Design and Technology-Sticky Learning

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<tr><td></td><td colspan="4"></td></tr>
<tr><td rowspan="3">Reception</td><td colspan="4">Expressive Art and Design
The development of children's artistic and cultural awareness supports their imagination and creativity. It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials. The quality and variety of what children see, hear and participate in is crucial for developing their understanding, self-expression, vocabulary and ability to communicate through the arts. The frequency, repetition and depth of their experiences are fundamental to their progress in interpreting and appreciating what they hear, respond to and observe.
Physical Development
Fine motor control and precision helps with hand-eye co-ordination which is later linked to early literacy. Repeated and varied opportunities to explore and play with small world activities, puzzles, arts and crafts and the practice of using small tools, with feedback and support from adults, allow children to develop proficiency, control and confidence.</td></tr>
<tr><td></td><td>3 & 4 year olds will be learning to:</td><td>Children in Reception will be learning to:</td><td>By the end of Reception – Early learning Goal.</td></tr>
<tr><td>Expressive art and design</td><td>• 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</td><td>• 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.</td><td>Creating with Materials
• 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.
• Make use of props and materials when role playing characters in narratives and stories</td></tr>
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		begin to use these shapes to represent objects.		
	Physical Development	• Match their developing physical skills to tasks and activities in the setting.	• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	
	Understanding the World	• 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	• Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons	Fine Motor Skills • Hold a pencil effectively in preparation for fluent writing - using the tripod grip in almost all cases. • Use a range of small tools, including scissors, paintbrushes and cutlery. • Begin to show accuracy and care when drawing.
	PSED	• 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.		
	Understanding the World	• Explore how things work		
	Sticky Knowledge			
	• Sticky tape can be used to join paper. • Different materials can be used for different things. • Scissors can be used to cut a straight line. • Materials can be joined to make new and useful things.			

	Key Stage 1 National Curriculum Objectives
	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 context [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment. **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 variety 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. • Understand where food comes from
Key	**In Key Stage 1, we will be:**
	We are learning:

	Autumn 1	Autumn 2	Summer 1
	Design, make and evaluate a drawbridge using levers, sliders and mechanisms.	Understand where food comes from.	Design and make a clay plant pot.
	Sticky Knowledge		
	A mechanism is where materials are connected to make movement. An example of a mechanism is a pivot. Types of mechanisms are sliders and levers.	Some of our food grows on top of the ground. Some of our food grows in the ground. Some of our food grows on trees and bushes.	Clay can be moulded to create a useful product. We can look at others work to help us design our own products. When clay dries it becomes hard.