DT Curriculum

Year 1 - Year 1 - DT Planners						
Topic: Mechanisms - Sliders and Levers			Key Question: How can I make a product move?			
Term: Spring	KQ1 Where can we find examples of moving parts - inc. sliders and levers?	KQ2 What different examples are there of sliders and levers?	KQ3 How will your design include a moving part?	KQ4 Which materials will you use to make your moving part?	KQ5	KQ6
Topic: Textiles - Templates and Joining			Key Question: Who is my puppet for?			
Term: Summer	KQ1 How are different materials and fabrics joined?	KQ2 What is a template and are all fabrics the same?	KQ3 How will I join the materials in my design?	KQ4 Does my product match my design?	KQ5 Does my final product match the intended purpose?	KQ6

Year 2 - Year 2 - DT Planners						
Topic: Mechanisms - Wheels and axles			Key Question: Does a wheel need an axle?			
Term: Autumn	KQ1 Where can I find examples of wheels and axles?	KQ2 Which materials are best? Can I make a product that moves?	KQ3 Who am I designing my product for?	KQ4 Which tools will I need to assemble my product?	KQ5 Does my final product meet the needs of the user?	KQ6
Topic: Structures - Freestanding structures			Key Question: Will my Bug Hotel stand up?			
Term: Summer	KQ1 What structures can we find around the school?	KQ2 What does a good bug hotel need?	KQ3 Which materials will you need to construct your bug hotels?	KQ4 How effective is your bug hotel?	KQ5	KQ6
Topic: Food - Preparing fruit and vegetables			Key Question: What makes a tasty healthy snack?			
Term: Spring	KQ1 What different types of fruit and vegetables do we know and where do they come from?	KQ2 What will you include in your product eg fruit/vegetable kebabs? Why?	KQ3 What utensils will you use to prepare each food item?	KQ4 What did you think about your final product?	KQ5	KQ6

Year 3 - Year 3 - DT Planners						
Topic: Mechanisms - Levers and Linkages			Key Question:What is the difference between a lever and a linkage?			
Term: Autumn 2	KQ1 What existing products show oscillating and reciprocating movement?	KQ2 What skills do I need in order to make my own linkage and lever example?	KQ3 Does my design meet the needs of the user?	KQ4 What are the key stages in assembling my product?	KQ5 Is there anything that I would change in my design based on feedback?	KQ6
Topic: Food - Healthy and varied diet			Key Question: How can my food product provide a healthy and balanced diet?			
Term: Spring 2	KQ1 Is all our lunch box food healthy?	KQ2 Where does the food in our lunch box come from?	KQ3 What do I need to consider in my design to make a healthy food product?	KQ4 What utensils will I need to prepare my product?	KQ5 How can feedback help to improve my product?	KQ6
Topic: Structures - Shell Structures			Key Question: Forest - Making a mini greenhouse - Spring cc links science			
Term: Summer	KQ1 What makes a good structure?	KQ2 What skills and techniques do I need to enable me to assemble nets?	KQ3 How can I strengthen my structure?	KQ4 Who is the intended user of my design and what materials are best?	KQ5 Are all structures assembled in the same way?	KQ6

Year 4 - Year 4 - DT Planners							
Topic: Mechanisms - Pneumatics			Key Question: What do all pneumatic systems need?				
Term: Spring	KQ1: What is a pneumatic system?	KQ2: What skills do I need to assemble a simple pneumatic system?	KQ3: Who is my final product going to be for?	KQ4: What techniques will I use when assembling my product?	KQ5: Is your final product safe and practical to use?	KQ6:	
Topic: Textiles - 2D shape to 3D product			Key Question: How do 2D shapes help with my 3D product?				
Term: Autumn	KQ1: How have existing products been made?	KQ2: Which fabrics are best and how can I join them?	KQ3: What will the purpose of my product be?	KQ4: How will templates help me to make my product?	KQ5: Did my product meet the intended purpose?	KQ6:	KQ7:

Topic: Electrical Systems - Simple Circuits and Switches				Key Question: How do I make a safe electrical product?			
Term: Summer	KQ1: What does a switch do (in existing electrical products)?	KQ2: In my circuit, what is an input and what is an output and where might faults occur?	KQ3: How many different switches can I make?	KQ4: How will my design incorporate a simple circuit and a switch?	KQ5: Do the electrical components in my final product work?	KQ6: Does my final product match my initial design?	KQ7:

Year 5 - Year 5 - DT Planners						
Topic: Mechanical Systems - Pulleys and Gears			Key Question: Why do we need pulleys and gears? cc Forest			
Term: Spring	KQ1: What are pulley and gear systems?	KQ2: Which are the best materials to use to construct a simple gear/pulley system?	KQ3: How can product research help with the design of your product?	KQ4: What tools will you use to make your final product?	KQ5: Have you met the expectations that were set based on your initial research?	KQ6:
Topic: Structures - Frame structures			Key Question: How can we make a structure stronger?			
Term: Summer	KQ1: What materials have been used to create existing Frame structures?	KQ2: What techniques can we use to reinforce frameworks?	KQ3: What product will you design to meet the criteria?	KQ4: What materials will you use to build your prototype?	KQ5: What changes will you make based on your prototype design?	KQ6:
Topic: Food and Nutrition - Celebrating culture and seasonality			Key Question: What do we need to think about when creating a food product for a specific occasion?			
Term: Autumn	KQ1: What existing food products are there that celebrate culture and seasonality?	KQ2: How could we evaluate ingredients that could be added to basic recipes?	KQ3: What techniques do I need to make a simple dough including ratios?	KQ4: Does my design meet the design criteria?	KQ5: What are the steps needed in order to make my final product?	KQ6: Does my final product meet the intended purpose?

Year 6 - Year 6 - DT Planners

Topic: Mechanical Systems - Cams				Key: Which cam system is best?		
Term: Autumn	KQ1: What are Cams?	KQ2: What tools do we need to make different cams?	KQ3: What ideas would incorporate a cam mechanism?	KQ4: What will your step-by-step plan be in order to make your product?	KQ5: Have I made my product aesthetically pleasing?	KQ6: How will feedback from my peers help to improve my product?
Topic: Textiles - Combining different fabric shapes				Key Question: What makes a product unique?		
Term: Summer	KQ1: What is the purpose of existing products and how have they been constructed?	KQ2 What skills are needed to sew materials together?	KQ3 What skills are needed to sew materials together?	KQ4 How will I join the different materials together in my design?	KQ5 Have I made the right design decisions when creating my final product?	KQ6 Is my final product innovative enough?
Topic: Electrical Systems - Monitoring and Control				Key Question: Question: How can coding help change your electrical system?		
Term: Spring	KQ1: What does a good Easter centrepiece need?	KQ2: How will you use coding to make your centrepiece interactive?	KQ3: How will you check that your code works?	KQ4: What materials will you use to construct your centrepiece?	KQ5: How effective is your electronic system?	KQ6