| DT long term overview | | | | | | |
|---|---|---|---|---|---|---|
| | Term 1 | Term 2 | | Term 4 | | Term 6 |
| Year 1 | | Home structures | Making sandwiches | | Moving pictures | |
| Year 2 | Moving vehicles | | Making a fruit salad | | Fabric puppets | |
| Year 3 | Moving monsters - pneumatics | | Shelters | | Making biscuits | |
| Year 4 | Roman Pouch | | Making bread | | Electrical circuits – pressure pads | |
| Year 5 | Drawbridges | | Nutrition | | Photo frames | |
| Year 6 | Product design | | Cam toys | | Seasonality | |

# The Craylands School S.T.A.R. KS1 Long term subject: DT

<table>
<tr><td colspan="2">Aims<br>The national curriculum for design and technology aims to ensure that all pupils:<ul><li>develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world</li><li>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</li><li>understand and apply the principles of nutrition and learn how to cook.</li></ul></td></tr>
<tr><td>Skills<br>Design<ul><li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li><li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication</li><li>Technology</li></ul>Make<ul><li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li><li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li></ul>Evaluate<ul><li>explore and evaluate a range of existing products</li><li>evaluate their ideas and products against design criteria</li></ul>Technical knowledge</td><td>Knowledge<ul><li>use the basic principles of a healthy and varied diet to prepare dishes</li><li>understand where food comes from.</li></ul></td></tr>
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| • build structures, exploring how they can be made stronger, stiffer and more stable<br>• □ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. | |
| Year 1 knowledge end points<br>• To identify and make different shapes from materials<br>• To cut different shapes<br>• To join 2 pieces of material together<br>• To reinforce materials to make them sturdy<br>• To understand what a hinge is and how it works<br>• To know what a balanced diet is<br>• To know what utensils are needed to make a sandwich<br>• To know how to cut safely<br>• To make a healthy food product<br>• To recognise and explain moving mechanisms including a lever, slider and wheel mechanism. | Year 2 knowledge end points<br>• Year 1 knowledge<br>• To know the functions of parts of a moving vehicle including axle, wheels and chasis<br>• To cut and join materials together<br>• To make a structure sturdy<br>• To chop, grate and peel with utensils<br>• To show a knowledge of where certain food types come from e.g. fruits and vegetables<br>• To know how fabric can be joined together<br>• To use a simple sewing stitch |

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| Early Years | Teach how to use scissors correctly<br>Use of glue (PVA/pritt sticks), tape and joining materials<br>Use of hole punches<br>Possible use of Binka<br>Junk modelling in CIA<br>Becoming independent in their construction work.<br>Talk about the colour, texture and shape of their work | | |
| **Year 1 Term 2/3** | **What is it like where we live? Has where we live always been like this? Home structures** | | |
| Link to prior learning | | | |
| Vocabulary | build, join, construct, strong, stiff, stable, hinge | | |
| Learning objectives | Context | Skills | Knowledge |
| To recognise different houses | Are all houses the same? What is the same and what is different? | | |

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| To recognise features of a house | | | |
| To make 3d models<br>CP | What shapes can be seen in a house?<br>How can we make these shapes? | | Can they explore the nets of cubes and cuboids? |
| To make a hinge<br>CP | How do doors and windows open? | To use hinges in models | |
| To be able to join materials<br>CP | How can we join these two pieces of material together? | To assemble, join and combine materials and components | |
| To design a house | What should we include in our house?<br>Who is it for? | | |
| To make a house | How can we make our house strong and sturdy?<br>How can we use hinges in our house? | To assemble, join and combine materials and components<br>To use hinges in models | Can they explore and understand how freestanding structures can be made stronger, stiffer and more stable? |
| **Year 1 Term 4** | **What is it like where we live? Has where we live always been like this? Sandwiches** | | |
| Link to prior learning | | | |
| Vocabulary | variety, smell, texture, taste, grown, plants, animals, food groups, Eatwell Plate, peeling, chopping, mixing, spreading | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand how sandwiches can make up a balanced diet? | What does eating healthily mean? Can a sandwich be healthy? What is a balanced diet? | | Can they identify the 5 food groups of The Eatwell Plate?<br>Can they name and sort food into the 5 groups of The Eatwell Plate? |
| To know where food comes from | Look at this sandwich – where does all the food come from? | | Can they understand where food comes from – plants/animals? |
| To evaluate the tastes of different bread | Which of these breads do you like the best? Why? | | Can they understand where food comes from – plants/animals? |
| To use tools safely | What equipment do we need to make a sandwich? How do we use it safely? | peeling using a peeler<br>• cutting (claw and bridge method)<br>• mixing | |

