Beaucroft School DT Overview

Rationale: At Beaucroft School, it is our vision for every student to engage, enjoy and achieve, developing self-esteem and resilience in preparation for adulthood. We want our Beaucroft community to **THRIVE** and be **T**houghtful and caring **H**appy and Safe **R**esilient **I**ndependent **V**alued **E**mpowered. Through our teaching of Design and Technology, we want to inspire our pupils to use their imagination to solve real life, practical problems. We want to prepare our pupils for a healthy lifestyle with an understanding of where their food comes from and what their body needs.

	Topic Knowledge	Skills Progression	Curriculum Sequence
Early Years	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.	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 Choose the right resources to carry out their own plan. Use one-handed tools and equipment Make imaginative and complex 'small worlds' with blocks and construction kits, Develop their own ideas and then decide which materials to use to expressthem. Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	Topic related 3D model making, using junk, fabrics, clay, wood, glue, paint. Sensory play Forest School Lego and brick model building. Wooden train set and construction toys. Develop design related knowledge and vocabulary
Juniors	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 relevant contexts for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment.	Pupils can generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology . Pupils can select and use materials, components,tools and equipment. Pupils can explore and evaluate a range of existing products. Pupils can build structures, and use mechanisms for example, levers, sliders, wheels and axles, in their products	Topic related 3D model making, using junk, fabrics, clay, wood, glue, paint. Sensory play Forest School Lego and brick model building. Wooden train set and construction toys. Develop design related knowledge and vocabulary ICT art and design programmes e.g. Busy Things
Middle	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 relevant contexts for example, the home, school, leisure, culture, enterprise, industry and the wider environment.	Pupils use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. Pupils can generate, develop, model and communicate their ideas through discussion, drawing and using digital media. Pupils can select and use a wider selection of materials, components,tools and equipment. Pupils can explore and evaluate a range of existing products. Pupils can understand and use electrical systems in their products for example, series circuits incorporating switches, bulbs, buzzers and motors.	Topic related 3D model making, expanding methods of construction and materials. Trips and experiences of local places, art and design. Residentials Forest School Forces, motion and magnets
Seniors	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 domestic and local contexts for example, the home, health, leisure and culture, and industrial contexts for example, engineering, manufacturing, construction, food, energy, agriculture (including horticulture) and fashion.	Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools. Pupils select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. Pupils select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties. Pupils can understand and use the properties of materials and the performance of structural elements to achieve functioning solutions.	Topic related 3D model making, expanding methods of construction and materials. Trips and experiences of local places, art and design. Residentials College experiences Increased ICT skills Mini Enterprise Forest School Links with science learning about gears, pulleys, cams, levers and linkages also Electrical circuits, lights, motors and buzzers. Links to accreditation through Functional Skills and ASDAN