

## Laying the Foundations for Design and Technology



### ELG: Expressive Arts and Design (Creating with Materials), Physical Development (Fine Motor) and Personal, Social and Emotional Development (Managing Self)

Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (CM)
- Share their creations explaining the process they have used. (CM)
- Use a range of small tools, including scissors, paintbrushes and cutlery. (FM)
- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. (MS)

### At AWPS, pupils are taught:

- To begin to design, make and evaluate.
- To explore, join and experiment with different materials, modelling resources and construction kits.
- That all their ideas, choices, creations and models are valued and celebrated.
- To explore and experiment with food and make healthy choices.

Links to the National Curriculum	Nursery		Reception
	N1 children learn to:	N2 children learn to:	Reception children learn to:
<b>Food and Nutrition</b>	<ul style="list-style-type: none"> <li>• Eat finger food and develop likes and dislikes. (D&amp;T)</li> <li>• Try a wider range of foods with different tastes and textures. (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Start to eat independently and learning how to use a knife and fork. (PD)</li> <li>• Make healthy choices about food, drink. (PSED)</li> <li>• Name some fruits and vegetables and know they are a healthy choice. (D&amp;T)</li> <li>• Begin to use their small motor skills to use a knife for spreading. (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently e.g. knife for spreading, cutting and chopping. (PD)</li> <li>• Know and talk about the different factors that support their overall health and wellbeing e.g. healthy eating. (PSED)</li> <li>• Make healthy choices about food, drink. (PSED)</li> <li>• Discuss favourite flavours/foods. (D&amp;T)</li> <li>• Further develop the skills they need to manage the school day successfully: mealtimes. (PD)</li> </ul>
<b>Mechanisms</b>	<ul style="list-style-type: none"> <li>• Repeat actions that have an effect. (UTW)</li> <li>• Explore a range of sound-makers and instruments and play them in different</li> </ul>	<ul style="list-style-type: none"> <li>• Join different materials e.g. cogs and wheels, marble run, magnets. (D&amp;T)</li> <li>• Explore how things work. (UTW)</li> </ul>	<ul style="list-style-type: none"> <li>• Join different materials e.g. cogs and wheels, marble run, magnets. (D&amp;T)</li> <li>• Explore how things work. (UTW)</li> </ul>

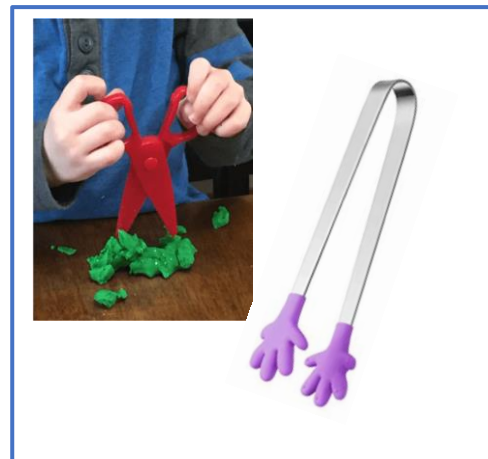
	<p>ways. (EAD)</p> <ul style="list-style-type: none"> <li>• Build independently with a range of appropriate resources. (PD)</li> <li>• Develop manipulation and control. (PD)</li> <li>• Explore different materials and tools. (PD)</li> <li>• Complete inset puzzles. (M)</li> <li>• Combine objects like stacking blocks and cups. Put objects inside others and take them out again. (M)</li> </ul>	<ul style="list-style-type: none"> <li>• Explore and talk about different forces they can feel. (UTW)</li> <li>• Choose the right resources to carry out their own plan. (PD)</li> <li>• Make imaginative and complex 'small worlds' with blocks and construction kits e.g. Duplo. (EAD)</li> <li>• Explore different materials freely, in order to develop their ideas about how to use them and what to make. (EAD)</li> <li>• Develop their own ideas and then decide which materials to use to express them. (EAD)</li> <li>• Join different materials and explore different textures. (EAD)</li> <li>• Use pictures to help them decide what to make. (D&amp;T)</li> <li>• Talk about their ideas. (D&amp;T)</li> <li>• Say what they have made and how they have made it. (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Explore and talk about different forces they can feel. (UTW)</li> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently e.g. split pins. (PD)</li> <li>• Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EAD)</li> <li>• Create collaboratively sharing ideas, resources and skills e.g. Lego, Mobilo, K'nex. (EAD)</li> <li>• Talk about the features of real structures/buildings/vehicles etc. to help develop their ideas. (D&amp;T)</li> <li>• Explain what they have made and describe its features. (D&amp;T)</li> <li>• Reflect and make choices on how to improve or make changes as they work. (D&amp;T)</li> </ul>
<b>Building Structures</b>	<ul style="list-style-type: none"> <li>• Build with a range of resources e.g. Mega Blocks, then Duplo. (M)</li> <li>• Explore, manipulate and play with different materials. (EAD)</li> <li>• Use their imagination as they consider what they can do with different materials. (EAD)</li> <li>• Make simple models which express their</li> </ul>	<ul style="list-style-type: none"> <li>• Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. (M)</li> <li>• Combine shapes to make new ones – an arch, a bigger triangle etc. (M)</li> <li>• Explore and play with deconstructive play materials e.g. planks, logs, different sized boxes, different types of fabric, tape, paper, scissors and pegs. (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently e.g. scissors, hole punches. (PD)</li> <li>• Create collaboratively sharing ideas, resources and skills e.g., large construction and loose parts. (EAD)</li> <li>• Talk about the features of real structures/buildings/vehicles etc. to help</li> </ul>

