

DT	Key:	*Vocabulary - Please see previous year groups for vocabulary already taught. New Vocabulary is in addition.	Adapted from Kapow plans to fit with topics for year group - additional planning and resources available.	
Y1	Focus	Puppet making	Fruit and Vegetables	Creating a Windmill
	Strand	Textiles	Food	Mechanisms
	Assessed Skills	To join fabrics together using different methods To use a template to create my design To join two fabrics together accurately To embellish my design using joining methods https://drive.google.com/drive/u/0/folders/16d70-fVTv3VImNjYqQ_W2slI5xkk8Ayu	To identify if a food is a fruit or a vegetable To identify where plants grow and which parts we eat To taste and compare fruit and vegetables To make a fruit and vegetable smoothie https://drive.google.com/drive/u/0/folders/1uWherNColrnw77ld62xbVZAH7OqgHAK	To include individual preferences and requirements in my design To make a stable structure To assemble the components of my structure To evaluate my project and adapt my design https://drive.google.com/drive/u/0/folders/1VkJjqOZ3pgD1icYMq8xbKb68uQt4yxBK
	Vocabulary	embellish, design, fabric, accurately, pinning, stapling, gluing, technique, symbolise, align, reflect,	classify, category, categorise, adjective, investigate, inspect, edible, determine, leaves, root, stem, characteristics, explore, evaluate, existing, ingredients, blender, principles, varied, generate, develop, model, communicate, temp top, tail, de-core, flesh, segments, bridge method,	Windmill, structure, net, support, recycled, materials, assemble, strength, stiffness, cylinders, turbine, sails, stable, model, axle, mechanism, traditional/traditionally, historical, contemporary, levers, sliders, wheels, weight, base, evaluate,
	Knowledge	Why do you think this joining technique may be chosen? How is it fastened? Who might use it? What does your character look like? What makes them different from other characters? What colour felt would symbolise your character? Which pieces are you joining? Where do you want the joins to be? How are you joining these two pieces? What part of the body will that be? How and where will you secure it to the puppet?	What is this called, who has eaten this before? What are its tastes, smell, texture and appearance? What will it look like if we peel or cut it in half? How might we describe its shape? Which parts do we eat? What might I need to do before eating this? How do we know what is a fruit or a veg? Where do fruit and veg grow? What part of plants can we eat? What is a smoothie? Why are smoothies good for us? What might we have to do before taste testing? What parts of these fruits/veg do we eat? Why is it important to wash before we eat ? What will you need? What might we have to do before eating this? Why do we slice in this way? What parts do we eat? Why is it important to wash before we eat ?	What is a structure? Something that has been made/constructed. Eg: a building, bridge, chair, table. What are structures for? Can you identify some structures in the room? What is a windmill? What are windmills for? Who might live in a windmill? What are the three main parts of a windmill? What are the three key features of a windmill? What materials are used? How has it been made? What does stable mean? Object does not easily topple over. What were windmills traditionally used for? What are they used for now? What are turbines for? Why might the mouse's grandparents lived in the windmill? Why does the current mouse live there? What are the three key features of a windmill? What are windmills used for? Why do windmills need turbines? What materials are used? How has it been made? What is an axle? What is it for? What other products use axles (cars, toys, etc)?
	Focus	Pouches	A balanced diet	Making a moving Minibeast

Strand	Textiles	food	Mechanisms
Assessed Skills	To sew a running stitch To cut fabric using a template To join fabrics using a running stitch To decorate a pouch using fabric glue or stitching https://drive.google.com/drive/u/0/folders/1nvUQQAVs1GKPiwsbtm3uZVn3TcwKPXpW	To know what makes a balanced diet To taste test food combinations To design a healthy wrap https://drive.google.com/drive/u/0/folders/1j-zoyAI9IvLdp1MtzMDcPl-ydzYgRXxt	To look at objects and understand how they move To explore different design options To create linkage systems To make a moving minibeast. https://drive.google.com/drive/u/0/folders/1otk7axrPlmgcn-UpaUGtIBBoUWAcmAD1
Vocabulary	running stitch, tools, equipment, evenly spaced, needle, thread, knot, eye, pouch, functional, flap, textiles, aligned, varying, consistent, equal	carbohydrates, starchy, proteins, dairy, spreads, hidden sugars, sensory characteristics, combination/s, ideal, flavour, texture, small, taste, bridge grip, claw grip, review, hygiene, assemble	mechanism, movement, input, output, lever, pivot, linkage, linear, reciprocating, rotary, oscillating, pulley, components, slider, wheel, axle, purposeful, functional, appealing, talley, survey, reinforce, design brief
