

The Design Technology Curriculum – overview of curriculum intent

Early Years Structure

Key Stage 1 readiness

During the EYFS pupils will:

- Talk about things that they have made and what it is for.
- Talk about things other people have made and what the object is for.
- Recognise that different objects are used for different purposes.
- Explore a range of materials, and how to join them and decorate them.
- Use some simple tools.

Key Stage 1 Structure

Disciplinary organisation

Design, make and evaluate process (Plan, do and review)

Design	Make	Evaluate
Use a design criteria: • To create functional and/or appealing products for themselves and/or others • To present ideas through an appropriate combination of talk, drawings, mock-ups and ICT	• Select and use tools and materials appropriate to the design criteria safely and with some accuracy	• Evaluate existing everyday materials • Evaluate their own ideas against the design criteria

Product Development – Design, make and evaluate products that develop the following:

Strengthening and stiffening structures	Using mechanisms <i>(levers, sliders, axles and wheels)</i>	Food <i>(preparing dishes for a healthy and varied diet)</i>
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Knowledge development

For specific everyday objects:	Homes and school	Food
• What the objects are made from and why. • How the design of the object is important for its function. • Know that designers design and create products.	• Describe the common design features of buildings in the pupil's experiences, naming materials, features and identifying design criteria • Know that architects design and create buildings	• Describe where different types of food come from. • Know that farmers grow food stuff, factories process food and shops sell food.

Key Stage 2 Structure

Disciplinary organisation

Design, make and evaluate process (Plan, do and review)

Design	Make	Evaluate
Use research and evaluation to develop their own design criteria.	Choose and use appropriate combinations of materials based on functional and aesthetic reasons to make their product	Carefully evaluate their product against their original design criteria.
Develop designs for innovative, purposeful and functional products.	Use a wide range of techniques accurately in making products.	Seek the views of others about their product and use this information to support their evaluations.
Communicate their designs clearly so that others understand their vision for the product	Use an appropriate range of tools safely to construct products	

Product Development – Design, make and evaluate products that develop the following:

Strengthening, stiffening and reinforcing structures	Using mechanisms <i>(gears, cams, pulleys, linkages)</i>	Electrical components <i>(series circuits including buzzers, switches, bulbs, and motors)</i>	Computing <i>(programming, controlling and monitoring the product)</i>	Food <i>(preparing mainly savoury dishes for a healthy and varied diet)</i>
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Knowledge development

Products within a group ¹	Architecture	People and events	Food
Pupils will explore: - What are the common materials? - How does the design differ between products? - What is the effect of the differences? - Does it matter which product you use?	- Know about significant architects from different periods of history and buildings they were responsible for. - Know that architects develop design criteria so that their building is functional and aesthetic.	- Know about significant product designers and the products they are responsible for. - Explain how the designers product was an innovation in its time.	- Understand the principles of a healthy diet, and use this knowledge when planning dishes - Know about seasonality and its impact on ingredients available for recipes - Know how farmers grow and rear food stuff, how it is then processed and how it is sold to consumers to make meals from.

¹ (e.g. different types of felt tip pens or paint brushes, different types of screwdrivers or hacksaws)