



# Upper Nidderdale Primary Federation

## Design and Technology (inc RHSE unit on Healthy Eating)

Intent, Implementation and Impact

Long Term Plans & Progression

EYFS, KS1 and KS - Updated September 2023



# Design Technology

## Implementation

Teachers are provided with an additional three planning days per year on top of their PPA, to plan their curriculum. As part of the planning process, teachers need to plan the following:

- A knowledge organiser which outlines knowledge (including vocabulary) all children must master;
- A cycle of lessons for each subject, which carefully plans for progression and depth;
- A low stakes quiz which is tested regularly to support learners' ability to block learning and increase space in the working memory;
- Challenge questions for pupils to apply their learning in a philosophical/open manner;
- Trips and visiting experts who will enhance the learning experience;
- A means to display and celebrate the pupils' DT work in their class.
- Teaching in DT will incorporate the RHSE 'Healthy Eating' unit.

## A Spiral Curriculum

Our Design and Technology curriculum is organised into units of four lessons.

Within each unit, lessons must be taught in order as they build upon each other.

The curriculum is designed as a spiral curriculum with the following key principles in mind:

- **Cyclical**: Pupils return to key areas again and again during their time in primary school.
- **Increasing depth**: Each time a key area is revisited it is covered with greater complexity.
- **Prior Knowledge**: Upon returning to each key area, prior knowledge is utilised so pupils can build upon previous foundations, rather than starting again.

# Design Technology - Key Areas

## Cooking and Nutrition

- Where food comes from
- Balanced diet
- Preparation and cooking skills
- Kitchen hygiene and safety
- Following recipes

## Mechanisms/Mechanical Systems

- Mimic natural movements using mechanisms, such as cams, followers, levers and slides.

## Structures

- Material functional and aesthetic properties.
- Strength and stability
- Stiffen and reinforce structures.

## Textiles

- Fastening, sewing, decorative and functional fabric techniques
- Cross stitch, blanket stitch and applique

## Electrical Systems

- Operational series circuits, circuit components
- Circuit diagrams and symbols, combined to create various electrical products.

## Digital World

- Program products to monitor and control, develop designs and virtual models using 2D and 3D CAD software.

**Healthy  
Eating  
RHSE Statutory Guidance**

**Know what constitutes a healthy diet (including understanding calories and other nutritional content).**

**Know the principles of planning and preparing a range of healthy meals.**

**Know the characteristics of a poor diet and risks associated with unhealthy eating (including, for example, obesity and tooth decay) and other behaviours (e.g. the impact of alcohol on diet or health).**

# KS 1 Design and Technology - Long Term Overview

	AUTUMN TERM	SPRING TERM	SUMMER TERM
2023-2024	<p><b><u>FOOD:</u></b> A Balanced Diet RSHE - Healthy Eating Link</p> <p><b><u>MECHANISMS:</u></b> Making a Moving Monster (4 lessons)</p>	<p><b><u>STRUCTURES:</u></b> Baby Bear's Chair (4 lessons)</p> <p><b><u>TEXTILES:</u></b> Pouches (4 lessons)</p>	<p><b><u>MECHANISMS:</u></b> Fairground Wheel (4 lessons)</p>
2024-2025	<p><b><u>FOOD:</u></b> Fruit and Vegetables (4 Lessons) RSHE - Healthy Eating Link</p> <p><b><u>MECHANISMS:</u></b> Making a Moving Story Book (4 lessons)</p>	<p><b><u>STRUCTURES:</u></b> Constructing a Windmill (4 lessons)</p> <p><b><u>TEXTILES:</u></b> Puppets (4 lessons)</p>	<p><b><u>MECHANISMS:</u></b> Axles and Wheels (4 lessons)</p>

## Lower Key Stage 2 Design and Technology - Long Term Overview

	AUTUMN TERM	SPRING TERM	SUMMER TERM
<b>2023- 2024</b>	<p><b><u>MECHANICAL SYSTEMS:</u></b> Making a Slingshot Car (4 Lessons)</p> <p><b><u>DIGITAL WORLD:</u></b> Mindful Moments Timer (4 lessons)</p>	<p><b><u>FOOD:</u></b> Adapting a Recipe (4 lessons) RSHE - Healthy Eating Link</p> <p><b><u>STRUCTURES:</u></b> Pavilions (4 lessons)</p>	<p><b><u>TEXTILES:</u></b> Fastenings (4 lessons)</p> <p><b><u>ELECTRONIC SYSTEMS:</u></b> Torches (4 lessons)</p>
<b>2024 - 2025</b>	<p><b><u>MECHANICAL SYSTEMS:</u></b> Pneumatic Toys (4 Lessons)</p> <p><b><u>DIGITAL WORLD:</u></b> Electronic Charm (4 lessons)</p>	<p><b><u>FOOD:</u></b> Eating Seasonally (4 lessons) RSHE - Healthy Eating Link</p> <p><b><u>STRUCTURES:</u></b> Constructing a Castle (4 lessons)</p>	<p><b><u>TEXTILES:</u></b> Cushions (4 lessons)</p> <p><b><u>ELECTRONIC SYSTEMS:</u></b> Electric Poster (4 lessons)</p>

## Upper Key Stage 2 Design and Technology - Long Term Overview

	AUTUMN TERM	SPRING TERM	SUMMER TERM
2023- 2024	<p><b><u>TEXTILES:</u></b> Waistcoats (4 Lessons)</p> <p><b><u>ELECTRICAL SYSTEMS:</u></b> Steady Hand Game (4 lessons)</p>	<p><b><u>STRUCTURES:</u></b> Playgrounds (4 lessons)</p> <p><b><u>DIGITAL WORLD:</u></b> Navigating the World (5 lessons)</p>	<p><b><u>FOOD:</u></b> Come Dine With Me (4 lessons) RSHE - Healthy Eating Link</p> <p><b><u>ELECTRONIC SYSTEMS:</u></b> Automata Toys (4 lessons)</p>
2024 - 2025	<p><b><u>TEXTILES:</u></b> Stuffed Toys (4 Lessons)</p> <p><b><u>ELECTRONIC SYSTEMS:</u></b> Doodlers (4 lessons)</p>	<p><b><u>STRUCTURES:</u></b> Bridges (4 lessons)</p> <p><b><u>DIGITAL WORLD:</u></b> Monitoring Devices (4 lessons)</p>	<p><b><u>FOOD:</u></b> What Could Be Healthier? (4 lessons) RSHE - Healthy Eating Link</p> <p><b><u>MECHANICAL SYSTEMS:</u></b> Making a Pop Up Book (4 lessons)</p>