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| | | • spreading butter onto bread | |
| To design a sandwich | How can we make a healthy sandwich? What ingredients will we choose to use? | To design a product | Can they identify the 5 food groups of The Eatwell Plate? |
| To make a sandwich | What skills do we need to use to make a sandwich? How do we need to prepare the area we are using? | peeling using a peeler<br>• cutting (claw and bridge method)<br>• mixing<br>• spreading butter onto bread | |
| To evaluate a sandwich | How was our sandwich? How did we find making it? | To evaluate a product | |
| **Year 1 Term 6** | **Where do people go on holiday abroad and the UK? What were holidays like in the past?** | | |
| Link to prior learning | | | |
| Vocabulary | mechanism, levers, sliders, hinges, movement | | |
| Learning objectives | Context | Skills | Knowledge |
| To evaluate a moving picture | Which parts of the picture move? Can you describe the movements? | | Can they recognise the different ways in which an image is moving? |
| To make a slider | What is a slider? How does it work? What could we make slide along in a picture? | To construct simple mechanisms – levers and sliders | Can they explore and use simple mechanisms for example, sliders in moving pictures and hinges into models to create movement? |
| To make a lever | What is a lever? How does it work? What could we make move using a lever in a picture? | To construct simple mechanisms – levers and sliders | Can they explore and use simple mechanisms for example, sliders in moving pictures and hinges into models to create movement? |
| To use a wheel mechanism | What is a wheel mechanism? How does it work? What could we make move using a wheel mechanism in a picture? | To construct simple mechanisms – levers and sliders | Can they explore and use simple mechanisms for example, sliders in moving pictures and hinges into models to create movement? |

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| To design a moving picture | What could we make move on picture of the seaside? How can we use the different mechanisms? | | |
| To make a moving picture | How will we make the parts of the picture move? | To construct simple mechanisms – levers and sliders | Can they explore and use simple mechanisms for example, sliders in moving pictures and hinges into models to create movement? |
| **Year 2 Term 1/2** | **How do we know that the Great Fire of London happened?** | | |
| Link to prior learning | | | |
| Vocabulary | wheels, axles, chassis, types of vehicles, construct, join, stable | | |
| Learning objectives | Context | Learning objectives | Context |
| To investigate a variety of vehicles and their uses and features. | How would you describe these vehicles? Are they all the same? How are they different? | To investigate a variety of vehicles and their uses and features. | How would you describe these vehicles? Are they all the same? How are they different? |
| To investigate wheels, axles and chassis. | What is the purpose of the wheels, axles and chassis? | To investigate wheels, axles and chassis. | What is the purpose of the wheels, axles and chassis? |
| To design a vehicle. | What do we need to make a vehicle? What shape is our vehicle? How many wheels does it need? | To design a vehicle. | What do we need to make a vehicle? What shape is our vehicle? How many wheels does it need? |
| To be able to make a vehicle based on a design. | What tools will we use to make our vehicle? How will we attach the wheels and axles? | To be able to make a vehicle based on a design. | What tools will we use to make our vehicle? How will we attach the wheels and axles? |
| To be able to evaluate a finished product. | How does our moving vehicle work? What changes would we make to them if we did them again? | To be able to evaluate a finished product. | How does our moving vehicle work? What changes would we make to them if we did them again? |
| **Year 2 Terms 3 & 4** | **How did the Victorians change nursing?** | | |
| Link to prior learning | | | |

