# United Curriculum

## Primary D&T and Food

United Curriculum
Primary
Part of United Learning

# United Curriculum Principles

**Building on the Framework for Excellence, The United Learning Primary Curriculum has six core principles:**

- **Entitlement**
  All pupils have the right to learn what is in the United Learning curriculum, and schools have a duty to ensure that all pupils are taught the whole of it
- **Coherence**
  Taking the National Curriculum as its starting point, our curriculum is carefully sequenced so that powerful knowledge builds term by term and year by year. We make meaningful connections within subjects and between subjects
- **Mastery**
  We ensure that foundational knowledge, skills and concepts are secure before moving on. Pupils revisit prior learning and apply their understanding in new contexts
- **Adaptability**
  The core content – the 'what' – of the curriculum is stable, but schools will bring it to life in their own local context, and teachers will adapt lessons – the 'how' – to meet the needs of their own classes
- **Representation**
  All pupils see themselves in our curriculum, and our curriculum takes all pupils beyond their immediate experience
- **Education with Character**
  Our curriculum - which includes the taught subject timetable as well as spiritual, moral, social and cultural development, our co-curricular provision and the ethos and 'hidden curriculum' of the school – is intended to spark curiosity and to nourish both the head and the heart

**Subject-specific rationales are built on these six principles.**

# United Curriculum: D&T and Food

| | N3-4 | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|---|---|---|---|---|---|---|---|
| Autumn | Coming soon! | | **Food**<br>**Eat a Rainbow**<br>[Aut2]<br>Preparing a colourful fruit salad and crudites. | **Food**<br>**Salads**<br>[Aut2]<br>Preparing healthy, balanced salads that include proteins. | **Picture Frames**<br>[Aut1]<br>Picture frames that would be made and sold in a commercial context. | **Food**<br>**Soups**<br>[Aut2]<br>Cooking vegetables and grains and combining into healthy soups. | **Interactive Display**<br>[Aut2]<br>Interactive information display for a context decided by pupils. | **Head Coverings**<br>[Aut1]<br>Made to measure hats and head coverings for a context decided by pupils. |
| Spring | | | **Moving Pictures**<br>Using simple linkages (levers) to make a moving picture for someone at home. | **Wheels & Axles**<br>[Spr2]<br>An engineering project to design a buggy that rolls straight and smoothly. | **Keeping it Contained**<br>A solution for users who struggle to keep possessions safe in their bag. | **Pulleys**<br>Using pulleys and levers to create a video that shares a message. | **Food**<br>**Sauces**<br>[Spr2]<br>Building foundational cooking skills with a range of staple sauces. | **Sustainable Systems**<br>[Spr1]<br>Identifying a need and designing a sustainable solution at a system level. |
| Summer | | | **Outdoor Space**<br>Designing an outdoor space and creating a 3D model to share the design. | **Glove Puppets**<br>Creating props to tell a story to children in EYFS. | **Food**<br>**Sandwiches and Packed Lunches**<br>[Sum1]<br>Making sandwiches with a balance of proteins fats & carbohydrates. | **Mood Lighting**<br>[Sum2]<br>Using nets and circuits to programme lighting. | **Flat Pack**<br>Designing a flat pack toy or model that can be sold for construction by users. | **Food**<br>**Savoury Snacks**<br>[Sum1]<br>Cooking and baking filled pastries and other balanced picnic snacks. |

# United Curriculum Principles: D&T

## The United Curriculum for Design & Technology provides all children, regardless of their background, with:

**Substantive knowledge**:

- Ensuring pupils **master** core content through the development of **conceptual knowledge** of structures, mechanisms, materials and programming in small steps, and the timely revisiting of this key knowledge.
- Ensuring that pupils are explicitly taught and have time to master **procedural knowledge**, including craftsmanship of cutting, shaping, joining and finishing as well as engineering in focused practical tasks.
- Making explicit and deliberate links to other curriculum subjects – particularly science – to ensure that pupils use and apply scientific concepts in a Design & Technology setting at the appropriate time. Pupils also draw on and further develop knowledge and skills first taught in Mathematics, History, Computing and Art & Design, due to the multi-disciplinary nature of Design & Technology.

**Disciplinary knowledge:**

- Reinforcing the **iterative design process** in the heart of every unit and allowing pupils to build their understanding and ability to apply design values gradually from EYFS to Key Stage 2 and beyond.
- Ensuring that pupils know **they are designers and engineers**, who design a solution to fit a specific user and need; they are not led by outcomes. Pupils should be encouraged to design products using all of the knowledge they have developed across the curriculum.
- **Explicitly teaching** ways of designing, ways of generating ideas and ways of identifying user needs, to give pupils the tools they need to thrive as designers of the future.

**Curiosity and excitement about the possibilities offered by Design & Technology:**

- Ensuring that all pupils **can see themselves reflected** in the Design & Technology curriculum, by exploring the contributions made by a wide range of designers, past and present.
- Opportunities to **develop character** by understanding the difficulties faced by those designers and seeing how characteristics such as resilience and risk taking contributed towards success.
- Understanding the contribution that design and technology makes to creativity, culture, wealth and the well-being of a nation and that **more opportunities exist** than ever before due to technological advances.

