrition / nutritious  Processed, fresh, frozen, dried, pre-cooked  Junk food  Spoil, rotten, Preservatives  Vitamins  Proteins  Minerals  Carbohydrates | | |
| I can describe properties of ingredients and the importance of varied diet  I can say where food comes from (animal, underground etc.)  I can describe how food is farmed, home-grown, caught  I can draw an eat well plate and explain that there are groups of food | I can describe some foods that come from UK and wider world  I can describe how a healthy diet = variety/balance of food/drinks  I can explain how food and drink are needed for active/healthy bodies  I can prepare and cook some dishes safely and hygienically with assistance | I understand that ingredients can be fresh, pre-cooked or processed  I understand which food is grown, reared or caught in the UK or wider world  I can explain importance of food and drink for active, healthy bodies  I can prepare and cook some dishes safely and hygienically |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Measure  Centimetres  Reinforce  Accurate  Precise  Concertina  Opaque/ transparent | | |
| I can measure and join materials, with some support  I can describe differences in materials  I can suggest ways to make material/product stronger | I can independently measure materials  I can describe some different characteristics of materials  I can join materials in different ways  I can use joining, rolling or folding to make it stronger | I use appropriate materials  I work accurately to make cuts and holes  I can use my own ideas to try to make products stronger  I am beginning to make strong structures |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  |  | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Simple circuit  Source of energy – battery  Output device – bulb  Connection – wire / cable / switch  Complete / closed circuit  Incomplete / open circuit | | |
| I can incorporate a simple circuit in product with support  I can talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion | I can incorporate a simple circuit in product  I am beginning to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made and whether they are fit for purpose  I know some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products | I use a number of components in circuit, within a product  I can program a computer to control a product  I can explain the work of someinventors/designers/ engineers/chefs/manufacturers of ground-breaking products  I can discuss by whom, when and where products were designed |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| See Hepp DT miners Lamps | | |  | | |
| **Year 4 – Cycle A** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that some ingredients in foods can be fresh, pre-cooked or processed. | | I can identify foods that are fresh, pre-cooked and processed. | | | |
| I know how some materials can be reinforced to make them stronger. | | I can use my own ideas to make a structure stronger. | | | |
| I know that Thomas Edison invented the light bulb. | | I can describe the work of an inventor. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Local  Native  Sourced  Climate  Seasonal  Healthy / unhealthy  Diet  Nutrition / nutritious  Processed  Junk food  Preservatives  Vitamins  Proteins  Minerals  Carbohydrates | | |
| I can describe some foods that come from UK and wider world  I can describe how a healthy diet = variety/balance of food/drinks  I can explain how food and drink are needed for active/healthy bodies  I can prepare and cook some dishes safely and hygienically with assistance | I understand that ingredients can be fresh, pre-cooked or processed  I am beginning to understand which food is grown, reared or caught in the UK or wider world  I can explain importance of food and drink for active, healthy bodies  I can prepare and cook some dishes safely and hygienically | I can explain how to be safe / hygienic and follow own guidelines  I am beginning to understand seasonality of foods  I understand that food can be grown, reared or caught in the UK and the wider world |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Characteristics  Properties  Strong / weak  Hard / soft  Squashy  Smooth / rough / bumpy  Dull / shiny  Brittle / fragile  Translucent / opaque  Flexible / rigid  Absorbant / waterproof | | |
| I can independently measure materials  I can describe some different characteristics of materials  I can join materials in different ways  I can use joining, rolling or folding to make it stronger | I use appropriate materials  I work accurately to make cuts and holes  I can use my own ideas to try to make products stronger  I am beginning to make strong structures | I measure carefully to avoid mistakes  I attempt to make products strong  I continue working on product even if original didn’t work  I can make a strong, stiff structure |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  |  | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Simple circuit  Source of energy – battery  Output device – bulb  Connection – wire / cable / switch  Complete / closed circuit  Incomplete / open circuit | | |
| I can incorporate a simple circuit in product  I am beginning to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made and whether they are fit for purpose  I know some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products | I use a number of components in circuit, within a product  I can program a computer to control a product  I can explain the work of someinventors/designers/ engineers/chefs/manufacturers of ground-breaking products  I can discuss by whom, when and where products were designed | I can incorporate switch into product  I confidently use number of components in a circuit  I am beginning to be able to program a computer to monitor changes in environment and control product |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  | | |
