

# The Beacon Centre

## Art/Design and STEM

Design and technology is a practical and valuable subject. It enables students to actively contribute to the creativity, culture, wealth and well-being of themselves, their community and their nation. It teaches how to take risks and so become more resourceful, innovative, enterprising and capable. Design and Technology is about providing opportunities for students to develop their capability. By combining their design and making skills with knowledge and understanding they learn to create quality products. D&T is often one of a student's favorite subjects. Students like making decisions for themselves and doing practical work. They love creating products they can see, touch – and even taste – for themselves. They feel proud to have done so. D&T brings learning to life. It is a motivating context for discovering literacy, mathematics, science, art, PSHE and ICT.

Long Term overview of the topics that each class will study during each half term.					
	Key Stage 3b	Key Stage 3a	Year 10	Year 11	Green Room
Autumn 1	Art Drawing and Colour. Line, shape, tone, pattern, shading techniques, form. Shading techniques, use of tone and varied tone, tonal changes etc. Composition, presentational skills Colour Wheel - primary, secondary, tertiary colours. Colour mixing and blending and colour schemes. Mixing colour, knowledge of colour schemes, composition, and use of IT to research categories of colour. Annotation to describe developments and demonstrate knowledge	Art Drawing and Colour. Line, shape, tone, pattern, shading techniques, form. Shading techniques, use of tone and varied tone, tonal changes etc. Composition, presentational skills Colour Wheel - primary, secondary, tertiary colours. Colour mixing and blending and colour schemes. Mixing colour, knowledge of colour schemes, composition, and use of IT to research categories of colour. Annotation to describe developments and demonstrate knowledge			
Autumn 2	Textiles NC- Focus on – KS3 Design and Technology Design- develop specifications to inform the design of innovation, functional, appealing products that respond to needs in a variety of situations Make- select from and use tools, techniques, processes and	Textiles NC- Focus on – KS3 Design and Technology Design- develop specifications to inform the design of innovation, functional, appealing products that respond to needs in a variety of situations Make- select from and use tools, techniques, processes and			

	equipment Evaluate- - understand developments in design and technology, its impact on individuals, society and the environment. Technical Knowledge- Understand and use the properties of materials	equipment Evaluate- - understand developments in design and technology, its impact on individuals, society and the environment. Technical Knowledge- Understand and use the properties of materials			
Spring 1	Food Technology In class cooking Foodwise NC- Focus on - Cooking and Nutrition - Cook a repertoire of savoury and sweet dishes so they can feed themselves and others - become confident in a range of cooking techniques. - understand the source, seasonality and characteristics of a broad range of ingredients	Food Technology In class cooking Foodwise NC- Focus on - Cooking and Nutrition - Cook a repertoire of savoury and sweet dishes so they can feed themselves and others - become confident in a range of cooking techniques. - understand the source, seasonality and characteristics of a broad range of ingredients			
Spring 2	Woodwork NC- Focus on – KS3 Design and Technology Design- develop specifications to inform the design of innovation, functional, appealing products that respond to needs in a variety of situations Make- select from and use tools, techniques, processes and equipment Evaluate- - understand developments in design and technology, its impact on individuals, society and the environment. Technical Knowledge- Understand and use the properties of materials	Woodwork NC- Focus on – KS3 Design and Technology Design- develop specifications to inform the design of innovation, functional, appealing products that respond to needs in a variety of situations Make- select from and use tools, techniques, processes and equipment Evaluate- - understand developments in design and technology, its impact on individuals, society and the environment. Technical Knowledge- Understand and use the properties of materials			
Summer 1	The environment What makes a city? What are the individual characteristics of a city? Students explore a chosen aspect of the city.	The environment What makes a city? What are the individual characteristics of a city? Students explore a chosen aspect of the city.			

Summer 2	Photography Looking at the work of others. Students need to know how to investigate, analyse and evaluate the work of others. Understand how investigating the work of other designers and design companies can inform designing	Photography Looking at the work of others. Students need to know how to investigate, analyse and evaluate the work of others. Understand how investigating the work of other designers and design companies can inform designing			
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Potential qualifications that can be achieved in this subject area:

GCSE, BTEC, Cambridge National, ASDAN, Functional Skills, Entry Level Certificate