Pocklington C of E Infant School

Design & Technology: Disciplinary Knowledge

Learning in EYFS			
Birth-Three - Notice patterns with strong contrasts and be attracted by patterns resembling the human face. - Start to make marks intentionally. - Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make. - Explore different materials, using all their senses to investigate them. - Manipulate and play with different materials. - Use their imagination as they consider what they can do with different materials. - Make simple models which express their ideas.	**Three- Four Years** - 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. - Join different materials and explore different textures. - Create closed shapes with continuous lines and begin to use these shapes to represent objects. - Explore colour and colour-mixing.	**Reception** - 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. - Plan and create collaboratively sharing ideas, resources and skills. - Adapt and improve my models with added features to ensure stability, scale and that it fits the purpose. - Develop their small motor skills so that they can use a range of tools competently, safely and confidently. - Measure and weigh food items, non-standard measures, e.g., spoons, cups.	**Early Learning Goal** - Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. EA&D, CWM. - Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories. EA&D, CWM. - Children handle equipment and tools effectively, including pencils for writing. (PD)

Progression of Disciplinary Skills in KS1 (I can…..)

Disciplinary Strand	Year 1		Year 2	
	Cycle A	Cycle B	Cycle A	Cycle B
Design	Thinking about what others might want from a design and talking about ideas with purpose and user in mind. Use basic drawing skills to communicate ideas and consider who they are designing for - by identifying the user. Creating a class design criteria for a moving monster.	Design a smoothie carton and begin to suggest information to be included on the packaging. Begin to use a template to create a design for a puppet. Using basic drawing skills to communicate ideas and beginning to consider who they are designing for.	Generating and communicating ideas using sketching and modelling. Use a simple design brief that outlines the intended use, target user, and key features of the product, to create simple design criteria. Designing a moving monster for a specific audience in accordance with a design criteria.	Design a smoothie carton and suggest information to be included on the packaging. Use a template to create a design for a puppet. Using basic drawing skills to communicate ideas and considering who they are designing for - identifying the user.

Make	Choosing between a small number of materials, ingredients or components and beginning to request equipment appropriate to the purpose. Choosing between a small number of materials, ingredients or components. Beginning to make linkages using card for levers and split pins for pivots.	Begin to chop and juice fruits and vegetables safely to make a smoothie. To begin to cut fabric neatly with scissors and use joining methods to decorate a puppet. Choosing between a small number of materials, ingredients or components.	Making a structure according to design criteria and creating joints and structures from paper/card and tape. Choosing materials, ingredients or components from a wider range of materials, ingredients or components and knowing some properties of materials like hard, soft, flexible, waterproof, strong etc. Making linkages using card for levers and split pins for pivots and cutting and assembling components neatly.	Chop and juice fruits and vegetables safely to make a smoothie. Cut fabric neatly with scissors and use a variety of joining methods to decorate a puppet. Choosing between a small number of materials, ingredients or components and refining their grip to cut competently and confidently.
Evaluate	Beginning to accept feedback and understand it is meant to improve their work. Evaluating their ideas and creations against simple design criteria. Evaluate their own designs against the design criteria.	Tasting and evaluating different food combinations. To begin to reflect on a finished product, explaining likes and dislikes. Accepting feedback and understanding it is meant to improve their work.	Evaluating the strength, stiffness and stability of their own structure. Evaluating their ideas and creations against the design criteria and knowing that it can help to decide if their product is a success. Evaluate their own designs against the design criteria and use peer feedback to modify a final design.	Tasting and evaluating different food combinations and describing its appearance, smell and taste. Reflect on a finished product, explaining likes and dislikes and compare their finished product to the design brief. Accepting feedback and understanding it is meant to improve their work and saying what they like about their peers' designs and products.
Technical Knowledge	Recognising that different structures are used for different purposes. To know everyday objects have mechanisms. To know that mechanisms are a collection of moving parts that work together as a machine to produce movement.	Begin to understand where and how fruits and vegetables grow. Beginning to make stable structures from card.	To know that shapes and structures with wide, flat bases or legs are the most stable and understand that the shape of a structure affects its strength. To know everyday objects have mechanisms and that mechanisms usually limit unwanted movement. To know that mechanisms are a collection of moving parts that work together as a machine to produce movement and know that there is always an input and output in a mechanism.	Understand where fruits and vegetables grow. Making stable structures from card and creating supporting structures to aid stability.