Y2	Knowledge How do I thread it? What can I do if I have trouble? Which direction am I sewing in? What is the name of the stitch? What must I remember to do? Which sides will be sewn together? Which parts will be open? What will this piece of fabric do? What do we need to consider when we sew? What can I do if I have trouble? How much glue should be used? What items are in your design? What colours should you use?	What do you think the ingredients are? Do you think it will taste sweeter? How much sugar do you think it will include – more or less than...? What food group might this be in? How might we know? What food group is it in? What ingredients have been used? Where do the products grow? How do the sensory characteristics affect your liking the food? What ingredients have been used? What food groups do they belong to? What should we do before we work with food? How do we select the ingredients? How could we make it appealing to eat? How do we make it a balanced diet? What do we need to do before we start preparing food? How do we chop safely? How do we ensure that we are hygienic in the kitchen? What do we do if we drop food?	What is a mechanism? A collection of parts that work together to create a movement, eg: a bicycle. What is an input/output? What is a lever/linkage? What are levers and linkages used for? Can you demonstrate/explain the four types of motion? Can you identify a lever/linkage? Can you name any products that use levers and linkages? What is a pivot? What are pivots used for in linkages? What products use levers and linkages? What is a Design Criteria and why is it important to use a Design Criteria? What materials can you use to make your monsters? How can we make a linkage with these materials? What might a well-made linkage look like? How will we work safely with scissors? How can we make the card stiffer to prevent it from bending? What materials could you use to represent fur, scales, claws, etc. What might happen during assembly which could stop your linkage from working? How can we work with scissors safely? How can you use foil, card and buttons creatively?
Focus	Pyramids	Pneumatic toys	Eating seasonally - chocolate

Strand	Construction	Mechanisms	Food
Assessed Skills	To identify features of a pyramid To design a pyramid To construct 3D nets To construct and evaluate my final product https://drive.google.com/drive/u/0/folders/1sgRVlyiVj7n9_2ZI95K6VB_jxBfx_ZIX	To understand how pneumatic systems work To design a toy which uses a pneumatic system To create a pneumatic system To test and finalise ideas against design criteria https://drive.google.com/drive/u/0/folders/1VJEscKIMzXsx2dnlYWpnoqvzwGYIwg_p	To know that climate affects food growth To know that importing food impacts the environment and is one of the reasons why we should eat seasonal foods grown in the UK. To create a recipe that is healthy and nutritious using seasonal vegetables To safely follow a recipe when cooking https://drive.google.com/drive/u/0/folders/1KQx0XqCJ_fn428szngZ0iDjs8JMzPM7d
Y3 Vocabulary	align, lines, angle, base, layer, features, polyhedron, polygon, triangular, apex, monumental structure, finishing, innovative, nets, structures, crisp folding, aesthetic qualities, scoring, geometric	pneu, pneumatic, cross-sectional, exploded diagram, prototype, computer-aided design, analyse, inflate, deflate, hinge/d, syringe, transmit, volume, thumbnail sketch, annotated sketch, manipulate, creating, weaving	climate, nutrition, savory, seasonality, processed, settlement, trade, distribution, skewer, complement
Knowledge	What are pyramids for? Who lived in pyramids? Where do we see pyramids? Which stories have pyramids in them? Do pyramids all look the same? Why/why not? What is a net? What is a tab? What is scoring? Can you name all the geometric shapes? Can you think of a more creative configuration? How can you combine nets and collected objects? What will make a good quality pyramid? Does your pyramid include all the features in your original design? Are there any other features you would like to include?	What is a mechanism? A system of parts that work together to create motion and transfer forces Can you identify products that are/use pneumatics? What is a pneumatic system? What does 'pneu' mean? What products use pneumatic systems? What are design criteria used for? What is a thumbnail sketch? What is an exploded diagram? Why are different types of drawing important in design? Can you remember the three different ways to create a pneumatic system? Why are different types of drawing important in design? Can you remember the three different ways to create a pneumatic system? How can you use pneumatic systems with linkage systems to create motion? How should you use scissors safely? How can you use pivots to create motion? How might you decide which materials to select for surface decoration? How could you assemble different parts?	What country has this been grown in? Why do we think some ingredients are sourced from so far away? What conditions do you think these fruits and vegetables need in order to grow? Why do you think these foods can't be grown in the UK? What does the term 'seasonal' mean? Where does the food in our supermarkets come from? Is the food in the supermarket always seasonable to the UK? Do we really need to import food? What are the effects of importing food? What ingredients do we need? How will we prepare each ingredient? What must we consider in order to stay safe in the kitchen? What hygiene risk do we face? How much of each ingredient do we need? How do we know? What colours are used? What images are used? What words are used? How might you show that your food is seasonal?

