Design Technology Learning Journey

EYFS

Nursery

In Nursery, you will learn what materials can be used or twisted for a particular purpose. You will use media, such as playdough, sand, clay and construction, to explore stretching, pulling, twisting and squeezing. You will also begin to use a variety of tools, such as paint and brushes, as well as making simple representations of animals and people.

Reception

You will learn that materials, such as clay and playdough, can be manipulated. You will practically explore which materials to use when joining, using different techniques. You will use a variety of tools of different shapes and sizes, including sponges, fingers, twigs and brushes. Once you have designed a product, you will look at and talk about what you have produced, describing the techniques and the media you have used.

Design Technology Learning Journey

Key Stage 1

Moving vehicles

You will design and make a moving vehicle using wheels and axles, as a gift for children in Reception. To create your product, you will need to select appropriate materials. You will learn how a wheel and axle works and how to attach them using simple joining techniques.

Fruit salad

In the summer term, you will make your own fruit salad using seasonal ingredients, which you will enjoy with your parents and carers. You will understand the term healthy, and you will sort common foods into simple food groups. Throughout this unit, you will learn to use simple food preparation techniques, such as chopping, mixing, combining and measuring when making your fruit salad.

Year 1

Design Technology Learning Journey

Key Stage 1

Moving pictures

Through exploring levers, sliders and dials, you will design and create moving pictures to use in school. You will consider which materials to use, and which tools are most appropriate for the task. You will evaluate your product's success and suggest ways to improve.

Puppets

In this unit, you will create a puppet for other children to enjoy in school. You will use sewing needles safely to create a running stitch, joining two pieces of material together. You will consider which materials are appropriate for purpose.

Windmill

You will explore stability and strength in design technology by creating a windmill, which will be used as an outdoor ornament. You will learn how a product can be made stronger, stiffer and more stable dependent on the materials used.

Year 2

Design Technology Learning Journey

Key Stage 2

Levers and pulleys

You will use K'nex to explore prototypes of different construction models. You will explore how to include levers and pulleys in your design, and how they make objects move. You will evaluate your design by identifying ways to strengthen and reinforce your structure.

Pizza

In this unit, you will develop your knowledge from KS1 by applying the principles of a healthy and balanced diet to a savoury dish. You will prepare and cook a pizza using techniques such as chopping, grating, slicing and kneading. You will explore a range of ingredients, including those grown and reared in the UK.

Year 3

Design Technology Learning Journey

Key Stage 2

Bookmarks

In this unit, you will further develop your textiles skills from KS1, as you will design and create a bookmark to use in school or at home. You will create patterns and designs using the cross stitch sewing technique.

Multistorey board game

In the spring term, you will design a multistorey board game, with multiple tiers, for other children to enjoy. You will learn how to strengthen, stiffen and stabilise your product to ensure it is long-lasting.

Electricity board game: *Beat the buzz*

You will apply your scientific knowledge to design and create an electrical toy that can be played in school. You will use known electrical items to enhance your game and achieve your design brief.

Year 4

Design Technology Learning Journey

Key Stage 2

Seasonal soup

You will build on your prior knowledge to prepare and cook a soup dish, using a wide range of ingredients. You will develop quantities of ingredients using standardised measurements for capacity and mass. You will explore how to safely prepare and cook food to avoid cross contamination.

Gears

Using K'nex, you will create prototypes of everyday products that we use in our homes and lives. You will explore how gears are used in construction and you will carefully consider how to strengthen and reinforce these structures.

Birdhouse

You will build a birdhouse made from wood, which will be placed on the school playground for the wildlife to enjoy. You will learn how to use tools, such as saws, drills and clamps to construct your product. You will also consider how to strengthen and finish your product, so that it is attractive and fit for purpose.

Year 5

Design Technology Learning Journey

Key Stage 2

Robotics

In this unit, you will be creating your own robotic device using a set design brief. You will create algorithms to program, monitor and control your device. Throughout the unit, you will explore other programmable robotic devices, and identify how they are created and used.

Memory cushion

In the summer term, you will design and create a memory cushion, to celebrate your time in primary school. You will use sewing needles to create both zigzag and ladder stitches. You will also select a suitable filling to enhance your textile product.

Year 6