| **Year 5 –** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know how to read a scale on a ruler. | | I measure accurately enough to ensure precision | | | |
| I know the properties of different materials. | | **I** select materials carefully, considering intended use of the product, the aesthetics and functionality. | | | |
| I know how to wire a circuit. | | I can confidently use number of components in circuit. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Accurate / precise  Reinforce  Evaluate / re-evaluate  Adjust / amend  Suitable / fit for purpose / functionality  Design criteria  Aesthetics / appearance | | |
| **I** measure carefully to avoid mistakes  I attempt to make products strong  I continue working on product even if original didn’t work  I can make a strong, stiff structure | I select materials carefully, considering intended use of product and appearance  I consider how a product meets its design criteria  I measure accurately enough to ensure precision  I ensure that a product is strong and fit for purpose  I am beginning to think about how I can reinforce and strengthen a 3D frame | **I** select materials carefully, considering intended use of the product, the aesthetics and functionality.  I can explain how a product meets design criteria  I can reinforce and strengthen a 3D frame |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
| [Hobbycraft video of how to make a Tudor house](https://www.hobbycraft.co.uk/ideas/kids/how-to-make-a-tudor-house) | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Accurate / precise  Reinforce  Evaluate / re-evaluate  Adjust / amend  Suitable / fit for purpose / functionality  Design criteria  Aesthetics / appearance  Green credentials  Innovative / new thinking / creativity  Characteristics of materials | | |
| I refer to design criteria while designing and making  I use criteria to evaluate product  I evaluate existing products, considering: how well they’ve been made, materials, whether they work, how they have been made, fit for purpose  I discuss by whom, when and where products were designed  I can research whether products can be recycled or reused  I know about some inventors/designers/ engineers/chefs/manufacturers of ground-breaking products | I evaluate quality of design while designing and making  I evaluate ideas and finished product against specification, considering purpose and appearance.  I test and evaluate final product  I begin to evaluate how much products cost to make and how innovative they are  I research how sustainable materials are  I can talk about some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products | I evaluate the quality of design while designing and making and then the finished product, considering whether it is fit for purpose?  I keep checking that the design is the best it can be.  I test and evaluate final product; explain what would improve it and the effect different resources may have had  I do thorough evaluations of existing products considering: how well they’ve been made, materials, whether they work, how they’ve been made, fit for purpose  I evaluate how much products cost to make and how innovative they are  I consider the impact of products beyond their intended purpose |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  |  | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** |  | | |
| I use number of components in circuit within my product  I can program a computer to control a product | I can incorporate a switch into a product  I can confidently use number of components in circuit  I am beginning to be able to program a computer to monitor changes in environment and control a product | I can use different types of circuit in a product  I think of ways in which adding a circuit would improve a product  I can program a computer to monitor changes in environment and control a product | Simple circuit  Source of energy – battery  Output device – bulb  Connection – wire / cable / switch  Parallel circuit  Complete / closed circuit  Incomplete / open circuit  Series circuit | | |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| See Hepp DT for planning fairground rides with cogs, gears and circuuits | | |  |  | |
| **Year 6** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that cornflour is used to thicken sauces and that chilli is used to add a hot spice to recipes. | | I can adapt recipes to change appearance, taste, texture or aroma. | | | |
| I know that pneumatic systems use air to make things move. | | I can use pneumatics to make a model move. | | | |
| I know that gears are wheels that have interlocking teeth that turn one another. | | I can use gears to create movement. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Local  Native  Sourced  Climate  Seasonal  Healthy / unhealthy  Diet  Nutrition / nutritious  Processed  Junk food  Preservatives  Vitamins  Proteins  Minerals  Carbohydrates  Recipe  Aesthetics / appearance  Vaccuum packed  Grown / reared / caught | | |
| I think about presenting a product in interesting / attractive ways  I understand that ingredients can be fresh, pre-cooked or processed  I am beginning to understand about food being grown, reared or caught in the UK or wider world  I can prepare and cook some dishes safely and hygienically  With support I can use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | I canexplain how to be safe / hygienic and follow own guidelines  I present products well - interesting, attractive, fit for purpose  I am beginning to understand seasonality of foods  I can describe how recipes can be adapted to change appearance, taste, texture, aroma  I can prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source  I am beginning to use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. | Iunderstand that a recipe can be adapted by adding / substituting ingredients  I can explain seasonality of foods  I have learnt about food processing methods  I can name some types of food that are grown, reared or caught in the UK or wider world  I can adapt recipes to change appearance, taste, texture or aroma.  I can describe some of the different substances in food and drink, and how they can affect health  I can confidently prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source.  I can confidently use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Simple circuit  Source of energy – battery  Output device – bulb  Connection – wire / cable / switch  Parallel circuit  Complete / closed circuit  Incomplete / open circuit  Series circuit  London Eye Lego? | | |