| Vocabulary | cutting, peeling, grating, savoury, sweet, measuring, teaspoons, tablespoons, cups | | |
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| Learning objectives | Context | Skills | Knowledge |
| To know how animals are farmed | Have you ever visited a farm where animals live?<br>What did you see?<br>What animals live on farms?<br>What do you think an animal needs to grow and stay healthy? | | Can they explain how food is produced farmed/grown/caught? |
| To know how plants are farmed. | What foods do think can be grown on a farm?<br>How do you think they are grown? | | Can they explain how food is produced farmed/grown/caught? |
| To use cooking utensils safely | Which equipment do we use for preparing food? How can we chop and grate food safely? | To chop (claw and bridge )<br>To peel using a peeler<br>To grate<br>To measure | |
| To design a fruit salad | Why do we need to eat fruit and vegetables? How much should we eat a day? How can we make a fruits salad? | To chop (claw and bridge )<br>To peel using a peeler<br>To grate<br>To measure | Can they understand that we should aim to eat 5 portions of fruit and veg a day? |
| To make a fruit salad | How can we use the utensils we have to make a fruit salad? | To chop (claw and bridge )<br>To peel using a peeler<br>To grate<br>To measure | |
| **Year 2 Term 6** | Are all parts of the world we live on the same? | | |
| Link to prior learning | | | |
| Vocabulary | running stitch, sew, needle, eye of the needle, thread, hessian/fabric | | |
| Learning objectives | Context | Skills | Knowledge |

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| To explore fabric products | How have these fabric dolls been made? | | Can they understand that a 3-D textiles product can be assembled from two identical fabric shapes? |
| To explore materials for hair | What materials would be best for making hair? What could we do with it to make it more hair like? | | |
| To join fabrics | How can we join these pieces of fabric together? What is sewing? | To learn how to sew and join fabrics using a running stitch | |
| To cut shapes | What shape is needed for a face? | To cut out shapes which have been created by drawing round a template onto the fabric | |
| To design a face | What materials can you use to create a face? How will you join the materials together? | | |
| To make a fabric face | What equipment will you need? How will you use it safely? | To learn how to sew and join fabrics using a running stitch<br>To cut out shapes which have been created by drawing round a template onto the fabric | Can they understand that a 3-D textiles product can be assembled from two identical fabric shapes? |

# The Craylands School S.T.A.R. KS2 Long term subject: DT

Aims

The national curriculum for design and 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.

| **Skills** | **Knowledge** |
|---|---|
| Design<br> 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<br> generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design<br><br>Make<br> select from and use a wider range of tools and equipment to perform practical tasks<br>[for example, cutting, shaping, joining and finishing], accurately<br> 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<br><br>Evaluate<br> investigate and analyse a range of existing products | understand how key events and individuals in design and technology have helped<br>shape the world<br>understand and use mechanical systems in their products [for example, gears, pulleys,<br>cams, levers and linkages<br>apply their understanding of how to strengthen, stiffen and reinforce more complex<br>structures<br>understand and use electrical systems in their products [for example, series circuits<br>incorporating switches, bulbs, buzzers and motors]<br>understand seasonality, and know where and how a variety of ingredients are grown,<br>reared, caught and processed. |

