

Michael Faraday DT Curriculum Map 2023/24



Key Skills

**Project 1
Autumn I**

**Project 2
Autumn II**

**Project 3
Spring**

EYFS

Nursery
Physical Development
 Use large-muscle movements to wave flags and streamers, paint and make marks.
 • Choose the right resources to carry out their own plan.
 • Use one-handed tools and equipment, for example, making snips in paper with scissors.
Understanding the world
 • Explore how things work.
Expressive Arts and Design
 • Make imaginative and complex ‘small worlds’ with blocks and construction kits, such as a city with different buildings and a park.
 • Explore different materials freely, in order to develop their ideas about how to use them and what to make.
 • Develop their own ideas and then decide which materials to use to express them.
 • Create closed shapes with continuous lines, and begin to use these shapes to represent objects.

Reception
Physical Development
 • Progress towards a more fluent style of moving, with developing control and grace.
 • Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
 • Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor
Expressive Arts and Design
 • Explore, use and refine a variety of artistic effects to express their ideas and feelings.
 • Return to and build on their previous learning, refining ideas and developing their ability to represent them.
 • Create collaboratively, sharing ideas, resources and skills.

**Cooking
and
nutrition**

Textiles

**Mechanisms
and
structures**

KS1

Design
 • design purposeful, functional, appealing products for themselves and other users based on design criteria
 • 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
 • explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Cooking and Nutrition
 • use the basic principles of a healthy and varied diet to prepare dishes
 • understand where food comes from.

**Cooking
and
nutrition**

Textiles

**Mechanisms
and
structures**

<p>KS2</p>	<p><u>Design</u></p> <ul style="list-style-type: none"> • 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 • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p><u>Make</u></p> <ul style="list-style-type: none"> • 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 <p><u>Evaluate</u></p> <ul style="list-style-type: none"> • 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 <p><u>Technical knowledge</u></p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products. <p><u>Cooking and Nutrition</u></p> <ul style="list-style-type: none"> • understand and apply the principles of a healthy and varied diet • 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. 	<p>Cooking and nutrition</p>	<p>Textiles</p>	<p>Mechanisms, structures and electrical systems</p>
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