| I can use a number of components in circuit  I can program a computer to control a product | I can incorporate a switch into a product  I can confidently use a number of components in a circuit  I ambeginning to be able to program a computer to monitor changes in environment and control a product | I can use different types of circuit in a product  I can think of ways in which adding a circuit would improve a product  I can program a computer to monitor changes in environment and control product |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:**  Tristan! | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Accurate / precise  Reinforce  Evaluate / re-evaluate  Adjust / amend  Suitable / fit for purpose / functionality  Design criteria  Aesthetics / appearance  Green credentials  Innovative / new thinking / creativity  Characteristics of materials | | |
| I can select appropriate tools / techniques  I alter products after checking, to make it better  I begin to try new/different ideas  I can use simple lever and linkages to create movement | I canselect the most appropriate tools / techniques  I can explain alterations to product after checking it  I am growing in confidence about trying new / different ideas.  I use levers and linkages to create movement  I use pneumatics to create movement | I canrefine a product after testing  I am confident about trying new / different ideas  I can use cams, pulleys or gears to create movement |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
|  | | |  | | |
| **Year 1 – Cycle B** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that a template can be used to ensure that different pieces of fabric can be cut to the same size and shape. | | I can carefully cut textiles to produce accurate pieces | | | |
| I know how to plan what I want to make. | | I can explain what I am making, what I will do next and why it fits the purpose | | | |
| I know how to make a lever and a slider. | | I can add a lever and a slider to a picture to create movement. | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Waterproof  Template  Pattern  Running stitch  ‘In and out’  Pin together  Fray / non-fraying fabric  Durable / delicate  Washable  Waterproof | | |
| I can help to measure, cut and join textiles to make a product  I can choose suitable textiles with support | I can measure, cut and join textiles to make a product, with some support  I can choose suitable textiles | I can measure textiles  I can join textiles together to make a product, and explain how I did it  I can carefully cut textiles to produce accurate pieces  I can explain choices of textiles |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Sanding  Smoothing  Decorative  Accurately  Saw ‘Forward and back’ | | |
| I construct with a purpose, using a variety of resources  I can use simple tools and techniques  I build / construct with a wide range of objects  I can select tools & techniques to shape, assemble and join  I record my experiences by drawing, writing, voice recording | I can explain what I’m making and why  I consider what I need to do next  I can confidently select tools/equipment to cut, shape, join, finish and explain choices  I measure, mark out, cut and shape, with support  I choose suitable materials and explain my choices  I try to use finishing techniques to make product look good | I can explain what I am making and why it fits the purpose  I make suggestions as to what I need to do next.  I can join materials/components together in different ways  I describe which tools I’m using and why  I choose suitable materials and explain choices depending on characteristics.  I use finishing techniques to make product look good |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Pop up  Mover / slider  Mechanism  Wheel  Rotate  Lever / slider / linkage  Score  Motion : Push / pull  Action  Reinforce  Thread  Mechanism  Guide / Bridge  Slot | | |
| I am beginning to explore the use levers or slides  I use wheels and axles within construction toys | I am beginning to have a go at using levers or slides to create movement in my products  I attempt to use wheels and axles in my products | I can confidently use levers or slides to create movement in a product  I can use wheels and axles correctly to enable movement in my product |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
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| **Year 2 – Cycle B** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that some fabrics do not let water pass through them (Waterproof). | | I can select appropriate fabrics for their purpose. | | | |
| I know what different tools are used for and how to use them (scissors, stapler, hole punch, needle & thread, split pins, hack saw, sandpaper, hand drill, brad hole) | | I can select suitable tools/equipment, explain choices; begin to use them accurately. | | | |
| I know that an axle is a rod that has a wheel attached to each end. It enables the wheels to rotate. | | I can use wheels and axles correctly to enable movement in my product. | | | |
| **Autumn Assessment Statements** | | | **Autumn Vocabulary** | | |
