St. Hugh's Catholic Primary School
DT Progression Map

Area of Learning and Development	Aspect	Range 3	Range 4	Range 5	Range 6
Physical Development	**Moving and Handling**	Hands start to operate independently during a task that uses both, with each hand doing something different at the same time (e.g. holding a block in one hand and steadying the other block with the other hand	Shows increasing control in holding, using and manipulating a range of tools and objects Holds mark-making tools with thumb and all fingers	Manipulates a range of tools and equipment in one hand, tools include paintbrushes, scissors, hairbrushes, toothbrush, scarves or ribbons	Uses simple tools to effect changes to materials Handles tools, objects, construction and malleable materials safely and with increasing control and intention

Early Learning Goal: 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 and paint brushes;
- Begin to show accuracy and care when drawing.

Area of Learning and Development	Aspect	Range 3	Range 4	Range 5	Range 6
Understanding the World	Technology	Shows interest in toys with buttons, flaps and simple mechanisms and begins to learn to operate them	Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car	Shows an interest in technological toys with knobs or pulleys, real objects such as cameras, and touch screen devices such as mobile phones and tablets Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images	Uses ICT hardware to interact with age- appropriate computer software

Children require access to a range of technologies, both digital and non-digital in their early lives. Exploring with different technologies through play provides opportunities to develop skills that children will go on to develop in their lifetimes. Investigations, scientific inquiry and exploration are essential components of learning about and with technology both digitally and in the natural world. Through technology children have additional opportunities to learn across all areas in both formal and informal ways. Technologies should be seen as tools to learn both from and with, in order to integrate technology effectively within early years practice.

Area of Learning and Development	Aspect	Range 3	Range 4	Range 5	Range 6
Expressive Arts and Design	**Creating with Materials**	Continues to explore and experiment with an increasing range of media and movement	Uses 3D and 2D structures to explore materials and/or to express ideas	Uses various construction materials, e.g. joining pieces, stacking vertically and	Uses their increasing knowledge and understanding of tools and materials to explore their

St. Hugh's Catholic Primary School
DT Progression Map

		through multi-sensory exploration and expression Notices and becomes interested in the transformative effect of their action on materials and resources		horizontally, balancing, making enclosures and creating spaces Uses tools for a purpose	interests and enquiries and develop their thinking Develops their own ideas through experimentation with diverse materials, e.g. light, projected image, loose parts, watercolours, powder paint, to express and communicate their discoveries and understanding Expresses and communicates working theories, feelings and understandings using a range of art forms, e.g. movement, dance, drama, music and the visual arts

Early Learning Goal: 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.

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing	To work confidently within a range of contexts such as imaginary, story-based, home, school, gardens, playgrounds To state what products they are designing and making To say whether their products are for themselves or others To use knowledge of existing products to help come up with ideas	To describe what their products are for To say how their products will work To say how they will make their products suitable for their intended users To use simple design criteria to help develop their ideas To model ideas by exploring materials, components and construction kits and by	To gather information about the needs and wants of particular individuals and groups To develop their own design criteria and use these to inform their ideas To generate realistic ideas, focusing on the needs of the user To make design decision that take account of the availability of resources	To work confidently within a range of contexts, such as the home, school, leisure, culture enterprise, industry and the wider environment To describe the purpose of their products To share and clarify ideas through discussion To use annotated sketches, cross-sectional drawings and diagrams to develop and communicate ideas	To indicate how design features of their products that will appeal to intended users To explain how particular parts of their products work To use computer aided design to develop and communicate ideas To generate innovative ideas, drawing on research	To carry out research, using surveys, interviews, questionnaires and web-based resources To identify the needs, preferences and values of particular individuals and groups To develop a simple design specification to guide their thinking To make design decisions, taking account of constraints such as time, resources and cost

