

LONG TERM PLAN – DT 2023-2024		Who was the bravest nurse? (Spr 1)	What was it like when the Queen came to the throne in 1953? (Sum 1)	OUR WONDERFUL WORLD: What are the wonders of our world? (Sum 2)
YEAR 1 AND 2		Structures Baby Bear's Chair (Kapow Y2)	Mechanisms Moving monsters (Kapow Y2)	Mechanisms Fairground wheel (Kapow Y2)
Progression of Knowledge		• To know that materials can be manipulated to improve strength and stiffness. • To know that a structure is something which has been formed or made from parts. • To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move. • To know that a 'strong' structure is one which does not break easily. • To know that a 'stiff' structure or material is one which does not bend easily.	• To know that mechanisms are a collection of moving parts that work together as a machine to produce movement. • To know that there is always an input and output in a mechanism. • To know that an input is the energy that is used to start something working. • To know that an output is the movement that happens as a result of the input. • To know that a lever is something that turns on a pivot.	• To know that different materials have different properties and are therefore suitable for different uses
Progression of Skills	Design	• Generating and communicating ideas using sketching and modelling.	• Creating a class design criteria for a moving monster. • Designing a moving monster for a specific audience in accordance with a design criteria.	• Selecting a suitable linkage system to produce the desired motion. • Designing a wheel.
	Make	• Making a structure according to design criteria. • Creating joints and structures from paper/card and tape. • Building a strong and stiff structure by folding paper.	• Making linkages using card for levers and split pins for pivots. • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used. • Cutting and assembling components neatly	• Selecting materials according to their characteristics. • Following a design brief.
	Evaluate	• Testing the strength of own structure. • Identifying the weakest part of a structure. • Evaluating the strength, stiffness and stability of own structure.	• Evaluating own designs against design criteria. • Using peer feedback to modify a final design.	• Evaluating different designs. • Testing and adapting a designs.

LONG TERM PLAN – DT 2023-2024		THE AMAZON: What is life like in the Amazon? (Aut 2)	OUR WORLD: Where on Earth are we? (Spr 2)	Were Norman castles really bouncy? (Sum 1)
YEAR 3 AND 4		Textiles: Cross-stitch and appliqué Egyptian collars or Cushions (Kapow Y3)	Cooking & Nutrition Eating Seasonally (Kapow Y3) Adapting a Recipe (Kapow Y4)	Structures Constructing a Castle (Kapow Y3)
Progression of Knowledge		•To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces. •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. •To understand that some products are turned inside out after sewing so the stitching is hidden.	•To know that climate affects food growth. • To know that vegetables and fruit grow in certain seasons. • To know that cooking instructions are known as a 'recipe'. • To know that imported food is food which has been brought into the country. • To know that exported food is food which 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.	• To understand that wide and flat based objects are more stable. • To understand the importance of strength and stiffness in structures • To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, 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.
Progression of Skills	Design	• Designing and making a template from an existing cushion and applying individual design criteria.	• Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.	• Designing a castle with key features to appeal to a specific person/purpose. • Drawing and labelling a castle design using 2D shapes, labelling: -the 3D shapes that will create the features - materials needed and colours. • Designing and/or decorating a castle tower on CAD software.
	Make	• Following design criteria to create a cushion or Egyptian collar. • Selecting and cutting fabrics with ease using fabric scissors. • Threading needles and Tying knots with greater independence. • Sewing cross stitch to join fabric. • Decorating fabric using appliqué. • Completing design ideas with stuffing and sewing the edges (Cushions) or embellishing the collars based on design ideas (Egyptian collars).	• Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination. • Following the instructions within a recipe.	• Constructing a range of 3D geometric shapes using nets. • Creating special features for individual designs. • Making facades from a range of recycled materials.
	Evaluate	• Evaluating an end product and thinking of other ways in which to create similar items	• 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.	• Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design. • Suggesting points for modification of the individual designs.

LONG TERM PLAN – DT 2023-2024		THE AMERICAS: Can you come on a Great American Road Trip?	CHANGES IN OUR LOCAL ENVIRONMENT: How is the UK changing? (Pendle Witches)	PROTECTING THE ENVIRONMENT: Are we damaging our world?
YEAR 5 AND 6		Electrical Systems Electronic Greeting card (Kapow Y5)	Structures Bridges (Kapow Y5)	Textiles Stuffed Toys with recyclable materials (Kapow Y5) Cooking and Nutrition What could be healthier? (Kapow Y5) Come dine with me (Kapow Y6)
Progression of Knowledge		- To know that batteries contain acid, which can be dangerous if they leak. - To know the names of the components in a basic series circuit, including a buzzer.	- To understand some different ways to reinforce structures. - To understand how triangles can be used to reinforce bridges. - To know that properties are words that describe the form and function of materials. - To understand why material selection is important based on properties. - To understand the material (functional and aesthetic) properties of wood.	- To know that 'flavour' is how a food or drink tastes. - To know that many countries have 'national dishes' which are recipes associated with that country. - To know that 'processed food' means food that has been put through multiple changes in a factory. - To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. - To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork)
Progression of Skills	Design	- Designing a card - identifying and naming the components required. - Drawing a design from three different perspectives. - Generating ideas through sketching and discussion. - Modelling ideas through prototypes.	- Designing a stable structure that is able to support weight. - Creating a frame structure with a focus on triangulation.	- Writing a recipe, explaining the key steps, method and ingredients. - Including facts and drawings from research undertaken.
	Make	- Constructing a suitable card. - Accurately cutting, folding and assembling. - Decorating the card to a high-quality finish. - Making and testing a circuit. - Incorporating a circuit into a card.	- Making a range of different shaped beam bridges. - Using triangles to create truss bridges that span a given distance and support a load. - Building a wooden bridge structure. - Independently measuring and marking wood accurately. - Selecting appropriate tools and equipment for particular tasks. - Using the correct techniques to saws safely. - Identifying where a structure needs reinforcement and using card corners for support. - Explaining why selecting appropriating materials is an important part of the design process. - Understanding basic wood functional properties.	- Following a recipe, including using the correct quantities of each ingredient. - Adapting a recipe based on research. - Working to a given timescale. - Working safely and hygienically with independence.
	Evaluate	Testing own and others finished cards identifying what went well and making suggestions for improvement.	- Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary. - Suggesting points for improvements for own bridges and those designed by others.	- Evaluating a recipe, considering: taste, smell, texture and origin of the food group. - Taste testing and scoring final products. - Suggesting and writing up points of improvements when scoring others' dishes, and when evaluating their own throughout the planning, preparation and cooking process. - Evaluating health and safety in production to minimise cross contamination.