WHOLE SCHOOL OVERVIEW

DESIGN TECHNOLOGY

		Autumn	Spring	Summer
Cycle A	EY	**Harvest**	**Journeys**	**Space**
	Y1/2	**Cut, Stitch & Join** Sewing	**Wheeled Vehicles** Woodwork, Axles	**Shelter and Shade** Structures
	Y3/4	**Making It Move** Cam mechanisms	**Cook, Well, Eat Well** Food	**Tomb Builders** Pullies and Levers
	Y5/6	**Make Do & Mend** Sewing	**Architecture** Structures & support mechanisms	**Eat the Seasons** Food
Cycle B	EY	**Food & Farms**	**Castles**	**Pirates**
	Y1/2	**Remarkable Recipes** Food	**Push & Pull** Mechanisms – Moving Greetings card	**Beach Huts** Woodwork
	Y3/4	**Greenhouse** Woodwork	**Light Up Signs** Electronics	**Functional & Fancy Fabrics** Sewing
	Y5/6	**Moving Mechanisms** Pneumatic Systems	**Fairground** Electronics	**Engineer** Bridges Transporter

	Cycle A		
	Autumn	**Spring**	**Summer**
Early Years	**Harvest**	**Journeys**	**Space**
	1. Where do fruit and vegetables come from? 2. What is growing in Wolviston allotments?	1. How can we build a vehicle to go on a journey?	1. How can we build a rocket / spaceship to fly to the moon?
Year 1/2	**Cut, Stitch & Join** Sewing	**Wheeled Vehicles** Woodwork, Axles	**Shelter and Shade** Structures
	1. What are some everyday products made from fabric? 2. Who is Cath Kidston? 3. What is a sewing pattern? 4. Can you use running stitch to join? 5. What are embellishments? 6. What will be your bag tag design? 7. How successful was your finished bag tag?	1. How do wheels work? 2. What will be your vehicle design? 3. How do we use tools safely? 4. How successful was your wheeled vehicle?	1. What is a shelter? 2. What materials are shelters made from? Why? 3. What will be your shelter design? 4. Can you build a sturdy shelter? 5. What will be your play den design? 6. How successful was your play den ?
Year 3/4	**Making It Move** Cam Mechanisms	**Cook, Well, Eat Well** Food	**Tomb Builders**
	1. What are mechanisms and how do they work? 2. What are cam mechanisms? 3. How do different shaped cams effect movement? 4. How will your automoton toy work and be finished? 5. Making an automoton toy 6. Can you give feedback to a friend about their automaton toy?	1. What is a healthy, balanced diet? 2. How can we cook potatoes? 3. How do we make ratatouille? 4. Can you design a Taco filling to meet design criteria? 5. Can you prepare food safely and hygienically? 6. How well did your taco meet the design criteria?	1. How do machines make life easier? 2. How does the strength or the direction of the force changes when a simple machine is used? 3. What materials will you choose for your machine? Why? 4. Can you create a prototype for your machine? 5. How would your machine help the Egyptian pyramid builders?
Year 5/6	**Make Do & Mend** Sewing	**Architecture** Structures & Support Mechanisms	**Eat the Seasons** Food
	1. What was the Make Do and Mend campaign? 2. How is clothing constructed? 3. What different times of stitching can you use to join material? 4. How will you repair your garment? 5. Do you think your item is practical and useful?	1. How have buildings developed over time? 2. What are the main features of Greek architecture? 3. How can support, stiffness and stability be created in structures? 4. Can you use CAD software to design a Greek temple? 5. How did you support, stabilise and stiffen your building design?	1. What are the benefits of seasonal eating? 2. What fruit and vegetables are currently in season? 3. Can you prepare food safely and hygienically? 4. What improvements could you make to your soup?

	Cycle B		
	Autumn	**Spring**	**Summer**
Early Years	**Food and Farms**	**Castles**	**Pirates**
	1. What food do we get from animals? 2. What grows on a farm?	1. How could we build a castle for a king or queen?	1. How could we build a pirate ship that floats?
Year 1/2	**Remarkable Recipes** Food	**Push & Pull** Mechanisms – Moving Greetings card	**Beach Huts** Woodwork
	1. Where does our food come from? 2. Which tool would you use ? 3. Why do we cook our food? 4. What is a recipe? 5. Can you plan a healthy school meal? 6. Can you follow a recipe? 7. Did the meal fulfil the design criteria?	1. What are machines? 2. What is a slider mechanism? 3. What is a lever mechanism? 4. What is a linkage mechanism? 5. Which part of your greeting card will move? How? 6. How can you improve your design?	1. What are the features of a beach hut? 2. How can we strengthen and join materials? 3. How can wood be joined to make a structure? 4. What are the design criteria for your beach hut? 5. Can you construct a box frame from wood? 6. How successful was your beach hut?
Year 3/4	**Greenhouse** Woodwork	**Light Up Signs** Electronics	**Functional & Fancy Fabrics** Sewing
	1. What are the key features and benefits of a greenhouse? 2. What are some similarities / differences between significant greenhouse designs? 3. How do diagonal struts strengthen a structure? 4. What are the benefits of using a hot glue gun in woodwork? 5. What are the most appropriate materials for a greenhouse roof/wall? 6. What are the 4 design criteria for a mini-greenhouse? 7. What improvements/ changes can you make ?	1. What is an illuminated sign & how do they work? 2. How can LEDs be used to illuminate a sign? 3. How can an illuminated sign be made to look more attractive? 4. What materials will you need to make an enclosure for a decorative sign? 5. How will you fit a circuit inside your design? 6. How can computers be used to program & control lights in a product?	1. What is fabric? 2. Who was William Morris and why is he significant ? 3. What are motifs? 4. What is a block print? 5. What is a hem? 6. What are embellishments ? 7. What are the main elements of your printed fabric design?
Year 5/6	**Moving Mechanisms** Pneumatic Systems	**Fairground** Electronics	**Engineer** Bridges Transporter
	1. Why are pneumatics used in heavy lifting equipment? 2. How can you make a box talk? 3. Can you design a prototype machine that makes life easier or more comfortable around the home? 4. Can you make a pneumatic machine prototype? 5. What changes would you make to the finished product?	1. How do different fairground rides move? 2. How can electrical motors be used to make rotating parts? 3. How can you strengthen a framework in a protype? 4. Can you design a rotating fairground ride? 5. Can you use a range of tools and electronic circuit to create a fairground ride model? 6. How successful is your finished model? What changes would you make?	1. How have bridges improved the lives of people in the UK? 2. What are the 4 main types of bridge? What bridge types are in our locality? 3. How can we strengthen a paper bridge? 4. Can you work as part of a group to design a bridge prototype? 5. Can you use the iterative design process to build your protype bridge? 6. What changes did you make during the iterative design process?