| **Emerging** | **Expecting** | **Exceeding** | Template  Pattern  Running stitch  ‘In and out’  Pin together  Fray / non-fraying fabric  Durable / delicate  Washable  Waterproof | | |
| I can measure, cut and join textiles to make a product, with some support  I can choose suitable textiles | I can measure textiles  I can join textiles together to make a product, and explain how I did it  I can carefully cut textiles to produce accurate pieces  I can explain choices of textiles | I canjoin different textiles in different ways  I choose textiles considering their appearance and functionality  I am beginning to understand that a simple fabric shape can be used to make a 3D textiles project |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
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| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Fabric  Template  Taught  Snip  Pattern  Tack  Pin  Fray  Durable  Delicate | | |
| I can explain what I’m making and why  I consider what I need to do next  I can confidently select tools/equipment to cut, shape, join, finish and explain choices  I measure, mark out, cut and shape, with support  I choose suitable materials and explain my choices  I try to use finishing techniques to make product look good | I can explain what I am making and why it fits the purpose  I make suggestions as to what I need to do next.  I can join materials / components together in different ways  I describe which tools I’m using and why  I choose suitable materials and explain choices depending on characteristics.  I use finishing techniques to make product look good | I can select suitable tools/equipment, explain choices; begin to use them accurately  I can select appropriate materials, fit for purpose.  I work through a plan in order  I consider how good product will be  I am beginning to measure, mark out, cut and shape, assemble and join materials/components with some accuracy  I am beginning to apply a range of finishing techniques with some accuracy |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Lever / slider / linkage  Score  Motion : Push / pull  Action  Reinforce  Thread  Mechanism  Guide / Bridge  Slot | | |
| I am beginning to have a go at using levers or slides to create movement in my products  I attempt to use wheels and axles in my products | I can use levers or slides to create movement in a product  I can use wheels and axles correctly to enable movement in my product | I select appropriate tools / techniques  I alter my product after checking, to make it better  I can use levers and linkages to create movement in a product |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
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| **Year 3 – Cycle B** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that hygiene in the kitchen is important to prevent illness. | | I can prepare and cook food in a safe and hygienic manner. | | | |
| I know how to safely handle and use hand tools | | I can use a hand saw to cut wood. | | | |
| I know that it is important to be accurate. | | I can use a template to cut out multiple pieces that are of an equal size and shape | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Sanding  Smoothing  Decorative  Accurately  Saw ‘Forward and back’ | | |
| I have my own ideas and can plan what to do next  I can explain what I want to do and describe how I may do it  I can describe my design using pictures, words, models, diagrams, begin to use ICT | I select suitable tools/equipment, explain choices; begin to use them accurately  select appropriate materials, fit for purpose.  I work through a plan in order  I consider how good product will be  I can measure, mark out, cut and shape materials/components, assemble and join with some accuracy  I am beginning to apply a range of finishing techniques with some accuracy | I can select suitable tools and equipment, explain my choices in relation to the required techniques and use accurately  I select appropriate materials, fit for purpose and explain my choices  I realise if a product is going to be good quality  I measure, mark out, cut and shape materials/components with some accuracy  I can assemble, join and combine materials and components with some accuracy  I apply a range of finishing techniques with some accuracy |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
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| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Healthy / unhealthy  Diet  Nutrition / nutritious  Processed  Junk food  Preservatives  Vitamins  Proteins  Minerals  Carbohydrates  Recipe  Aesthetics / appearance  Vaccuum packed  Grown / reared / caught | | |
| I can explain hygiene and keep a hygienic kitchen  I can describe properties of ingredients and the importance of varied diet  I can say where food comes from (animal, underground etc.)  I can draw an eat well plate; and explain the different groups of food  I can cut, peel and grate with increasing confidence | I use equipment safely  I make products look attractive  I begin to understand that food comes from UK and wider world  I can describe how healthy diet= variety/balance of food/drinks  I can explain how food and drink are needed for active/healthy bodies.  I can prepare and cook some dishes safely and hygienically  I am growing in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | **I can** explain how to be safe/hygienic  I think about presenting product in interesting/ attractive ways  I understand ingredients can be fresh, pre-cooked or processed  I am beginning to understand about food being grown, reared or caught in the UK or wider world  I am confident in using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** |  | | |
