



As a Year 3 Designer I will know...

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Unit title Eating seasonally	To know that not all fruits and vegetables can be grown in the UK.	To know that climate affects food growth.	To know that vegetables and fruit grow in certain seasons.
FOCUS: Food and nutrition	To know that cooking instructions are known as a 'recipe'.	To know that imported food is food that has been brought into the country.	To know that exported food is food that has been sent to another country.
	To understand that imported foods travel from far away and this can negatively impact the environment.	To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.	To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.
	To know safety rules for using, storing and cleaning a knife safely.	To know that similar coloured fruits and vegetables often have similar nutritional benefits.	



Unit title Electronic charm FOCUS: Digital world	To understand that in programming a 'loop' is code that repeats something again and again until stopped.	To know that a Micro: bit is a pocket-sized, codeable computer writing program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm.	Writing a program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm.
	To know what the 'Digital Revolution' is and features of some of the products that have evolved as a result.	To know that in Design and technology the term 'smart' means a programmed product.	To know the difference between analogue and digital technologies.
	To understand what is meant by 'point of sale display.'	To know that CAD stands for Computer-aided design.	
Unit title Pneumatic toys FOCUS: Mechanisms	To understand how pneumatic systems work.	To understand that pneumatic systems can be used as part of a mechanism.	To know that pneumatic systems operate by drawing in, releasing and compressing air.
Unit title Constructing a castle	To understand that wide and flat based objects are more stable.	To understand the importance of strength and stiffness in structure.	To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat,



FOCUS: Structures			drawbridge and gatehouse - and their purpose.
	To know that a façade is the front of a structure.	To understand that a castle needed to be strong and stable to withstand enemy attack.	To know that a paper net is a flat 2D shape that can become a 3D shape once assembled.
	To know that a design specification is a list of success criteria for a product.		
Unit title Cushions (Cross-stitch and applique)	To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric.	To know that when two edges of fabric have been joined together it is called a seam.	To know that it is important to leave space on the fabric for the seam.
FOCUS: Textiles	To understand that some products are turned inside out after sewing so the stitching is hidden.		



As a Year 3 Designer I can...

Food and nutrition: Eating seasonally

- ✓ Creating a healthy and nutritious recipe for a savory tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.
- ✓ Knowing how to prepare themselves and a workspace to cook safely in, learning the basic rules to avoid food contamination.
- ✓ Following the instructions within a recipe.
- ✓ Establishing and using design criteria to help test and review dishes.
- ✓ Describing the benefits of seasonal fruits and vegetables and the impact on the environment.
- ✓ Suggesting points for improvement when making a seasonal tart.

Digital world: Electronic charm

- ✓ Problem solving by suggesting potential features on a Micro: bit and justifying my ideas.
- ✓ Developing design ideas for a technology pouch.
- ✓ Drawing and manipulating 2D shapes, using computer-aided design, to produce a point-of-sale badge.
- ✓ Using a template when cutting and assembling the pouch.
- ✓ Following a list of design requirements.
- ✓ Selecting and using the appropriate tools and equipment for cutting, joining, shaping and decorating a foam pouch.
- ✓ Applying functional features such as using foam to create soft buttons.
- ✓ Analysing and evaluating an existing product.
- ✓ Identifying the key features of a pouch.



As a Year 3 Designer I can...

Mechanisms: Pneumatic toys

- ✓ Designing a toy that uses a pneumatic system.
- ✓ Developing design criteria from a design brief.
- ✓ Generating ideas using thumbnail sketches and exploded diagrams.
- ✓ Learning that different types of drawings are used in design to explain ideas clearly.
- ✓ Creating a pneumatic system to create a desired motion.
- ✓ Building secure housing for a pneumatic system.
- ✓ Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.
- ✓ Selecting materials due to their functional and aesthetic characteristics.
- ✓ Manipulating materials to create different effects by cutting, creasing, folding and weaving.
- ✓ Using the views of others to improve designs.
- ✓ Testing and modifying the outcome, suggesting improvements.
- ✓ Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.

Textiles: Cushions (Cross-stitch and applique)

- ✓ Designing and making a template from an existing cushion and applying individual design criteria.
- ✓ Following design criteria to create a cushion.
- ✓ Selecting and cutting fabrics with ease using fabric scissors.
- ✓ Threading needles with greater independence.
- ✓ Tying knots with greater independence.
- ✓ Sewing cross stitch to join fabric.
- ✓ Decorating fabric using appliqué.
- ✓ Completing design ideas with stuffing and sewing the edges.
- ✓ Evaluating an end product and thinking of other ways in which to create similar items.