



St Monica's R.C Primary School – Nursery Knowledge Organiser – DT



Design and Technology in Nursery

We become are developing our Design and Technology through the following EYFS areas of learning:

Expressive Arts and Design

Physical Development

Understanding the World

Personal, Social and Emotional Development

In Nursery, we look at the ways that things work. We learn to research, design and make products. Our Design and Technology skills are developed through our topics as well as through continuous provision through construction and creativity and the children's interests. Children develop ideas and decide which materials to use to express them for example making dens.

Technical Knowledge/Skills

Different techniques can be used to join materials.
Using tools likes scissors in a safe way is very important.
Products have a purpose e.g. Bird feeders feed the birds.
Tools help us change things. Scissors are a cutting tool.
Some tools can be used independently and some will need adult support.
Materials can be manipulated to create something e.g. playdough into cakes
Fruit and vegetables can be used to make models e.g. Supertato using a potato.

Design

Designing is an important part of the making process. It helps us to plan what materials we will use.
Experimenting with different materials helps us to develop our ideas.
Looking at pictures and objects can inspire us and help us to design our own creations.
Talking about what we are going to do will help us when we are making our designs.



Make and Create

Leaf Sculpture

Using transient art and leaves to create 3D sculptures.

Christmas Cards

A range of tools and materials can be used to create a Christmas card. Card can be folded and materials can be attached.

Bird Feeder

Cardboard can be used to make 3D models. They come in different shapes and sizes. Materials can be joined together using sellotape, glue, tape and string.

Supertato Characters

Other materials such as food can be used to create models.

Large Scale models

Blocks, bricks and boxes can be stacked to create models.

Various construction materials, e.g. joining pieces (straws to make 2D shapes), stacking vertically and horizontally, balancing, making enclosures and creating spaces. Using resources to create props or creates imaginary ones to support play such as making enclosures for animals in the small world. Using materials to make imaginary worlds.

Continuous Provision (ongoing): Playdough. Messy play experiences- cornflour and water, shaving foam, rice and pasta, Mud kitchen, Digging Area. Joining materials in Funky Fingers area- Meccano, Nuts and bolts, pipe cleaners, string. Weekly baking/food prep and making playdough. Den-building. Junk modelling. Creative workshop. Construction (indoor and outdoor).

Evaluate

Feedback from others help me to improve my creations next time.
Displaying our models, sharing our creations with the rest of the class and explaining how we made it helps us to review our ideas.
I notice what other children and adults do, mirroring what is observed, adding variations and then doing it spontaneously.

Vocabulary

Join, build, shape, cut, stick, fix, tape, pull, push, on, below, next to, above, roll, knead, sculpt(ure), slip, form, hole punch, sellotape dispenser. Plan, create, make.
Equipment and basic cooking utensils sensory vocabulary e.g. soft, juicy, crunchy. Shapes, 2D, 3D, solid, flat, round, roll, slide. Material- paper, card, felt, ribbon, cloth, carpet, wood, plastic, metal, straw, bricks.

Design and Technology Links to EYFS Statutory Framework and Development Matters

Design and Technology			
Personal, Social, Emotional Development	Physical Development	Expressive Arts and Design	Understanding the World
<p>3 / 4 year olds:</p> <ul style="list-style-type: none"> - Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them. 	<p>3 / 4 year olds:</p> <ul style="list-style-type: none"> - 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. <p>Reception:</p> <ul style="list-style-type: none"> - 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. 	<p>3 / 4 year olds:</p> <ul style="list-style-type: none"> - 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. <p>Reception:</p> <ul style="list-style-type: none"> - 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. <p>ELG: EAD: Creating with Materials:</p> <ul style="list-style-type: none"> - 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. 	<p>3 / 4 year olds:</p> <ul style="list-style-type: none"> - Explore how things work.

KS1 Design and Technology National Curriculum Areas of Learning

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

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.