

Curriculum overview

Design and Technology

Charlestown
2022-23

| | Autumn Food and Nutrition | Spring Mechanisms | Summer Structures |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nursery | Healthy Me! <i>Children will discuss and experience healthy snacks. Learning to wash and clean items for health and safety.</i> | Sticky tape & Scissors! <i>Children will investigate how to join things together with glue or tape by using boxes of different sizes to change the box into 'something'.</i> | Models <i>Children will manipulate and play with different materials making simple models developing the skills to help them build for a purpose with a range of construction equipment.</i> |
| Reception | Harvest <i>Children will investigate how to harvest food from the ground. Learning about the need for a varied diet by making a healthy soup, using different cutlery.</i> | 3D Modelling <i>Children select tools and techniques needed to shape, assemble and join materials such as rolled up paper and pipe cleaners.</i> | Collaborative Modelling <i>Children will work in a group to create a 3D model, using materials such as paper to add extra detail whilst developing skills to discuss and evaluate choices made.</i> |
| Year One | Fruit Salad <i>Children will investigate a range of fruits before using appropriate tools to make a fruit salad which they have designed.</i> | Puppets <i>Children will design and sew their own finger puppet which will be used to tell a story.</i> | We are Architects <i>Children will investigate the most appropriate materials for making a secure model of a house.</i> |
| Year Two | Pizzas <i>Children will use the basic principles of a healthy and varied diet to design and make a new pizza.</i> | Vehicles <i>Children will design, build and evaluate a moving vehicle for a race across the playground.</i> | Windmills <i>Children will design, build and evaluate a model windmill with moving blades.</i> |

| | Autumn Food and Nutrition | Spring Mechanisms | Summer Structures |
|------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Year Three | Biscuits <i>Children will research and develop a design criteria to bake their own healthy biscuit.</i> | Robots <i>Children will their understanding of computing to program, monitor and control a robot.</i> | Pencil Cases <i>Children will design, sew and evaluate the use of a functional pencil case.</i> |
| Year Four | Bread <i>Children will be designing and making bread with at least one added ingredient for the Great Bread Bake Off.</i> | Lights! <i>Children will use electrical systems to build a decorative light box.</i> | <i>Children will evaluate existing products to help them design and make a storybook with moving parts for a younger child</i> |
| Year Five | Bolognaise <i>Children will use a range of cooking techniques to create a seasonally appropriate bolognaise recipe.</i> | Carousels <i>Children will create a circuit and pulley system to build a working model of a carousel.</i> | Cushions <i>Children will evaluate existing products to help them design, sew and evaluate a cushion that is functional and aesthetic.</i> |
| Year Six | 3-courses with 3-ingredients. <i>Children will design and develop a functional and appealing three course meal.</i> | Moving Toys <i>Children will build a moving toy with a cams mechanism.</i> | Playground Design <i>Children will use computed aided design to create a new design for the playground.</i> |