

The Craylands School S.T.A.R. KS1 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

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

Knowledge

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

<ul style="list-style-type: none"> • 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. 			
<p style="text-align: center;">Year 1 knowledge end points</p> <ul style="list-style-type: none"> • To identify and make different shapes from materials • To cut different shapes • To join 2 pieces of material together • To reinforce materials to make them sturdy • To understand what a hinge is and how it works • To know what a balanced diet is • To know what utensils are needed to make a sandwich • To know how to cut safely • To make a healthy food product • To recognise and explain moving mechanisms including a lever, slider and wheel mechanism. 	<p style="text-align: center;">Year 2 knowledge end points</p> <ul style="list-style-type: none"> • Year 1 knowledge • To know the functions of parts of a moving vehicle including axle, wheels and chassis • To cut and join materials together • To make a structure sturdy • To chop, grate and peel with utensils • To show a knowledge of where certain food types come from e.g. fruits and vegetables • To know how fabric can be joined together • To use a simple sewing stitch 		
<p style="text-align: center;">Early Years</p>	<p style="text-align: center;">Teach how to use scissors correctly Use of glue (PVA/pritt sticks), tape and joining materials Use of hole punches Possible use of Binka Junk modelling in CIA Becoming independent in their construction work. Talk about the colour, texture and shape of their work</p>		
<p style="text-align: center;">Year 1 Term 2/3</p>	<p style="text-align: center;">What is it like where we live? Has where we live always been like this? Home structures</p>		
<p>Link to prior learning</p>			
<p>Vocabulary</p>	<p>build, join, construct, strong, stiff, stable, hinge</p>		
<p>Learning objectives</p>	<p style="text-align: center;">Context</p>	<p style="text-align: center;">Skills</p>	<p style="text-align: center;">Knowledge</p>
<p>To recognise different houses</p>	<p>Are all houses the same? What is the same and what is different?</p>		

To recognise features of a house			
To make 3d models CP	What shapes can be seen in a house? How can we make these shapes?		Can they explore the nets of cubes and cuboids?
To make a hinge CP	How do doors and windows open?	To use hinges in models	
To be able to join materials 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? Who is it for?		
To make a house	How can we make our house strong and sturdy? How can we use hinges in our house?	To assemble, join and combine materials and components 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? 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 • cutting (claw and bridge method) • mixing	

		<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • cutting (claw and bridge method) <ul style="list-style-type: none"> • mixing • 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?

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		
Learning objectives	Context	Skills	Knowledge
To know how animals are farmed	Have you ever visited a farm where animals live? What did you see? What animals live on farms? 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? 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) To peel using a peeler To grate 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) To peel using a peeler To grate 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) To peel using a peeler To grate 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

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 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

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

Knowledge

understand how key events and individuals in design and technology have helped shape the world
 understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
 apply their understanding of how to strengthen, stiffen and reinforce more complex structures
 understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
 understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

<input type="checkbox"/> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Technical knowledge <input type="checkbox"/> apply their understanding of computing to program, monitor and control their products. understand and apply the principles of a healthy and varied diet <input type="checkbox"/> prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques			
Year 3 knowledge end points	Year 4 knowledge end points	Year 5 knowledge end points	Year 6 knowledge end points
<ul style="list-style-type: none"> • To understand what a pneumatic system is and how it can be used • To measure, mark and cut out shapes accurately • To recognise 2d shapes from 3d shapes • To know how to make a 3d structure sturdy and strong • To make frames using struts and beams • To join materials together • To recognise food groups 	<ul style="list-style-type: none"> • Year 3 knowledge • To understand how levers and linkages work • To appreciate a famous brand and its history • To recognise different types of a bread • To follow a recipe for bread • To weigh, mix, knead ingredients • To understand the roles of yeast as an ingredient • To understand how electric circuits work • To create an electric circuit 	<ul style="list-style-type: none"> • Year 3 & 4 knowledge • To understand how a pulley works as a mechanism • To know how to use beams and struts to make a bridge structure sturdy • To recognise tapestry from history • To use a range of textiles; using methods of joining e.g. stitching, weaving • To know how to complete different stitch types 	<ul style="list-style-type: none"> • Year 3, 4 & 5 knowledge • To recognise the history of a famous chocolate brand • To consider what makes effective advertising/wrapping • To use CAD to create a wrapper • To understand what a Cam mechanism is • To recognise the different movements from different cams • To measure, cut, join using a variety of tools

<ul style="list-style-type: none"> To know what the difference between savoury and sweet is To follow a recipe, mixing and kneading 	<ul style="list-style-type: none"> To programme a device To create a device with a pressure pad and explain how it works 	<ul style="list-style-type: none"> To understand what the body gets from different food groups To recognise and explain the eat well food plate 	<ul style="list-style-type: none"> To understand the seasonality of different foods
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Year 3 Term 2	What is a mountain and where in the world are they? – MOUNTAIN MOVING MONSTER		
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 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	

		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 To make 3d shapes	What shapes can you see within different shelters? What structure is the sturdiest?		Can they explore strong shapes and domes?
To make beams 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	

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 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? 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 To measure/weigh, mix, knead, shape, To flavour measure and weigh ingredients 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 - Create a moving parts poster		
Link to prior learning	Y1 – (Moving pictures) Levers and sliders		
Vocabulary	levers, linkages, pop outs, concertina, rotating, windows, flaps, join, assemble, components		
Learning objectives	Context	Skills	Knowledge

