

### How can children learn about Design and technology Early Years?

The Early Years Foundation Stage Curriculum supports children to develop their creativity, imagination and problem-solving skills through purposeful designing and making. Children are encouraged to plan, create and evaluate their ideas using a wide range of tools, construction kits, and materials such as wood, card, fabric and recycled items. Through hands-on exploration, they learn how things are put together, how they work, and how they can be improved. Cooking and food technology activities enable children to explore tastes, textures and healthy choices, while also developing important skills such as measuring, mixing and following simple instructions. Children are given opportunities to work independently and collaboratively, fostering resilience, perseverance and pride in their achievements. Exposure to real-life design problems and everyday objects helps children to understand the role of design and technology in their homes, school and wider community.

### Links to Development Matters: Birth to Three

<b>Understanding the World</b>	<ul style="list-style-type: none"> <li>• Explore materials with different properties</li> <li>• Explore natural materials, indoors and outside</li> </ul>
<b>Communication and Language</b>	<ul style="list-style-type: none"> <li>• Understand simple instructions like "go" or "stop"</li> <li>• Recognise and point to objects if asked about them</li> <li>• Identify familiar objects and properties when they are described: for example: 'Red pencil', 'blue paper'</li> <li>• Understand and act on longer sentences like 'hold the pencil'</li> <li>• Understand simple questions about 'who', 'what' and 'where'</li> </ul>
<b>Personal, Social and Emotional Development</b>	<ul style="list-style-type: none"> <li>• Express preferences and decisions. They also try new things</li> <li>• Engage with others through gestures, gaze and talk. Use that engagement to achieve a goal • Begin to show 'effortful control'. For example, waiting for a turn</li> </ul>
<b>Physical Development</b>	<ul style="list-style-type: none"> <li>• Reach out for objects as co-ordination develops</li> <li>• Use large and small motor skills to do things independently, for example manage buttons and zips, and pour drinks</li> <li>• Explore different materials and tools</li> </ul>
<b>Expressive Art and Design</b>	<ul style="list-style-type: none"> <li>• Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make</li> <li>• Explore different materials, using all their senses to investigate them</li> <li>• Manipulate and play with different materials</li> <li>• Use their imagination as they consider what they can do with different materials • Make simple models which express their ideas</li> </ul>

## Key Vocabulary

Hold, go, stop, yes, no, show

## End Points

- **Playing and Exploring** – children investigate and experience things, and have a go
- **Active learning** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- **Creating and thinking critically** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things

## Links to Development Matters: Three and Four Year Olds

### Understanding the World

- Explore how things work

### Personal, Social and Emotional Development

- 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

### 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

### 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

## Key Vocabulary

cut, stick, fix, join, fold, build, glue, sellotape, card, scissors, hole punch, stapler, stick, string, fabric, ribbon, **Food:** hard, soft, lumpy, smooth, sweet, sour

### End Points

- **Playing and Exploring** - children investigate and experience things, and have a go
- **Active learning** - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- **Creating and thinking critically** - children have and develop their own ideas, make links between ideas, and develop strategies for doing things

### Links to Development Matters: Reception

<b>Physical development</b>	<ul style="list-style-type: none"> <li>• Develop small motor skills so that they can use a range of tools competently, safely and confidently</li> </ul>
<b>Expressive Arts and Design</b>	<ul style="list-style-type: none"> <li>• Explore, use and refine a variety of artistic effects to express ideas and feelings</li> <li>• Return to and build on their previous learning, refining ideas and developing their ability to represent them</li> <li>• Create collaboratively, sharing ideas, resources and skills</li> <li>• Explore, use and refine a variety of artistic effects to express ideas and feelings</li> </ul>
<b>Communication and language</b>	<ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Use new vocabulary throughout the day</li> <li>• Articulate their ideas and thoughts in well-formed sentences</li> <li>• Connect one idea or action to another using a range of connectives</li> <li>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen</li> </ul>
<b>Personal, social and emotional development</b>	<ul style="list-style-type: none"> <li>• Know and talk about the different factors that support their overall health and wellbeing: healthy eating</li> </ul>
<b>Physical development</b>	<ul style="list-style-type: none"> <li>• Develop small motor skills so that they can use a range of tools competently, safely and confidently</li> </ul>
<b>Understanding the world</b>	<ul style="list-style-type: none"> <li>• Explore the natural world around them</li> </ul>

### Early Learning Goals

<b>Fine Motor Skills</b>	<ul style="list-style-type: none"> <li>• Use a range of small tools, including scissors, paint brushes and cutlery</li> </ul>
<b>Creating with materials</b>	<ul style="list-style-type: none"> <li>• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</li> <li>• Share their creations, explaining the process they have used</li> </ul>
<b>Speaking</b>	<ul style="list-style-type: none"> <li>• Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary</li> <li>• Offer explanations for why things might happen</li> </ul>
<b>Managing self</b>	<ul style="list-style-type: none"> <li>• Manage their own basic hygiene and personal needs, including understanding the importance of healthy food choices</li> </ul>
<b>Physical Development</b>	<ul style="list-style-type: none"> <li>• Use a range of small tools, including scissors, paint brushes and cutlery</li> </ul>
<b>The Natural World</b>	<ul style="list-style-type: none"> <li>• Explore the natural world around them, making observations and drawing pictures of animals and plants</li> </ul>

### Key Vocabulary

cut, stick, fix, join, fold, build, glue, masking tape, sellotape, card, scissors, hole punch, stapler, split pin, paper fastener, lolly stick, craft stick, bottle top, string, fabric, ribbon, box modelling

**Food:** hard, soft, lumpy, rough, smooth, sweet, sour, crunchy, healthy, cutting

### End Points

- Playing and exploring their environment.
- Active learning through creative and imaginative play.
- Creating and thinking about new products.
- Critically thinking about how their actions can impact the world around them.

**Links to National Curriculum: Year 1**

**Pupils should be taught about**

- Working collaboratively or independently
- Communicate with others
- Identify and use a range of different materials and describe their properties
- Use simple techniques to join, fold and cut
- Use tools safely