**Essendon CofE Primary School**

*Encouraging everyone's light to shine (Matthw 5:16)*

# DT: values-linked progression of skills

❖ **Love yourself / Independence & wellbeing** ❖ **Love others / Inclusivity & respect** ❖ **Love God / Spirituality & insight**
❖ **Love learning / Knowledge & skills** ❖ **Love the world you live in / Awe & wonder**

| Values & Intentions | Focus of development | Linked EYFS Outcomes | Y1-2 Progression | Y3-4 Progression | Y5-6 Progression |
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| **Love yourself**<br><br>**Independence and wellbeing** | Self-knowledge<br><br>Self-esteem<br><br>Metacognition<br><br>Self-evaluation<br><br>Creativity<br><br>Courage<br><br>Resilience<br><br>Joy | | • Take pride in your own efforts<br>• Begin to value effort over outcome<br>• Work independently<br>• Take inspiration from others<br>• Recognise your own successes<br>• Begin to judge your own work against your own past efforts, not the work of others<br>• Maintain a positive outlook in the face of unfavourable outcomes<br>• View the creative process as an inherently joyful experience<br>• Be prepared to try something new | • Recognise and celebrate your own efforts and the progression of your skills<br>• Understand the importance to your own wellbeing and self-image of valuing your effort and progress over your outcomes<br>• Work in an independent and focused way to develop skills you have been shown<br>• Judge your own work against your own past efforts, not the work of others<br>• Recognise how unfavourable outcomes can help guide future progression<br>• Take joy in the process of self-expression and creativity<br>• Be prepared to experiment and take risks, and ready to learn from the outcomes | • Make links between all areas of creative expression<br>• Recognise and value the creative process in all its forms as an opportunity for self-expression<br>• Demonstrate resilience and perseverance when faced with challenges<br>• View unfavourable outcomes as a step in a developmental journey, not as a failure<br>• Show understanding of the joy to be found in the focused "flow" state of creativity<br>• Demonstrate understanding that risk-taking and exploration are vital parts of the creative process |

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| **Love others**<br><br>**Inclusivity & respect** | Critical thinking<br><br>Collaboration<br><br>Evaluation<br><br>Respect<br><br>Honesty<br><br>Humility | | • Take inspiration from the efforts and skills of others<br>• Give honest feedback in a kind and considerate way<br>• Contribute constructively to group projects<br>• Work with others in a positive way to help solve problems and generate new ideas | • Actively seek opportunities to learn from the efforts and skills of others<br>• Collaborate constructively on a range of creative projects<br>• Give feedback and suggestions in a sensitive and constructive way | • Take inspiration from the efforts and skills of others<br>• Demonstrate understanding of strategies for collaborating successfully with others<br>• Show awareness of the impact on others of giving feedback in different ways |
| **Love God**<br><br>**Spirituality & insight** | Wisdom<br><br>Spirituality<br><br>Depth of reflection<br><br>Understanding of design as a means of the communication of ideas | | • Know that design can be used to communicate ideas<br>• Know that good and bad design can affect the mental state and wellbeing of people using a product<br>• Recognise ways in which design has been used to communicate ideas about God (e.g. the layout of a church, the symbol of the cross)<br>• Use design as a means to express your own understanding of religious themes, e.g. making a palm cross | • Understand that design can be an important means of communicating ideas<br>• Recognise how the use of design to communicate deep ideas has developed over time, e.g. a medieval church compared to a modern church; the image of Buddha<br>• Discuss how your own design work can be used to express ideas that you may find hard to put into words<br>• Know that good design can appeal to our senses, our emotions and our critical minds | • Demonstrate understanding of the power of design as a means of expressing ideas, e.g. what message is expressed by the cross, the Star of David, the Islamic crescent moon, etc.<br>• Talk about how good design can help us to gain awareness of ideas that are hard to express in words, e.g. the ceiling of the Sistine Chapel, the dome of the blue mosque.<br>• Be able to discuss ways in which good design can appeal to different senses, critical minds and emotions |
| **Love learning**<br><br>**Knowledge & skills** | Developing practical skills | Food | • Cut, peel or grate ingredients safely and hygienically. | • Prepare ingredients hygienically using appropriate utensils. | • Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). |

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| | | | • Measure or weigh using measuring cups or electronic scales.<br>• Assemble or cook ingredients. | • Measure ingredients to the nearest gram accurately.<br>• Follow a recipe.<br>• Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). | • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.<br>• Demonstrate a range of baking and cooking techniques.<br>• Create and refine recipes, including ingredients, methods, cooking times and temperatures. |
| | | Materials | • Cut materials safely using tools provided.<br>• Measure and mark out to the nearest centimetre.<br>• Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).<br>• Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen). | • Cut materials accurately and safely by selecting appropriate tools.<br>• Measure and mark out to the nearest millimetre.<br>• Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).<br>• Select appropriate joining techniques. | • Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).<br>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper). |
| | | Textiles | • Shape textiles using templates.<br>• Join textiles using running stitch.<br>• Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing). | • Understand the need for a seam allowance.<br>• Join textiles with appropriate stitching.<br>• Select the most appropriate techniques to decorate textiles. | • Create objects (such as a cushion) that employ a seam allowance.<br>• Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).<br>• Use the qualities of materials to create suitable visual and tactile |

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| | | | | | effects in the decoration of textiles (such as a soft decoration for comfort on a cushion). |
| | | Electricals and electronics | • Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage). | • Create series and parallel circuits | • Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips). |
| | | Computer-aided design (CAD) | • Model designs using software. | • Control and monitor models using software designed for this purpose. | • Write code to control and monitor models or products. |
| | | Construction | • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. | • Choose suitable techniques to construct products or to repair items.<br>• Strengthen materials using suitable techniques. | • Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding). |
| | | Mechanics | • Create products using levers, wheels and winding mechanisms. | • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product such as levers, gears winding mechanisms and pulleys. | • Convert rotary motion to linear using cams.<br>• Use innovative combinations of electronics (or computing) and mechanics in product designs. |
| | Design, make, evaluate and improve | | • Design products that have a clear purpose and an intended user.<br>• Make products, refining the design as work progresses.<br>• Use software to design. | • Design with purpose by identifying opportunities to design.<br>• Make products by working efficiently (such as by carefully selecting materials).<br>• Refine work and techniques as work progresses, continually evaluating the product design. | • Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).<br>• Make products through stages of prototypes, making continual refinements. |

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| | | | | • Use software to design and represent product designs. | • Ensure products have a high quality finish, using art skills where appropriate.<br>• Use prototypes, cross-sectional diagrams and computer aided designs to represent designs. |
| **Love the world you live in**<br><br>**Awe & wonder** | Taking inspiration from nature and the world around you<br><br>Taking inspiration from design throughout history<br><br>Respecting the world we live in and understanding its limited resources | | • Explore objects and designs to identify likes and dislikes of the designs.<br>• Suggest improvements to existing designs.<br>• Explore how products have been created. | • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.<br>• Improve upon existing designs, giving reasons for choices.<br>• Disassemble products to understand how they work.<br>• Discuss how design can be used to complement or detract from nature<br>• Discuss how innovation can be used to solve problems and support the natural environment, e.g. the Ocean Cleanup project, wind farms. | • Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.<br>• Create innovative designs that improve upon existing products.<br>• Evaluate the design of products so as to suggest improvements to the user experience.<br>• Understand and discuss the obligations of current generations to find innovative design solutions to safeguard the environment for future generations to come. |