

Design and Technology Overview

Year	Autumn	Spring	Summer
Nursery	Autumn 1 – My environment and me Make spins in paper using a two-handled scissor grip. Use glue to join pieces. Use blocks to build houses and buildings. Autumn 2 – Seasons and celebrations Use a range of tools, rolling pin, cutters, extruders, scissors, hole punch, tape dispenser independently. Explore the texture of natural Autumn materials.	Spring 1 – Once Upon a Time Build a representation of a home using a mixture of materials. Make and taste porridge. Build bridges strong enough to hold the Billy Goats Gruff. Explore pop up books. Spring 2 – Heroes Use a range of tools, rolling pin, cutters, extruders, scissors, hole punch, tape dispenser independently and with accuracy. Use a variety of different materials to create a variety of different transport such as a boat, plane, helicopter. Explain what healthy and unhealthy means.	Summer 1 – Growth and Change Use a range of materials to join, glue, string, cotton, tape. Make own designs from junk modelling materials. Know that some food is grown from plants and trees – vegetable / fruit. Make chocolate nests. Summer 2 – Near and Far Create animal habitats using a range of different materials and textures and explain their choices.
Reception	Autumn 1- My Environment and Me Begin to talk about the effect of exercise and food on their health. Use a range of tools to prepare and make a fruit kebab using British fruit, e.g. strawberries, apples and pears. Use construction materials to build a structure of my home. Construct a building from our community and label their model – place of work, school, hospital. Autumn 2- Seasons and Celebrations	Spring 1 – Once Upon a Time Make and taste gingerbread men. Design and build a boat, bridge, etc. to carry the Gingerbread Man across the river. Design and make a new chair for Baby Bear. Explore pop-up and moving picture books. Spring 2 – Heroes Brush own teeth and talk about the importance of good oral health. Make a person with moving parts using split pins for joints.	Summer 1 – Growth and Change Use heat to melt chocolate to make Easter nests. Look at the effects of cooking and melting. Summer 2 – Near and Far Understand where food comes from and experience growing their own vegetables, harvesting, preparing and eating.

	Explore the texture of natural autumn materials and use them to make pictures and models	Verbally evaluate their work and explain what is good and one thing that could make it better. Make superhero models.	
1	Structures <i>Freestanding Stable Structures</i> Design, make and evaluate a cage (product) For Nibbles (user) to stop him from eating our books (purpose).	Mechanisms <i>Sliders or Levers</i> Design, make and evaluate a picture (product) for the children in reception (user) to show them what we have been learning (purpose).	Food (Community Project) <i>Preparing Fruits and Vegetables</i> Design, make and evaluate a fruit smoothie (product) for parents (user) attending the stay and taste session at school (purpose)
2	Textiles (Community project) <i>Templates and Joining</i> Design, make and evaluate a blanket (product) for babies at the hospital (user) to keep them warm (purpose).	Mechanisms <i>Wheels and Axles</i> Design, make and evaluate a push/pull toy (product) for Year 1 (user) to play with at Golden time (purpose).	Food <i>Preparing Fruits and Vegetables</i> Design, make and evaluate a vegetable soup (product) for the giant (user) to enjoy for his dinner (purpose).
3	Mechanisms (Community Project) <i>Levers and linkages</i> Design, make and evaluate a seasonal greetings card (product) for residents of Coopers Croft (Dementia care home) (user) to celebrate Christmas (purpose).	Food <i>Healthy and varied diet</i> Design, make and evaluate a healthy Eid celebration meal (product) for themselves and family (user) to enjoy at Eid (purpose).	Structures <i>Shell Structure</i> Design, make and evaluate a keep safe box (product) for themselves (users) to transport and protect biscuits (purpose)
4	Mechanisms <i>Pneumatics</i> Design, make and evaluate a magic trick using Pneumatics (product) for Leon (user) to create his own magic show (purpose).	Textiles (Community Project) Involve parents <i>2D shapes to 3D shapes</i> Design, make and evaluate characters from traditional tales (product) for a local toddler's group (users) to use in role play to develop communication skills (purpose).	Electrical Systems <i>Simple circuits and switches</i> Design, make and evaluate a torch (product) for the Y4 children (user) to use in the caves and caverns (purpose).
5	Structures <i>Frame Structures</i>	Food <i>Celebrating culture and seasonality</i>	Textiles (Community Project) Involve parents <i>Combining different fabric shapes</i>

	Design, make and evaluate a bus shelter (product) for the local community (user) to rest in whilst waiting for a bus (purpose).	Design, make and evaluate a seasonal salad from a chosen country (product) for ourselves (user) to have for lunch (purpose).	Design, make and evaluate a decorative cushion cover (product) for residents of Coopers Croft (Dementia care home) (users) to improve residents' comfort and happiness (purpose).
6	Mechanisms <i>Pulleys or Gears</i> Design, make and evaluate a controllable pulley toy (product) for Year 5 (user) to learn about forces and simple machines (purpose).	Electrical Systems <i>Monitoring and control</i> Design, make and evaluate an automatic night light (product) for our younger siblings (user) to make them feel safe at night (purpose).	Food (Community Project) <i>Celebrating culture and seasonality</i> Design, make and evaluate biscuits (product) to sell to community members at the Summer Fayre (user) to raise money for charity (purpose).