	<p>ideas. (EAD)</p> <ul style="list-style-type: none"> <li>• Play with deconstructive play materials e.g. different solid boxes, cushions, blankets. (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Use pictures to help them decide what to make. (D&amp;T)</li> <li>• Talk about their ideas. (D&amp;T)</li> <li>• Say what they have made and how they have made it. (D&amp;T)</li> </ul>	<p>develop their ideas. (D&amp;T)</p> <ul style="list-style-type: none"> <li>• Play and build more complex structures with deconstructive play materials. (D&amp;T)</li> <li>• Use a range of joining materials and tools e.g. string, tape, pegs, split pins, velcro, glue, hammer and nails. (D&amp;T)</li> <li>• Explain what they have made and describe its features. (D&amp;T)</li> <li>• Reflect and make choices on how to improve or make changes as they work. (D&amp;T)</li> </ul>
<b>Textiles</b>	<ul style="list-style-type: none"> <li>• Explore and play with different materials. (EAD)</li> </ul>	<ul style="list-style-type: none"> <li>• Explore different materials freely, in order to develop their ideas about how to use them and what to make. (EAD)</li> <li>• Develop small motor skills e.g. threading (D&amp;T)</li> </ul>	<ul style="list-style-type: none"> <li>• Use a range of joining techniques including joining fabrics using glueing and stapling. (D&amp;T)</li> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently e.g. scissors, large plastic needles. (PD)</li> </ul>

## Stages of Cutting



1. Tear paper, spray bottles, squirt toys, sponges, pipettes



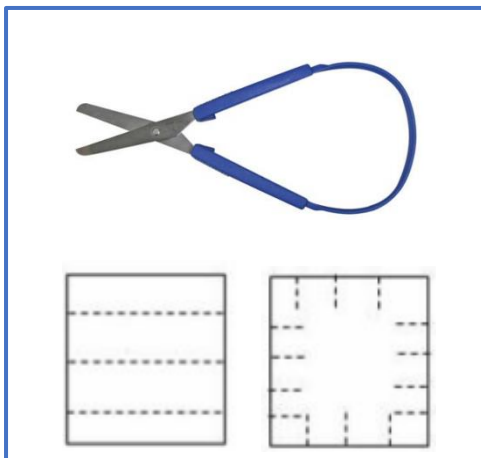
2. Use two hands to transfer objects with tongs, use scissors to snip



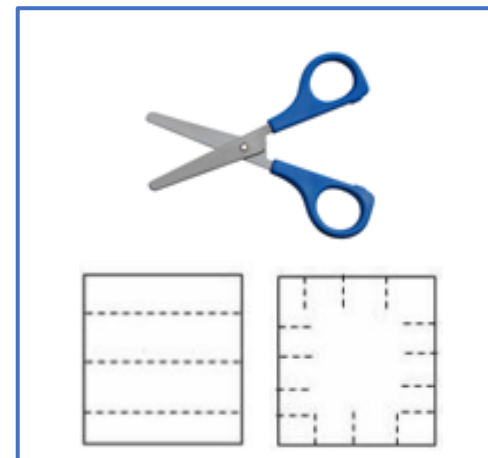
3. Use one hand to transfer objects with tongs



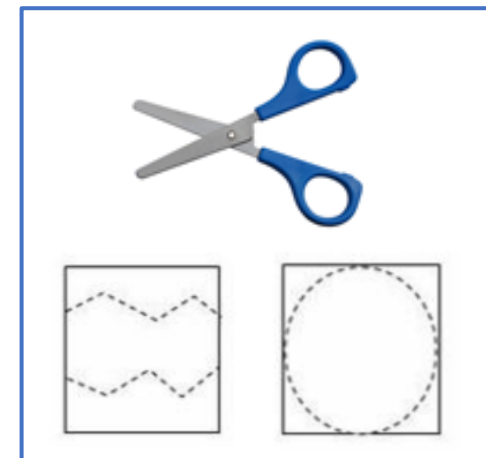
4. Use tweezers with one hand to transfer objects, place clothes



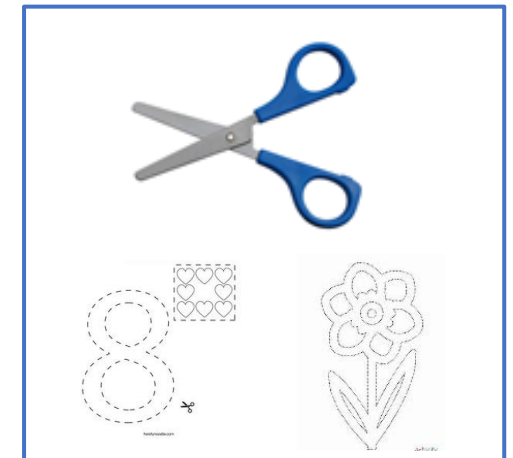
5. Make snips on the edge of paper, cut strips along a line with spring scissors



6. Hold scissors in finger and thumb and cut snips, cut strips along a line



7. Cut angles, circles and curved lines



8. Cut complex shapes and cut outs