	Focus	Torches	Roman catapult	Adapting food
	Strand	Electrical systems	Mechanisms	Food
Y4	Assessed Skills	<p>To learn about electrical items and how they work To evaluate electrical products To design a torch To make and evaluate a torch</p> <p>https://drive.google.com/drive/u/0/folders/1zD8WHX11rMxZ1OV2nenR1ggILPm3ixbf</p>	<p>To build a basic catapult. To design a shape that reduces air resistance To make a model based on a chosen design To assemble and test my completed product</p> <p>https://drive.google.com/drive/u/0/folders/1cU-Vxqjp47qALNdr9sWWcl7Babdb6eP5-</p>	<p>To follow a baking recipe. To make and test a prototype To design a biscuit to a given budget To make a biscuit that meets a given design brief</p> <p>https://drive.google.com/drive/u/0/folders/1Enplx5LmoH-dWynmy8Upe7VLZ16mgw1o</p>
	Vocabulary	cross-sectional, exploded diagram, prototype, computer-aided design, thumbnail sketch, annotated sketch, electrical, insulators, battery, motor, appliance, cells, circuit, conductor, connection, housing, reflector, switch, aesthetic,	kinetic, motion, dowel, cross-section, catapult, chassis, personalise, resistance, dimensions	generate, accurately, prototype, parchment, branding, budget, utilities, approximately, preparation
	Knowledge	<p>What is electricity? How do we use it? How can electricity be dangerous? How can we make sure we are safe around electrical items? What is a battery? What products use batteries? What's the purpose of a torch? What features do they have? How does a torch work? Who are you designing your torch for? What colours might they like? What themes might they like? Does it need to be able to stand freely, more like a lamp? Does it need a loop or keyring to attach to? How could you improve your design? Should it have any other special features? What is a conductor? What is an insulator? What is a battery? How do the torches work?</p>	<p>What was the earliest form of the catapult? Can you identify any types of mechanisms that you know of in a catapult? What is air resistance? Why might larger objects move more slowly through the air than smaller ones? How can you apply this science to your own designs? What is a chassis? What is air resistance? How can air resistance affect the speed of a catapult? What is a structure? What is a net? What is the importance of a tab in a net design? How are tabs used to create structures? How can we work safely with glue guns? What would good-quality construction look like?</p>	<p>What does it taste like? What ingredients/flavours can you taste? How does it feel when you put it into your mouth? Does it crumble or crack? What is its texture like? What does it remind you of? What colours are used? How will that change the taste/smell/texture/appearance? Who would that appeal to? What would you like to change? How might that alter the biscuit? What will you include? Will that add value? How much will it cost? How will it change your biscuit's taste/smell/appearance?</p>

	Focus	Moving dragon	What could be healthier?	Stuffed toy
	Strand	Mechanisms	Food	Textiles
Y5	Assessed Skills	<p>To design a moving dragon. To follow my design brief to make my moving dragon To use layers and spacers to cover the working of mechanisms To create a high quality product suitable for a target user</p> <p>https://drive.google.com/drive/u/0/folders/1GptCXtAwRulqSQsQdoDPV3IM6K3LvDFM</p>	<p>To understand where food comes from. To understand the term healthy. To adapt a traditional recipe. To make a complete product.</p>	<p>To design a stuffed toy To sew blanket stitch To create and add decorations to fabric To use a blanket stitch to assemble the components of a stuffed toy</p> <p>https://drive.google.com/drive/u/0/folders/1HOnvFVLHCJLAuZHYstykLF2wsNEqv3gH</p>
	Vocabulary	disassemble, mechanism, deviated	beef, cross contamination, farm, method, packaging, research, welfare	proportional, recipient, blanket stitch, contrasting, applique, appendage, consistent
	Knowledge	<p>What is the difference between a 'structure' and a 'mechanism'?</p> <p>Can you combine structures and mechanisms?</p> <p>What is the difference between mechanisms and structures?</p> <p>How can we measure, mark and cut to produce accurate right angles and neat edges?</p> <p>How should we work safely with scissors?</p> <p>Can you identify the different types of mechanisms?</p> <p>How can I use a mechanism to create a structure?</p> <p>How can I make it neater and more appealing to children?</p> <p>Which parts of a linkage should you cover to make it safer and more appealing to children?</p> <p>Who are your users/clients?</p> <p>What might their requirements and expectations be?</p> <p>What aesthetic (visual) considerations might they have?</p>	<p>What ingredients go into a bolgnese?</p> <p>do you know where ingredients come from?</p> <p>How do cattle find their way onto our supermarket shelves as beef?</p> <p>Do you think it is fair to eat meat? Why/Why not?</p> <p>Is it important that cattle and other animals we eat are well looked after? Why?</p> <p>What ingredients did you expect to be included? Are any of them surprising?</p> <p>What might that ingredient add to the recipe?</p> <p>How are the ingredients/quantities different/the same in the recipes you have found?