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| □ evaluate their ideas and products against their own design criteria and consider the<br>views of others to improve their work<br><br>Technical knowledge<br>□ apply their understanding of computing to program, monitor and control their products.<br><br>understand and apply the principles of a healthy and varied diet<br>□ prepare and cook a variety of predominantly savoury dishes using a range of cooking<br>techniques | | | |
| Year 3 knowledge end points | Year 4 knowledge end points | Year 5 knowledge end points | Year 6 knowledge end points |
| • To understand what a pneumatic system is and how it can be used<br>• To measure, mark and cut out shapes accurately<br>• To recognise 2d shapes from 3d shapes<br>• To know how to make a 3d structure sturdy and strong<br>• To make frames using struts and beams<br>• To join materials together<br>• To recognise food groups | • Year 3 knowledge<br>• To use a range of textiles; using methods of joining e.g. stitching<br>• To know how to complete different stitch types<br>• To appreciate a famous brand and its history<br>• To recognise different types of a bread<br>• To follow a recipe for bread<br>• To weigh, mix, knead ingredients<br>• To understand the roles of yeast as an ingredient | • Year 3 & 4 knowledge<br>• To understand how a pulley works as a mechanism<br>• To know how to use beams and struts to make a structure sturdy<br>• To understand what the body gets from different food groups<br>• To recognise and explain the eat well food plate<br>• To join wood together<br>• To design a product to meet a purpose | • Year 3, 4 & 5 knowledge<br>• To recognise the history of a famous chocolate brand<br>• To consider what makes effective advertising/wrapping<br>• To use CAD to create a wrapper<br>• To understand what a Cam mechanism is<br>• To recognise the different movements from different cams<br>• To measure, cut, join using a variety of tools |

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| • To know what the difference between savoury and sweet is<br>• To follow a recipe, mixing and kneading | • To understand how electric circuits work<br>• To create an electric circuit<br>• To programme a device<br>• To create a device with a pressure pad and explain how it works | | • To understand the seasonality of different fooods |

| **Year 3 Term 2** | **What is a mountain and where in the world are they? – MOUNTAIN MOVING MONSTER** | | |
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| Link to prior learning | Y2 – (vehicles) create simple mechanisms that create movement | | |
| Vocabulary | pneumatic, syringe, plastic tubing, connector, pump | | |
| Learning objectives | Context | Skills | Knowledge |
| To investigate air pressure in devices | How do these objects work? How is air used in their operation? | | Can they investigate how air can produce movement and how this can be used in simple pneumatic mechanisms? |
| To create simple pneumatic systems | How can we use air to make something move? | To create a pneumonic mechanism | Can they investigate how air can produce movement and how this can be used in simple pneumatic mechanisms? |
| To use air to open and close<br>To use hinges | How does this open and close? Where is the hinge? | To measure, mark out, cut and shape materials and components with some accuracy | |
| To design something that moves through pneumatics | What could we make open and close using a pneumatic system? | | |
| To make a pneumatic moving device | How can we use the tools safely to create our design? | To assemble, join and combine materials and components with some accuracy | |

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| | | To measure, mark out, cut and shape materials and components with some accuracy | |
| To evaluate the device | How did our design turn out? Would we change it in any way if we could? | | |
| **Year 3 Term 4** | **What was life like in the Stone Age?** | | |
| Links to prior learning | Y1 – building structures (homes) | | |
| Vocabulary | shell, dome, strong shapes, reinforce, girders, rafters, struts, beams, force, twisting, stretching, | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand the purpose behind a shelter | What do we need shelters for? What different types of shelters can you think of? | | |
| To identify shapes shelters are made from<br>To make 3d shapes | What shapes can you see within different shelters?<br>What structure is the sturdiest? | | Can they explore strong shapes and domes? |
| To make beams<br>To join using materials | How can we use paper to make strong beams? How can we join the beams to make 3d shapes? | To measure, mark out, cut and shape materials and components with some accuracy assemble, join and combine materials and components with some accuracy | |
| To reinforce a structure | How can we make our structures stronger and sturdier? | To make frames reinforcing corners | Can they explore how structures can be made stronger and more stable – use of girders, rafters, struts? |
| To design a shelter | What do we want from our shelter? | | |
| To make shelter | How can we use the equipment we have available to make a shelter? | To make strong, stiff shell structures | |