| I can measure textiles  I can join textiles together to make a product, and explain how I did it  I carefully cut textiles to produce accurate pieces  I can explain my choices of textile  I understand that a 3D textile structure can be made from two identical fabric shapes. | I canjoin different textiles in different ways  I can choose textiles considering appearance and functionality  I am beginning to understand that a simple fabric shape can be used to make a 3D textiles project | **I** think about the user when choosing textiles  I think about how to make a product strong  I am beginning to devise a template  I can explain how to join things in a different way  I understand that a simple fabric shape can be used to make a 3D textiles project | Fabric  Template  Taught  Snip  Pattern  Tack  Pin  Fray  Durable  Delicate | | |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
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| **Year 4 – Cycle B** | | | | | |
| **Knowledge (I know therefore…)** | | **Skills (I can…)** | | | |
| I know that sand paper can be used to round edges and stop wood from splintering. I know that wax or varnish is applied to stop the wood from marking / staining / to repel water. | | I apply a range of finishing techniques with some accuracy. | | | |
| I know how to safely use a knife to peel, slice, chop and spread. | | I can use some of the following techniques: peeling, chopping, slicing & spreading. | | | |
| I know the properties of different types of fabrics. | | **I** think about the user when choosing textiles | | | |
| **Autumn Assessment Statements** | | **Autumn Vocabulary** | | | |
| **Emerging** | **Expecting** | **Exceeding** | Sanding  Smoothing  Decorative  Accurately  Saw ‘Forward and back’  Splintering  Wax / varnish | | |
| I select suitable tools/equipment, explain choices; begin to use them accurately  select appropriate materials, fit for purpose.  I work through a plan in order  I consider how good a product will be  I can measure, mark out, cut and shape materials/components, assemble and join with some accuracy  I am beginning to apply a range of finishing techniques with some accuracy | I can select suitable tools and equipment, explain my choices in relation to the required techniques and use accurately  I select appropriate materials, fit for purpose and explain my choices  I realise if a product is going to be good quality  I measure, mark out, cut and shape materials/components with some accuracy  I can assemble, join and combine materials and components with some accuracy  I apply a range of finishing techniques with some accuracy | I use selected tools/equipment with good level of precision  I produce suitable lists of tools, equipment/materials needed  I select appropriate materials, fit for purpose; explain choices, considering functionality  I create and follow detailed step-by-step plan  I can explain how a product will appeal to an audience  I use techniques that involve a small number of steps  I am beginning to be resourceful with practical problems |
| **AUTUMN IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Weblinks:** | | | **Pupils Not Meeting Target** | | **Actions To Address:** |
|  | | |  | |  |
| **SPRING ASSESSMENT STATEMENTS** | | | **SPRING VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** | Healthy / unhealthy  Diet  Nutrition / nutritious  Processed  Junk food  Preservatives  Vitamins  Proteins  Minerals  Carbohydrates  Recipe  Aesthetics / appearance  Vaccuum packed  Grown / reared / caught | | |
| I use equipment safely  I make products look attractive  I begin to understand that food comes from UK and wider world  I can describe how healthy diet= variety/balance of food/drinks  I can explain how food and drink are needed for active/healthy bodies.  I can prepare and cook some dishes safely and hygienically  I am growing in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | I canexplain how to be safe/hygienic  I think about presenting product in interesting/ attractive ways  I understand ingredients can be fresh, pre-cooked or processed    I am beginning to understand about food being grown, reared or caught in the UK or wider world  I can use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking | I can explain how to be safe / hygienic and follow own guidelines  I present products well - interesting, attractive, fit for purpose  I am beginning to understand seasonality of foods  I can describe how recipes can be adapted to change appearance, taste, texture, aroma  I can prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source  I am confident in using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking |
| **SPRING IMPACT     ARE  %   GD  %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
| **SUMMER ASSESSMENT STATEMENTS** | | | **SUMMER VOCABULARY** | | |
| **Emerging** | **Expecting** | **Exceeding** |  | | |
| I canjoin different textiles in different ways  I can choose textiles considering appearance and functionality  I am beginning to understand that a simple fabric shape can be used to make a 3D textiles project | **I** think about the user when choosing textiles  I think about how to make a product strong  I am beginning to devise a template  I can explain how to join things in a different way  I understand that a simple fabric shape can be used to make a 3D textiles project | **I** think about the user and aesthetics when choosing textiles  I use my own template  I think about how to make my product strong and look better  I think of a range of ways to join things  I am beginning to understand that a single 3D textiles project can be made from a combination of fabric shapes. | Fabric  Template  Taught  Snip  Pattern  Tack  Pin  Fray  Durable  Delicate  Applique  Layer  Thread  Stuff  Running stitch  Blanket stitch | | |
| **SUMMER IMPACT ARE % GD %** | | | | | |
| **Helpful Resources & Web Links:** | | | **Pupils Not Meeting Target** | **Actions To Address:** | |
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