

# Progression in DT

Children will develop their small motor skills so that they can use a range of tools competently, safely and confidently. They will explore the creative table and various construction toys like lego, duplo, wooden blocks. Den building materials and guttering and stands are available as well as construction kits such as giant macanor. They will use junk modelling to make a chair for baby bear, a pirate themed item and follow instructions to make reindeer cookies and healthy Santa snacks.

Key Stage 1

**Yr1 Cooking and Nutrition:**  
Children will learn food preparation skills with emphasis on taste testing and ingredient choices before designing smoothies.

**Yr1 Structures:**  
Design and construct a windmill for a mouse to live

**Yr1 Textiles:**  
Explore methods of joining fabric. Design and make a character-based hand puppet using a preferred joining technique, before decorating.



**Yr2 Structures**  
Explore stability and methods to strengthen structures (chairs), to understand furniture weaknesses and develop an improved design.



Year R

The Journey Starts

Year 1



Year 2

**Yr2 Mechanisms:**

Design and create a functional Ferris wheel, learn how different components fit together so that the wheel rotates and the structure stands freely.



**Yr2 Structures:**

Identify and learn about the key features of a castle, before designing and making a recycled-material castle.



Year 3

**Yr3 Mechanisms:**

Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving creature.



**Yr3 Digital world:**

Design wearable technology and write a program that initiates a flashing LED panel, or another pattern, on the virtual micro:bit when a button is pressed.

**Yr3 Cooking and Nutrition:**

Children will learn about seasonal foods and create a seasonal food tart. They will learn how to prepare the vegetables safely themselves.



Key Stage 2

**Yr4 Electrical systems:**

Identify the difference between electrical and electronic products. Evaluate a range of existing torches and their features, then develop a new functional torch design.



Year 4

**Yr5 Electrical systems:**

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.



**Yr5 Structures:**

Explore material properties and sources, before marking, sawing and assembling a wooden truss bridge.



**Yr5 Mechanisms:**

Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms.

**Yr6 Structures:**

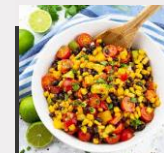
Research existing playground equipment and their different forms, before designing and developing a range of apparatus.



**Yr6 Textiles:** Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, children design, assemble and decorate a waistcoat.

**Yr6 Cooking and Nutrition:**

Design, make and evaluate a Mexican chilli for a fiesta.



Year 6

Year 5

**Yr4 Structures:**

Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, longhouse.



**Yr4 Mechanisms:**

Using a range of materials, design and make a car with a working slingshot mechanism and house the mechanism using a range of nets.

