

An 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: <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Select and use tools and materials appropriate to the design criteria safely and with some accuracy 	<ul style="list-style-type: none"> • 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>

Knowledge development

For specific everyday objects:	Homes and school	Food
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
<p>Use research and evaluation to develop their own design criteria.</p> <p>Develop designs for innovative, purposeful and functional products.</p> <p>Communicate their designs clearly so that others understand their vision for the product</p>	<p>Choose and use appropriate combinations of materials based on functional and aesthetic reasons to make their product</p> <p>Use a wide range of techniques accurately in making products.</p> <p>Use an appropriate range of tools safely to construct products</p>	<p>Carefully evaluate their product against their original design criteria.</p> <p>Seek the views of others about their product and use this information to support their evaluations.</p>

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

<p>Products within a group¹</p> <p>Pupils will explore:</p> <ul style="list-style-type: none"> • 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? 	<p>Architecture</p> <ul style="list-style-type: none"> • 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. 	<p>People and events</p> <ul style="list-style-type: none"> • Know about significant product designers and the products they are responsible for. • Explain how the designers product was an innovation in its time. 	<p>Food</p> <ul style="list-style-type: none"> • 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.
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¹ (e.g. different types of felt tip pens or paint brushes, different types of screwdrivers or hacksaws)