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| To evaluate a shelter | Are our shelter as we wanted them to be? Could we improve them in any way? | | |
| **Year 3 Term 6** | **Who were the Ancient Greeks?** | | |
| Links to prior learning | Y2 – build on where food comes from | | |
| Vocabulary | knead, shape, adapt, measure, sweet, savoury | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand what makes a biscuit<br>To recognise sweet and savoury | Who has a favourite biscuit? What shape is it? Does it have anything in it? | | Can they explore a variety of biscuits from around the world?<br>Can they recognise the place biscuits play in a healthy diet, knowing it is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate? |
| To recognise the place of biscuits within a balance diet | What ingredients are there in a biscuit? What food group do biscuits belong to? | | |
| To design a biscuit | How can we change this biscuit recipe to match our design? How can we make it savoury? How can we make it sweet? | To adapt a recipe | Can they explore ways of adapting a recipe |
| To make a biscuit | What techniques are needed when making a biscuit? How do we know how much of each ingredient we need? | To adapt a recipe<br>To measure/weigh, mix, knead, shape, To flavour measure and weigh ingredients<br>To follow a recipe | |
| To evaluate a biscuit | How have our biscuits turned out? Are they tasty to eat? | | |
| **Year 4 Term 1** | What happened at Pompeii<br>Making a Roman pouch | | |
| Link to prior learning | Y2 – fabric faces | | |
| Vocabulary | | | |

| Learning objectives | Context | Skills | Knowledge |
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| To look at how people carried items in the past | How did people carry their items around the in past? | | |
| To develop stitching techniques | How will we join the fabric together? | To thread a needle and tie a knot at the end of a piece of thread | Can they complete a running stitch? |
| To design a pouch | What will your pouch look like? | | |
| To make a pouch | What equipment and tools will we need to use? | To accurately measure, mark out and cut out shapes using fabric.<br>To accurately join and combine fabric/materials using a variety of methods/stitching<br>To thread a needle and tie a knot at the end of a piece of thread | |
| To create a draw string | How can we close the purse so that the money does not fall out? | | |
| To evaluate a product | Has the purse met the original design created? | | |
| **Year 4 Term 3** | **Why did the Romans invade Britain?**<br>**What was the legacy of the Roman invasion on Britain?**<br>Bread | | |
| Links to prior learning | Y3 – Build on skills developed in year 3 'Biscuits' | | |
| Vocabulary | balanced diet, variety, cultural dishes, dough, yeast, proving | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand the role that Warburtons have had with bread making | Can you name any types of bread? Any brands? What is the history of Warburtons bread? | | Can they understand how key events and individuals in design and technology have helped shape the world? |

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| To tastes different types of bread | Is all bread the same? What type of bread are there? Do you like the taste of them? | To evaluate | Can they explore bread from around the world?<br>Can they recognise a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate? |
| To design<br>To shape and practise techniques | What sort of bread will you make? What should it be like? How can we practise shaping dough? What is kneading? | To knead and shape | Can they understand the role of kneading and leaving dough to rise (proving)? |
| To design | What ingredients will you use in you bread? How will you make it different? | To adapt a recipe | |
| To make bread | What is the recipe we need to follow?<br>What tools will we use?<br>How will we use them safely? | To measure and weigh ingredients<br>To follow a recipe<br>To measure/weigh, mix, knead, shape, flavour | Can they understand the role of yeast in bread? |
| To evaluate bread | Did the bread turn out how we wanted it to? Does it taste how we wanted it to? Is it shaped correctly? | | |
| **Year 4 Term 6** | **Who was Tutankhamun and how do we know about him?**<br>Pressure pads – tomb booby trap (electrical circuits)<br>Design and make a product incorporating a bulb and a switch | | |
| Links to prior learning | Simple circuits - Science | | |
| Vocabulary | circuit, switch, pressure pad, input, output, process | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand the history behind electricity | What do we use electricity for? What runs on electricity? When was electricity first used? | | Can they understand how key events and individuals in design and technology have helped shape the world? |