# United Curriculum Principles: Food

## The United Curriculum for Food provides all children, regardless of their background, with:

**Substantive knowledge**:

- Ensuring pupils **master** core content through the development of **conceptual knowledge** of food sources, safety, hygiene and nutrition in small steps, and the timely revisiting of this key knowledge.
- Ensuring that pupils are explicitly taught and have time to master **procedural knowledge**, including cooking skills of chopping, preparing, combining and heating in focused practical tasks.
- Making explicit and deliberate links to other curriculum subjects – particularly science – to ensure that pupils use and apply scientific concepts, such as nutrition and food chains, in a Food setting at the appropriate time.

**Disciplinary knowledge:**

- Ensuring that pupils are taught how to make **food choices** based on qualities like nutritional value; dietary requirements; cost; seasonality; food miles and carbon footprint of production; time to prepare; and quantities. These qualities are introduced in small steps but applied cumulatively so that by Year 6, pupils are able to make decisions based on a selection of them.

**The ability, and desire, to cook balanced, sustainable meals for themselves and their family:**

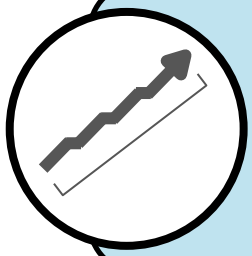
- Ensuring that the recipes and foods chosen reflect relevant cuisines from the local context, the UK and around the world.
- Providing recipes that are balanced and sustainable, which can be cooked after school in a family context.

# Alignment to the National Curriculum

**The below tables outlines where the statutory content from the National Curriculum is first taught across KS1 or KS2.**

| In KS1, pupils should be taught: | | |
|---|---|---|
| Design | Design purposeful, functional, and appealing products for themselves and other users based on design criteria. | Covered throughout D&T units. |
| | Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. | |
| Make | Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. | |
| | Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. | |
| Evaluate | Explore and evaluate a range of existing products. | |
| | Evaluate their ideas and products against design criteria | |
| Technical Knowledge | Build structures, exploring how they can be made stronger, stiffer and more stable | Y1 Sum, Y2 Spr (structures) |
| | Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. | Y1 Spr (levers/sliders), Y2 Spr (wheels/axles) |
| Cooking & Nutrition | Use the basic principles of a healthy and varied diet to prepare dishes. | Y1 Aut, Y2 Aut |
| | Understand where food comes from. | |
| **In KS2, pupils should be taught:** | | |
| Design | Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. | Covered throughout D&T units. |
| | Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. | |
| Make | Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. | |
| | Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. | |
| Evaluate | Investigate and analyse a range of existing products. | |
| | Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. | |
| | Understand how key events and individuals in design and technology have helped shape the world. | |
| Technical Knowledge | Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. | Y3 Aut, Y4 Spr, Y4 Sum, Y5 Sum |
| | Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. | Y4 Spr, Y5 Aut |
| | Understand and use electrical systems in their products [e.g., series circuits incorporating switches, bulbs, buzzers and motors]. | Y4 Sum, Y5 Aut |
| | Apply their understanding of computing to program, monitor and control their products. | Y4 Sum, Y5 Aut |
| Cooking & Nutrition | Understand and apply the principles of a healthy and varied diet. | Y3 Sum, Y4 Aut, Y5 Spr, Y6 Sum |
| | Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. | |
| | Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. | |

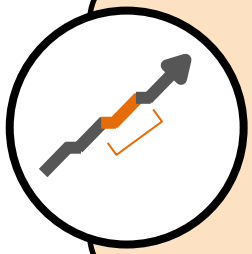
# Using the United Curriculum for D&T



### Within the Subject

The United Curriculum for Design & Technology has been very carefully sequenced to ensure coverage and appropriate progression through substantive (conceptual and procedural) and disciplinary knowledge, and ensuring that pupils create a balanced range of outcomes and are exposed to a broad range of designers.

**Implement the longer-term subject plan; avoid swapping units or 'pick and mixing' with other schemes.**



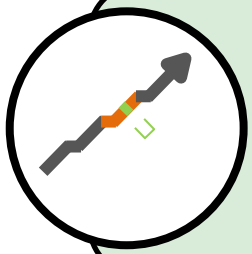
### Within the Unit

Each unit clearly sets out the knowledge that should be taught and reviewed in the sequence of lessons. Suggested designers for each unit are provided, but these could be supplemented and replaced with those from your own local context where appropriate.

Each unit is planned to cover six 1-hour lessons; this allows time before and after the unit for you to fill gaps or address misconceptions as required. A sequence of four 1-hour lessons is also provided for each unit; this allows you to teach the core, non-negotiable knowledge for the unit while allowing additional time to fill gaps if required.

**Teach the core content in order suggested in the lesson sequence, filling gaps and addressing misconceptions as required.**

**Where appropriate, supplement or replace suggested designers with artists from your local area.**



### Within the Lesson

Some lesson slides and printable resources are provided, which follow the principles of the Great Teaching Toolkit. Where applicable, content is broken down into small steps and 'I', 'We', and 'You' sections allow for modelling, guided and independent practice.

Lesson resources provide **just one way** to teach the required knowledge. You should adapt these slides as much or as little as is required to meet the needs of your class.

**Adapt the lesson resources as much as is required to meet the needs of your class.**