## Nevill Road Infant School Design Technology Curriculum

## National Curriculum Subject Content

EYFS

## ESSENTIAL OBJECTIVES / ESSENTIAL OPPORTUNITIES

Children at the expected level of development will:

- Use a range of small tools, including scissors, paintbrushes and cutlery.
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.


## KEY STAGE 1

## ESSENTIAL OBJECTIVES

- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Select from and use a range of tools and equipment to perform practical tasks.
- Explore and evaluate a range of existing products.
- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Use the basic principles of a healthy and varied diet to prepare dishes.


## ESSENTIAL OPPORTUNITIES

- To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and where appropriate, information and communication technology.
- To select from and use a wide range of materials and components, including construction materials, textiles and ingredients according to their characteristics.
- To evaluate their ideas and products against design criteria.
- To explore and use mechanisms (levers, sliders, wheels and axles) in their products.
- Understand where food comes from.

| EYFS | KS1 |  |  |
| :---: | :---: | :---: | :---: |
| BREADTH <br> OF | BREADTH |  | Y1 |
| STUDY | OF STUDY |  |  |

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## Personal, Social and Emotiona

Development
Select and use activities and resources, with help when needed.

## Physical Development

Use large-muscle movements to wave flags and streamers, paint and make marks.

Three and
Four Year Olds

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.

## Design <br> Make <br> Evaluate Technical knowledge

MECHANISMS: SLIDERS AND LEVERS:
Can I explore and use sliders and levers?
Can I understand that mechanisms produce different types of movement?

Can I show knowledge and use of technical vocabulary relevant to the project?

Can I plan by suggesting what to do next?
Can I select and use tools suitable for the task, explaining my choices, to cut, shape and join paper and card?

Can I use simple finishing techniques suitable for the product I am creating?

Can I explore a range of existing books and everyday products that use simple sliders and levers?

Can I evaluate my product by discussing how well it works in relation to the purpose and user and whether it meets design criteria?

STRUCTURES: FREESTANDING STRUCTURES
Can I explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings?

Can I generate ideas based on simple design criteria and my own experiences, explaining what I can make?

## TEXTILES: TEMPLATES AND JOINING

 TECHNIQUES:Can I select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing?

Can I select from and use textiles according to their characteristics?

Can I explore and evaluate a range of existing textile products relevant to the project being undertaken?

Can I understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling?

Can I explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons?

Can I show knowledge and use of technical vocabulary relevant to the project?

Can I understand how simple 3-D textile products are made, using a template to create two identical shapes?

## MECHANISMS: WHEELS AND AXLES:

Can I generate initial ideas and simple design criteria through talking and using my own experiences?

Can I explore and evaluate a range of products with wheels and axles?

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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.

Reception
$\left.\begin{array}{|l|l|l|} & \begin{array}{l}\text { Can I develop, model and communicate my ideas } \\ \text { through talking, mock-ups and drawings? } \\ \text { Can I select new and reclaimed materials and } \\ \text { construction kits to build my structures? } \\ \text { Can I use simple finishing techniques for the } \\ \text { structure I am creating? } \\ \text { Can I plan by suggesting what to do next? } \\ \text { Can I show I know how to make freestanding } \\ \text { structures stronger, stiffer and more stable? } \\ \text { Can I show knowledge and use of technical } \\ \text { vocabulary relevant to the project? }\end{array} & \begin{array}{l}\text { Can I develop and communicate ideas through } \\ \text { drawings and mock-ups? } \\ \text { Can I explore and use wheels, axles and axle } \\ \text { holders? }\end{array} \\ \text { Can I distinguish between fixed and freely moving } \\ \text { axles? } \\ \text { Can I show knowledge and use of technical } \\ \text { vocabulary relevant to the project? }\end{array}\right\}$

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Can I understand where a range of fruit and vegetables come from e.g. farmed or grown at home?
Can I understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The Eatwell Plate?

Can I show knowledge and use of technical and sensory vocabulary relevant to the project?

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Can I taste and evaluate a range of fruit and vegetables to determine the intended user's preferences?

Can I evaluate ideas and finished products against design criteria, including intended user and purpose?

Can I show knowledge and use of technical and sensory vocabulary relevant to the project?

| KEY END-POINT ASSESSMENT |  |  |  |
| :---: | :---: | :---: | :---: |
|  | EYFS | Y1 | Y2 |
| Design | Fine Motor Skills <br> - Use a range of small tools, including scissors, paintbrushes and cutlery. Expressive Arts and Design <br> Creating with Materials <br> - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <br> - Share their creations, explaining the process they have used. | Can I generate ideas based on simple design criteria and my own experiences, explaining what I Can make? | Can I design a functional and appealing product for a chosen user and purpose based on a simple design criteria? |
| Make |  | Can I develop, model and communicate my ideas through drawing and mock-ups with card and paper? | Can I generate, develop, model and communicate my own ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology? |
| Evaluate |  | Can I evaluate my product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria? | Can I evaluate my ideas throughout and my final product against original design criteria? |
| Technical knowledge |  | Can I select and use tools, skills and techniques suitable for the task, explaining my choices? | Can I select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing? <br> Can I select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics? |
| Cooking \& Nutrition |  | Can I use simple utensils and equipment e.g. peel, cut, slice, squeeze, grate and chop safely? | Can I understand where a range of fruit and vegetables come from e.g. farmed or grown at home? |

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