St. Hugh's Catholic Primary School
DT Progression Map

	To develop and communicate ideas by talking and drawing To generate ideas by drawing on their own experiences	making templates and mock ups To use information and communication technology, where appropriate, to develop and communicate ideas				
Making	To plan by suggesting what to do next To follow procedures for safety and hygiene To use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components	To select from a range of tools and equipment, explaining their choices To select from a range of materials and components according to their characteristics To measure, mark out, cut and shape materials and components To assemble, join and combine materials and components To use finishing techniques including those from art and design	To order the main stages of making To select tools and equipment suitable for the task To use a wider range of materials and components than KS1 including, construction materials, kits, textiles, food ingredients To measure, mark out, cut and shape materials and components with some accuracy	To explain their choice of tools and equipment in relation to the skills and techniques they will be using To explain their choice of materials and components according to functional properties and aesthetic qualities To follow procedures for safety and hygiene To assemble, join and combine materials and components with some accuracy To apply a range of finishing techniques with accuracy	To produce appropriate lists of tools, equipment and materials that they need To accurately measure, mark out, cut and shape materials and components To accurately assemble, join and combine materials and components To accurately apply a range of finishing techniques	To formulate step-by-step plans as a guide to making To use techniques that involve a number of steps To demonstrate resourcefulness when tackling practical problems
Evaluating	To talk about their design ideas and what they are making	To make simple judgements about their products and ideas against design criteria To suggest how their products could be improved	To refer to their design criteria as they design and make To use their design criteria to evaluate their completed products To investigate and analyse who designed and made the products	To identify the strengths and areas for development in their ideas and products To consider the views of others, including intended users, to improve their work	To evaluate their ideas and products against their original design specification To investigate and analyse how well products work To investigate and analyse how well	To critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make To investigate and analyse how innovative products are

St. Hugh's Catholic Primary School
DT Progression Map

			To investigate where products were designed and made To investigate when and whether products were designed and if they can be reused or recycled	To investigate how well products have been designed To investigate and analyse how well the products have been made To analyse why materials have been chosen To investigate what methods of construction have been used	products achieve their purposes To understand how well products meet users' needs and wants To investigate and analyse how much products cost to make	To investigate how sustainable the materials in products are To investigate and analyse what impact products have beyond their intended purpose
Technical Knowledge	To know about the simple working characteristics of materials and components To know how freestanding structures can be made stronger, stiffer and more stable To know about the movement of simple mechanisms, such as levers and sliders To know the correct technical vocabulary for the projects they are undertaking	To know about the movement of simple mechanisms, such as wheels and axles To know that a 3D textile product can be assembled from two identical fabric shapes To know the correct technical vocabulary for the projects they are undertaking	To understand how mechanical systems e.g. levers and linkages To know how simple electrical circuits and components can be used to create functional products To know how to program a computer to control their products To know how to make strong, stiff shell structures	To know how to use learning from science to help design and make products that work To know how to use learning from maths to help design and make products work To know that materials have both functional properties and aesthetic qualities To know that mechanical and electrical systems have an input, process and output	To know how mechanical systems such as cams or pulleys or gears create movement To know how more complex electrical circuits and components can be used to create functional products	To know how to program a computer to monitor the changes in the environment and control their products To know how to reinforce and strengthen a 3D framework To know that 3D textiles product can be made from a combination of fabric shapes

St. Hugh's Catholic Primary School
DT Progression Map

Cooking and Nutrition	To know where food comes from – all food comes from plants or animals To prepare simple dishes safely and hygienically, without using a heat sources To use techniques such as cutting To name and sort foods into the five groups of the 'eat well' plate	To know where food comes from -food has to be farmed, grown elsewhere (e.g. home) or caught To use appropriate equipment to weigh and measure ingredients To know that everyone should eat at least five portions of fruit and vegetables every day To understand that food ingredients should be combined according to their sensory characteristics	To know that food is grown (such as tomatoes, wheat and potatoes), reared(such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world To know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate To measure using grams	To know that seasons may affect the food available To know that food ingredients can be fresh, pre-cooked and processed To know that to be active and healthy, food is needed to provide energy for the body To follow a recipe	To understand how food is processed into ingredients that can be eaten or used in cooking To know that different foods contain different substances - nutrients, water and fibre - that are needed for health To understand the need for correct storage To measure accurately	To know that a recipe can be adapted a by adding or substituting one or more ingredients To know that recipes can be adapted to change the appearance, taste, texture and aroma To work out ratios in recipes