

Overall skills: follow procedures for safety and hygiene. Use a wide range of materials and components - construction materials, textiles, food ingredients, mechanical and electrical components.

Apply a range of finishing techniques, including those from art & design, with some accuracy.

Design and

Technology Year 3 www.kapowprimary.com planning

Autumn – Sensational Shropshire and Castle Chaos			Spring – Seriously Stone Age. The Natural World Around Us			Summer -Escape from Pompeii. Invaders from Rome		
<p>Skills – Structure</p> <p>Investigate and describe features of a castle Draw and label diagrams Design and make a castle using 3D solids – both nets and junk modelling. Construct 3D nets, fixing accurately Simplify a complicated design Consider difficulties in construction and adapt design accordingly Self and peer evaluate finished product- is it fit for purpose?</p>			<p>Skills – Nutrition and Cookery</p> <p>Know that climate affects food growth in UK and worldwide How to prepare and cook a variety of healthy dishes safely and hygienically (know the basic rules of food contamination) How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking Select from and use a range of tools and equipment to perform practical tasks accurately Use, store and clean a knife safely Follow a recipe accurately Self-evaluate finished food item</p>			<p>Skills – Mechanism</p> <p>Design and create a toy with a pneumatic system, learning how trapped air can be used to create a product with moving parts while also building on their design knowledge. Record findings use annotated thumbnail sketches, drawings, exploded diagrams Make design decisions that consider visual appeal and properties of materials Make – measure, mark out, cut, shape, fix materials and components with some accuracy, adjust plan as needed Use design criteria to evaluate completed product. Identify the strengths and areas for development</p>		
<p>Final Outcome - To construct a Castle A fit-for-purpose castle structure made from 3D solids and junk materials and including a range of features</p>			<p>Final Outcome Food: designing, planning and creating a range of seasonal food items</p>			<p>Final Outcome Mechanical Systems – A pneumatic toy which fits the design brief</p>		
<p>Pupils should know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products:</p>								
<p>Look at range of historical castles including the remains of Bridgnorth Castle.</p>			<p>Home research of chefs from around the world</p>			<p>Look closely at a range of pneumatic inventions, including toys</p>		
<p>To identify features of a castle - I can identify different features of castles I can design my own castle I can label the features of my castle</p>	<p>To design a castle - I know the features of a castle I can add two design points to the Design Specification to appeal to the person/purpose of my castle I can draw the design of my castle using 2D shapes, labelling: the 3D shapes that will create the features, materials I need, colours I will use</p>	<p>To construct 3D nets - I know that a net is what a 3D shape would look like if it were opened out flat I can construct a range of 3D geometric shapes using a net by: cutting along the bold line, folding along the dotted lines, keeping the tabs the correct size, making crisp folded edges, constructing the net using glue to</p>	<p>To know that climate affects food growth - that not all fruits and vegetables can be grown in the UK - that each country has its own climate and that these climates enable different fruits and vegetables to grow. I can consider hygiene when preparing food. I can use cooking equipment, items and objects which are needed to</p>	<p>That for some foods to be in our supermarkets all year round, we have to import them from other countries. I know that imported food will have travelled from far away and has an impact on the environment I know that vegetables and fruit grow in certain seasons and that in the UK we often import food from other countries</p>	<p>Know what foods are currently in season Know the part of a plant that contains seeds, parts of plants that can be eaten by people as food (leaves, roots or stem). Vegetables do not contain any seeds.... Nutritional benefits of fruit and vegetables. Design a filo tart using seasonal vegetables. Create a set of instructions for</p>	<p>Investigate and explore different pneumatic systems. Understanding how pneumatic systems work I know that mechanisms are a system of parts that work together to create motion The movement an object makes when controlled by an input or output (e.g. left, right, up, down). There are four types of motion: reciprocating,</p>	<p>Using their understanding of pneumatics, children design their own pneumatics toys through thumbnail sketches and exploded diagrams. I can develop design criteria from a design brief I can generate suitable ideas using thumbnail sketches and exploded diagrams I know that there are three different types of pneumatic</p>	<p>Children create a working pneumatic system and casing for their toys I can create a pneumatic system to create a desired motion I can build secure housing for a pneumatic system I know that syringes and balloons can be used to create different types of pneumatic systems I know how to use these components to make a functional</p>

		make a geometric shape	complete a task safely.	when it is not in season. Bake a fruit crumble, using seasonal British fruits	making or preparing tart.... healthy and nutritious using seasonal vegetables	oscillating, rotary and linear....	systems that I can use to design my toy and I can use recycled household objects to make it	and appealing pneumatic toy
To construct my final product- I can construct my castle to meet the requirements of my brief. Create a castle base to secure my structures to- adorning my castle with facades and other decorative features	To evaluate my finished product I can evaluate my work and the work of others		Using the seasonal ingredients they specified in their 'Tart Design Brief' in Lesson 3, children make their seasonal tart, covering a rectangle of puff pastry with a tomato base and topping it with cheese, their choice of vegetables, olive oil and basil	Self-evaluate their recipe for their seasonal tart – was it helpful to follow? Were all of the stages listed? Consider the flavour – Would I change anything next time?		Testing, Finalising and Decorating final design. I can remember that materials are selected due to their functional and aesthetic characteristics I know how to manipulate materials to create different effects by cutting, creasing, folding, weaving, etc	Complete final design and evaluate... Is my pneumatic toy fit for purpose? Would I change anything next time?	