Thurlstone Primary School - DT Long Term Overview

Year	Autumn 1	Spring 1	Summer 1
FS2	Structures: Junk Modelling In this unit, pupils explore and learn about various types of permanent and temporary join. They are encouraged to tinker using a combination of materials and joining techniques in the junk modelling area.	Seasonal Projects: A series of seasonal projects to choose from to deliver across the year – covering Autumn, Christmas, Easter, Spring and Summer.	Cooking and Nutrition: In this unit, children explore the differences between fruits and vegetables using their senses (taste, texture, smell etc.). They listen to the story 'The best pumpkin soup' and discuss the key ingredients the characters used before developing a class-based vegetable soup recipe.
1	**Textiles: Puppets** Explore methods of joining fabric. Design and make a character-based hand puppet using a preferred joining technique, before decorating.	**Cooking and nutrition: Fruit and vegetables** Learn to distinguish between fruit and vegetables and where they grow. Design a fruit and vegetable smoothie and accompanying packaging.	**Mechanisms: Wheels and axles** Learn about the key parts of a wheeled vehicle, to develop an understanding of how wheels, axles and axle holders work. Design and make a moving vehicle.
2	**Structures: Baby Bear's chair** Explore stability and methods to strengthen structures, to understand Baby Bear's chair weaknesses and develop an improved solution for him to use.	**Mechanisms: Making a Moving Monster** Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving monster. Example theme: Moving monster. Alternative theme: Easter – Mechanical animals	**Food: A balanced diet** Learn about the food groups (carbohydrates, proteins, fruits and vegetables, dairy, oils and spreads) to understand a balanced diet to develop a healthy wrap.
3	**Food: Eating Seasonally** Learn about various fruits and vegetables, and when, where and why they are grown in different seasons. Discover the relationship between colour and health benefits.	**Textiles: Cross stitch and applique** Learn and apply two new sewing techniques – cross-stitch and appliqué. Utilise these new skills to design and make a cushion	**Electrical Systems: Electric poster** Our new electric poster unit introduces children to various forms of 'Information design' before they are briefed to develop an electric museum display based on the Romans.
4	**Electrical Systems: Torches** Identify the difference between electrical and electronic products. Evaluate a range of existing torches and their features, then develop a new functional torch design.	**Food: Adapting a recipe** Work in groups to adapt an existing biscuit recipe, whilst taking into account the cost of the ingredients and other expenses against a set budget.	**Structures: Pavilions** Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, decorated pavilion.
5	**Electrical Systems: Doodlers** Our Doodlers unit explores series circuits further and introduces motors. Explore how the design cycle can be approached at a different starting point, by investigating an existing product, which uses a motor, to encourage pupils to problem-solve and work out how the product has been constructed, ready to develop their own.	**Food: What could be healthier?** Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe.	**Mechanical Systems: Making a pop-up book** Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms.
6	**Structure: Playgrounds** Research existing playground equipment and their different forms, before designing and developing a range of apparatus to meet a list of specified design criteria.	**Food: Come dine with me** Develop a three-course menu focused on three key ingredients, as part of a paired challenge to develop the best class recipes. Explore each key ingredient's farm to fork process.	**Textiles: Waistcoats** Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, children design, assemble and decorate a waistcoat for a chosen purpose.