</p> <p>Is there a difference as to how you prepare or store the two products?</p> <p>What might you add?</p> <p>What might you remove?</p> <p>How will 'X' change the sensory characteristics of the dish?</p> <p>How might that alter the nutritional information of the dish?</p> <p>What are nutrients?</p> <p>In a nutritional table, which figures should be kept low and which can be higher?</p> <p>What is our recommended daily intake?</p> <p>Why have you decided that your chosen sauce is healthier? Did other members of your group think it was?</p> <p>What do you need to do before you start cooking?</p> <p>What are the different stages of your recipe?</p> <p>Who will be responsible for each stage?</p> <p>How will you know that the meat is cooked?</p> <p>How will you ensure that your food is hygienic?</p> <p>What do you need to do before you start cooking?</p> <p>How are you going to ensure that everyone is involved?</p> <p>What risks are there in using raw meat? What precautions will you take?</p>	<p>How would you describe your stuffed toy?</p> <p>What shape is the main body?</p> <p>What other body parts will it have?</p> <p>What shape will it be?</p> <p>How is blanket stitch different to running stitch?</p> <p>What do you need to consider when sewing?</p> <p>What equipment will you need?</p> <p>What part is this?</p> <p>How will it be attached?</p> <p>What do you need to do next?</p> <p>What do you need to do/get in order to prepare for that?</p> <p>How will you attach those?</p> <p>Which method are you using?</p>

Y6	Focus	Automata toys (Japan)	Come dine with me	Steady hand game
	Strand	Mechanical systems	Food	Electrical systems.
	Assessed Skills	<p>To use woodworking tools To assemble components to make a frame To explore cams and make appropriate choices To assemble a window display</p> <p>https://drive.google.com/drive/u/0/folders/15hpP5A1Wcd0EEWBJeS9oNCZ_kBUk6ah</p>	<p>To research and design a three course meal To prepare a meal using a recipe To understand where their food comes from To write up a recipe</p> <p>https://drive.google.com/drive/u/0/folders/1ICPy4zjD3f-Hs3qfBnQXfz-tPjuBYoO</p>	<p>To make electromagnetic motors and understand how they work To design a steady hand game To construct a stable base To assemble electronics and complete their electronic game</p> <p>https://drive.google.com/drive/u/0/folders/1gdSzQxUHj_qltyibn3xMcRh2XUCWD_kl</p>
	Vocabulary	<i>automata, cams, tenon, kinetic, jelutong, bench hook, dwell</i>	<i>batch/ batches, rotation, storyboard, contribute, reared, sustainable, cross-contamination, farm to fork</i>	<i>homopolar, lorentz force, neodymium battery, electromagnetic, perspective, alignment</i>
	Knowledge	<p>What is a cam used for? What is the purpose of having different shaped cams? How do we use tenon saws safely? Why is it important to measure and mark out the wood accurately? Why is it important to focus on cutting the jelutong at right angles? How can you check the accuracy of your work? What is an axle for? How can axles be used in automata toys? What is the purpose of having different shaped cams? How do we use tenon saws safely? How can you check the accuracy of your work? Describe what a well made frame would look like? Can you name the different types of cams? Can you guess what sort of movement they might make the followers create? How might you be able to use a linkage system with the followers to make a more complex mechanism? Will the cams work if you rotate the axle in the opposite direction? Can you name the different types of cams? How might you be able to use a linkage system with the followers to make a more complex mechanism? Why do the cams need to be fixed to the axle?</p>	<p>What course and ingredient are you researching recipes for? How will those flavours work together? Are you following a theme – what is it? How easy will it be to make? What ingredients do you need? How long does the recipe take to cook? What additional ingredients does it need? How long does it take to prepare? What cooking techniques are used? How long does it take to cook? How would you categorise this food – what nationality/food type? What health and safety considerations are there when preparing food? How should we cut safely? What does 'Farm to 'Fork' mean? What have you learnt? Did anything surprise you? What illustrations could accompany your recipe page? What top tips can you give to accompany the recipe?</p>	<p>What is a conductor? What is an insulator? Is copper a conductor or insulator? Explain how the motor spins Why is it important that the shape is symmetrical? What is the name of the tool we will use to shape the copper wire? What are the dangers of batteries? What should you do if you notice your battery becoming hot? What makes the buzzer sound? What is a net? What would make the game difficult to complete? What might the target audience for the game be? What is a design criteria for? Give an example of what should be included in the design criteria. How can the design criteria help us this lesson? What would a good quality base look like? Describe the function of each component in the circuit. How can you make the buzzer sound or make the bulb light up - depending on which of these you are using?</p>