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| To make different circuits | How can we make a bulb light? | To construct simple circuits incorporating a bulb within a product | Can they understand how simple electrical circuits and components can be used to create functional products?<br>Can they understand that mechanical and electrical systems have an input, process and output? |
| To investigate switches | How can we turn a bulb on and off? | To incorporate a switch or a pressure pad to control the light | Can they understand how simple electrical circuits and components can be used to create functional products?<br>Can they understand that mechanical and electrical systems have an input, process and output? |
| To design a product | What do we want a torch to look like? | | |
| To make an electrical product | What equipment do we need to use ?<br>How will we use it safely? | To construct simple circuits incorporating a bulb within a product<br>To incorporate a switch or a pressure pad to control the light | Can they understand how simple electrical circuits and components can be used to create functional products?<br>Can they understand that mechanical and electrical systems have an input, process and output? |
| To evaluate an electrical product | Does the circuit work? | | |
| To control a circuit using programming | How can we control a circuit using a computer? | To control a bulb using programming | Can they understand how to programme a device to control an electrical circuit? |
| **Year 5 Term 1** | Bridges (structures and mechanisms)<br>Design and build a draw bridge | | |
| Link to prior learning | Y3 – shelters (structures) | | |
| Vocabulary | , construct, beam, girder, arch, truss, abutment, suspension, cantilever | | |
| Learning objectives | Context | Skills | Knowledge |

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| To study bridges | Are all bridges the same? Which bridges open and close? | | |
| To investigate drawbridges | What is the difference between a bridge and a drawbridge? | | Can they recognise the mechanism behind a drawbridge? |
| To investigate pulleys | What mechanism opens and closes a drawbridge? | | Can they explain how a pulley works? |
| To design a drawbridge | What will our drawbridge look like? | | |
| To make a drawbridge | How will we cut the wood?<br>How will we join pieces of wood? | To accurately measure, mark out, cut and shape materials and components<br>• accurately assemble, join and combine materials and components<br>• use techniques that involve a number of steps | |
| To evaluate a bridge | Does the bridge open and close using a pulley system? | | Can they assess a bridge based on a criteria given? |
| **Year 5 Term 2** | Cooking and nutrition<br>'Eat like a champ' – 6 sessions<br>Fibre/Energy/Hydration | | |
| Links to prior learning | The Eatwell Plate Yr1/2<br>Balance diet Yr1-4<br>Nutrition and hydration | | |
| Vocabulary | fibre, vitamins, energy, carbohydrate, hydration, protein | | |
| Learning objectives | Context | Skills | Knowledge |

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| To understand the eat well plats | What is the eatwell plate? | build upon and use a variety of skills introduce throughout KS1 and KS2 | • learn about carbohydrates, protein, vitamin C, calcium, fat, and fibre<br>• learn about the importance of staying hydrated<br>learn where our energy comes from, what we need energy for<br>• learning about food labels and packaging<br>• understand the importance of staying active in order to maintain good health |
| To understand the function and sources of different nutrients | What are nutrients? | | |
| To understand the role of adequate, healthy hydration. | How do we know if we are not well hydrated? | | |
| This lesson covers why the body needs energy and explores the energy provided by different types and amounts of food and drinks. | Why does the body need energy? | | |
| This lesson looks at how to identify and interpret information on food labels in order to make healthier choices. | What do the labels on food packaging tell us? | | |
| **Year 5 term 5** | Photo frames | | |
| Link to prior learning | Year 3 – shelters<br>Year 5 - drawbridges | | |
| Vocabulary | Frame strengthen photo stand display butt joint mitre joint | | |
| Learning objectives | Context | Skills | Knowledge |

