

Castle View Primary School and Nursery Design and Technology overview 'Exceeding expectations, raising aspirations'

Aims:

•To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

• To build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.

• To critique, evaluate and test their ideas and products and the work of others.

• To understand and apply the principles of nutrition and learn how to cook.

Early Years Framework and National Curriculum								
Cycle 1	All About Me	Let's Celebrate	Long, long ago	On the farm	Nursery Rhymes	Real Life Hero		
Cycle 2	Home Sweet Home	Light and Dark	Go wild	In my garden	Traditional	When I grow up		
Nursery	Personal Social and Emotions 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. 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							

	 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 						
ELG – Physical Development	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. 						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	



EYFS Nursery	when needed. This helps them achieve the goal they have chosen, or one which is suggested to them. Use large scale muscle	and equipment, for example, making snips in paper with scissors. Explore different		Develop their own ideas and then decide which materials to use to express them.	Explore how things work. Make imaginative and complex 'small worlds' with blocks and construction kits, such as city with different buildings and a park.	
EYFS Reception	Explore, use, and refine a variety of artistic effects to express their ideas and feelings.	a variety of artistic effects to express their ideas and feelings Progress towards a more fluent style of moving, with	a variety of artistic effects to express their ideas and feelings. Return to and build on their previous learning, refining ideas	Explore, use, and refine a variety of artistic effects to express their ideas and feelings Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. Create	Explore, use, and refine a variety of artistic effects to express their ideas and feelings	Explore, use, and refine a variety of artistic effects to express their ideas and feelings.

		competently, safely and confidently.		collaboratively, sharing ideas, resources and skills		
Year 1	Design, make and evaluate – structures (joining and stability) Disassembled boxes to produce luggage bags for Barnaby	Design, make and evaluate – textiles – simple printing/finishing techniques	Design, make and evaluate – structures (stability) – animal homes	Design, make and evaluate –Food – making of bread	Food (sources, vocab, preparing, safety and hygiene, measure/weigh Make egg and cress sandwiches	Design, make and evaluate – Selecting from equipment, tools and technique to cut shape, join and finish Creating model rock pools
Year 2	Design, make and evaluate Evaluation of rocket (homework project)	Design, make and evaluate – structures – axles Cars using CAD modelling for 3D design Joining, stability	Design, make and evaluate – structures – levers. Creating pop up books using levers and sliders Joining, stability	Design, make and evaluate – Food - cupcakes Structures – Food packaging – shell structure		3-D structures – Dens and Shelters
Year 3		Design, make and evaluate – Structures – 3D models		Textiles – 2D – 3D project		Design, make and evaluate – Food Making a healthy lunch box
Year 4		Mechanical and Electrical systems – create a wire maze		Mechanisms – Pneumatic moving toy		Textiles – running stitch and over sewing – blanket stitch to avoid fraying. Simple patterns and measurements to hem garments



Year 5	Levers and pulleys (shaduf)		Frame Structures	CAD Textiles – Link to Art & Design Textiles – printing Computer Designed logos
Year 6	Mechanisms – pulleys and gears		Textiles – pin, tack, join, stitches, Textiles - cross stitch (stitches, textures, colours)	Electrical Systems – Saving Sea Turtles - Microbit