Wilbury Design and Technology Overview - Composite Knowledge

	Autumn	Spring	Summer
EYFS	Can we explore and use a range of materials, tools (including scissors, hammers and saws) and techniques safely? Can we experiment with colour, design, texture, form and function? Why is it important to make healthy food choices? Where do vegetables come from?		
Year 1	**Sliders and Levers** What is a slider? What is a lever? Which part of the mechanism is a pivot?	**Freestanding structures** What is a freestanding structure? How can we stop freestanding structures from falling over? How can we make a structure stronger, stiffer and more stable?	**Freestanding structures** What is a freestanding structure? How can we stop freestanding structures from falling over? How can we make a structure stronger, stiffer and more stable?
Year 2	**Templates and Joining** What is a template? What is a joining technique?	**Preparing fruit and veg** What is a balanced diet? Why is it good to eat a balanced diet? What do we need to do before we can eat fruit and veg?	**Wheels and axles** What is an axle? What is a chassis? How do wheels and axles work together to help things move?
Year 3	**Shell structures** How can we construct strong, stiff shell structures? How can we use a net to effectively make a 3D shape?	**2D Shape to 3D shape** How can we securely join two pieces of fabric together? How can we strengthen, stiffen and reinforce existing fabrics?	**Healthy and varied diet** What equipment and resources do we need to use to combine and prepare food? How can we prepare food hygienically? Why do we follow instructions when cooking? How can we prepare food safely?
Year 4	**Simple Programming and Control** What is a program? How can we create a simple program? How can we create a program with a control aspect?	**Healthy and Varied diet** What are culture and seasonality? What different techniques can we use? How can we understand the nutritional value of a product? What functions do different utensils have?	**Shell Structures** What is a shell structure? How can we join our shell structure? What is triangulation and how does it help?
Year 5	**Frame Structures** What is a frame structure? How can we join our frame structure? What is triangulation and how does it help?	**Combining different fabric shapes** How can we combine different fabric shapes? What impact have different designers had on fabrics and products? How can we strengthen/stiffen a product?	**Celebrating culture and seasonality** What are culture and seasonality? What different techniques can we use? How can we understand the nutritional value of a product? What functions do different utensils have?

Wilbury Design and Technology Overview - Composite Knowledge

Year 6	**Monitoring and control** Why do we use computer control programs to operate products? What are the advantages of using computer control?		**Pulleys or gears** How do gears help to change the speed or direction of movement of an object? What are the inputs, processes, and outputs for a particular object?