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| To investigate products | What type of photo frame may we use if we were to put in a holiday picture?<br><br>Would this be the same frame for a new baby? | | Can children consider the audience for different products? |
| To understand how to strengthen joins | What different joins can we make?<br><br>How can we strengthen them? | To cut accurately<br>To join | Can children explain which type of joint is strongest?<br>Can children explain how to make a joint stronger? |
| To design a frame | What would a frame look like for a holiday to a landmark? | To accurately measure | |
| To make a frame | | To accurately measure, mark out, cut and shape materials and components<br>• accurately assemble, join and combine materials and components<br>• use techniques that involve a number of steps | Can children use a range of tools safely |
| To evaluate | Does the finished product look like the design?<br><br>Does it meet the design criteria? | | |
| **Year 6 Term 1** | Who were the Maya and where are they now?<br>New Chocolate Bar and Packaging (product design)<br>Design, make and create the packaging for a new chocolate bar | | |
| Link to prior learning | Maths – nets<br>Food and nutrition – adapting a recipe Y3/Y4 | | |
| Vocabulary | advertising, packaging, product, manufacturing, sustainable, testing, substituting | | |
| Learning objectives | Context | Skills | Knowledge |

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| To understand the history behind a chocolate brand | What are the most famous chocolate brands? | | Can they understand how key events and individuals in design and technology have helped shape the world? |
| To evaluate and analyse a range of existing products. | Which brand of chocolate do you know of? Which brands do you prefer and why? | To understand how innovative products are<br>To understand what impact products have beyond their intended purpose | |
| To design an appealing product | Which chocolate bar wrapping is the most appealing and why? | To design and construct nets for packaging<br>To understand what impact products have beyond their intended purpose<br>To understand how much products cost to make | |
| To make an appealing product. | How can we make an appealing design?<br>How can we use a computer to design a wrapper? (Use 2 simple 2 Design and make) | To use computer aided design to | Can they understand that a recipe can be adapted by adding or substituting one or more ingredients? |
| To evaluate and analyse a new product. | What do you think of your end product?<br>What do others think? | | |
| **Year 6 Terms 3 & 4** | **Changes over time** | | |
| Links to prior learning | Y5 – Bridges (mechanisms)<br>Science - forces | | |
| Vocabulary | cam, shaft, off-centre cam, peg cam, snail cam, pear cam, follower, spindle | | |
| Learning objectives | Context | Skills | Knowledge |

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| To consider how a toy moves | How do these toys move? Are they linear or circular movements? What mechanisms are involved? | | |
| To understand how cams work | What is a cam? Are they all the same? What types of movement come from a cam? | | Can they develop a greater understanding of how cams, pulleys or gears create movement |
| To design a toy with a cam | What are the different parts of the moving toy called? What will be needed? Who will the toy be for? | | |
| To make a toy with a cam | What equipment will we need to use? How do we use the equipment sensible and safely? | To accurately measure, mark out, cut and shape materials and components<br>To accurately assemble, join and combine materials and components<br>To use techniques that involve a number of steps | Can they design and make products with greater independence? |
| To evaluate the toy with a cam | Does the moving toy work? Are the movements how we wanted them to be? | | |
| **Year 6 Term 3** | Cooking and nutrition<br>Seasonality | | |
| Links to prior learning | Cookery sessions in previous year groups | | |
| Vocabulary | seasonality, availability, processed, balanced | | |
| Learning objectives | Context | Skills | Knowledge |
| To understand what seasonality means | What are our seasons? Can you think of any food related to seasons? | | Can they explain when different fruit and vegetables are in season in the United Kingdom? |

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|---|---|---|---|
| To understand where food comes from | How are these ingredients reared, caught and processed? | | Can they explain where and how a variety of ingredients are grown, reared, caught and processed? |
| To taste and evaluate seasonal food | How does the food taste to you? | | |
| To understand what a balanced diet is | What is the importance of protein to our balanced diets? | | |
| To design a seasonal meal | What seasonal ingredients will you include in your meal? How will you make it a balanced meal? | | Can they generate a range of ideas for balanced seasonal recipes? |
| To prepare and evaluate a seasonal meal | What equipment will you need? What techniques do you know to prepare food? | To build upon and use a variety of skills introduce throughout KS1 and KS2 | Can they prepare ingredients hygienically? |