To evaluate moving story books	What parts move in these story books? How do the mechanisms work? Can you see the mechanisms?		Can they understand how mechanical systems such as levers and linkages create movement?
To make mechanisms with levers and linkages	How do these mechanisms work? What materials do we need to make these mechanisms?	To measure, mark out, cut and shape materials and components with some accuracy To assemble, join and combine materials and components with some accuracy To create movement with levers, linkages, pop outs, windows, rotating wheels, ect.	Can they understand how mechanical systems such as levers and linkages create movement?
To design a moving poster	What could move on our poster? How do we want it to move?		
To make a moving poster	What equipment and tools will we need to use? How can we make it safe?	To measure, mark out, cut and shape materials and components with some accuracy To assemble, join and combine materials and components with some accuracy To create movement with levers, linkages, pop outs, windows, rotating wheels, ect.	Can they understand how mechanical systems such as levers and linkages create movement?
To evaluate a moving poster	How does our poster move? Does it look how we wanted it to?		
Year 4 Term 3	Why did the Romans invade Britain? What was the legacy of the Roman invasion on Britain? 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?
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? 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 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? What tools will we use? How will we use them safely?	To measure and weigh ingredients To follow a recipe 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? Pressure pads – tomb booby trap (electrical circuits) 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?
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? 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? 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 ? How will we use it safely?	To construct simple circuits incorporating a bulb within a product 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? 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	Where can you visit in Europe? Is Europe the same as the UK? Bridges (structures and mechanisms) Design and build a working drawstring bridge		

Link to prior learning	Y3 – shelters (structures) Y4 - Levers/linkages (mechanisms) Science - Forces		
Vocabulary	pulleys, drawstring, forces, construct, beam, girder, arch, truss, abutment, suspension, cantilever		
Learning objectives	Context	Skills	Knowledge
To study bridges	Are all bridges the same? Which bridges open and close?		
To investigate the mechanisms used in bridges	What mechanism can we use to open and close?		Can they begin to understand how mechanical systems such as pulleys create movement?
To strengthen structures	How can we make the ends of a bridge strong and sturdy?		
To design a bridge	What do we want our bridge to look like? How will it open and close?		Can they design and make a product that incorporates a pulley (drawstring) mechanism?
To make and evaluate a bridge	What equipment do we need to make our bridge? How can we use it safely? Does it open and close?	To accurately measure, mark out, cut and shape materials and components <ul style="list-style-type: none"> • accurately assemble, join and combine materials and components • use techniques that involve a number of steps 	Can they design and make a product that incorporates a pulley (drawstring) mechanism?
Year 5 Term 3 & 4	What happened after the Romans left Britain? Talking Textiles (textiles) Design and create a tapestry that tells a story		
Links to prior learning	Y2 – fabric faces- how to use a running stitch to attach two pieces of material		
Vocabulary	tapestry, running stitch, felt, hessian, layering, attach, cross stitch, template		
Learning objectives	Context	Skills	Knowledge

To understand how stories have been told through textiles	What story is this textile work telling? What is the Bayeux tapestry about?		Can they understand that a 3D textiles product can be made from a combination of fabric shapes – different attaching techniques?
To plan a textile story	What story can we choose that we can retell through textile? What parts of the story could we retell?		Can they understand that a 3D textiles product can be made from a combination of fabric shapes – different attaching techniques?
To combine textiles	What method do we have of combining different pieces of material?	To accurately measure, mark out and cut out shapes using fabric. To accurately join and combine fabric/materials using a variety of methods/stitching	
To sew	What are the different sewing techniques that could be used?	To thread a needle and tie a knot at the end of a piece of thread	
To create a textile story	How can we join pieces of material we are using? What other techniques could we incorporate e.g. weaving	To accurately measure, mark out and cut out shapes using fabric. To accurately join and combine fabric/materials using a variety of methods/stitching To thread a needle and tie a knot at the end of a piece of thread	
To evaluate	Can we tell the story from the tapestry that has been created?		
Year 5 Term 3	Cooking and nutrition 'Eat like a champ' – 6 sessions Fibre/Energy/Hydration		

Links to prior learning	The Eatwell Plate Yr1/2 Balance diet Yr1-4 Nutrition and hydration		
Vocabulary	fibre, vitamins, energy, carbohydrate, hydration, protein		
Learning objectives	Context	Skills	Knowledge
To understand the eat well plats		build upon and use a variety of skills introduce throughout KS1 and KS2	<ul style="list-style-type: none"> • learn about carbohydrates, protein, vitamin C, calcium, fat, and fibre • learn about the importance of staying hydrated <p>learn where our energy comes from, what we need energy for</p> <ul style="list-style-type: none"> • learning about food labels and packaging • understand the importance of staying active in order to maintain good health
To understand the function and sources of different nutrients			
To understand the role of adequate, healthy hydration.			
This lesson covers why the body needs energy and explores the energy provided by different types and amounts of food and drinks.			
This lesson looks at how to identify and interpret information on food			

labels in order to make healthier choices.			
Year 6 Term 1	Who were the Maya and where are they now? New Chocolate Bar and Packaging (product design) Design, make and create the packaging for a new chocolate bar		
Link to prior learning	Maths – nets Food and nutrition – adapting a recipe Y3/Y4		
Vocabulary	advertising, packaging, product, manufacturing, sustainable, testing, substituting		
Learning objectives	Context	Skills	Knowledge
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 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 To understand what impact products have beyond their intended purpose To understand how much products cost to make	
To make an appealing product.	How can we make an appealing design? How can we use a computer to design a wrapper?	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? What do others think?		
Year 6 Terms 3 & 4	Changes over time – which ruler (Queen Elizabeth 1, Queen Victoria or Shaka Zulu) had the most impact on progress in their country, including trade, colonisation and inventions?		
Links to prior learning	Y5 – Bridges (mechanisms) Science - forces		
Vocabulary	cam, shaft, off-centre cam, peg cam, snail cam, pear cam, follower, spindle		
Learning objectives	Context	Skills	Knowledge
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 To accurately assemble, join and combine materials and components 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 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?
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?