

Subject	Design and Technology	Year Group	7
	Half of Carousel rotation - Approx 6-7 weeks	Half of Carousel rotation - Approx 6-7 weeks	
Scheme title	D&T Materials - Using timbers to make a picture frame	D&T Textiles - Using fibres to make a hat	
Purpose of scheme	The purpose of this scheme is to introduce pupils to the secondary school workshop environment. This includes learning how to remain safe and keep others safe, and how to use select pieces of machinery and handtools safely. Pupils need to feel safe in order to build their confidence and accuracy, in a subject which some pupils may have very little experience with. This scheme will introduce pupils to the project style learning undertaken and the key assessment pieces, will remain the same in year 8 and 9 also. For this project we have selected timber as our focus material, meaning pupils will be given the opportunity to experience the working properties of timber, and produce a useful product which they'll be able to take home. In addition to the working properties, pupils will also learning the theoretical properties of the selected material.	The purpose of this scheme is to introduce pupils to the secondary school textiles workshop environment. This includes learning how to remain safe and keep others safe, and how to use select pieces of machinery and handtools safely. Pupils need to feel safe in order to build their confidence and accuracy, in a subject which some pupils may have very little experience with. This scheme will introduce pupils to the project style learning undertaken and the key assessment pieces, will remain the same in year 8 and 9 also. For this project we have selected textiles as our focus material, meaning pupils will be given the opportunity to experience the working properties of textiles, and produce a useful product which they'll be able to take home. In addition to the working properties, pupils will also learning the theoretical properties of the selected material.	
Knowledge in sequence	Pupils will learn about the raw source of the chosen material. They will learn how it is extracted and processed and the variety of different types used. They will also learn about the environmental impact of using timber as a material, including terms such as sustainability and deforestation. Pupils will learn about general workshop safety and how to use each particular tool and machine safely and which and when PPE is required. Pupils will then learn how to cut and use lap joints as a joining method understanding the importance of accuracy. In addition pupils will learn how a vacuum former works and how to design drawings for the laser cutter. Pupils will learn the importance of and how to keep log of practical work through a manufacturing diary and learn how to reflect of manufacturing through product evaluation.	Pupils will learn about the raw source of the chosen material. They will learn how it is gathered and processed and the variety of different types produced. They will also learn about the environmental impact of using synthetic fibres as a material, including terms such as sustainability. Pupils will learn about general workshop safety and how to use each particular tool and machine safely. Pupils will then learn how to cut fabric and produce seams, in order to understanding the importance of accuracy. Pupils will learn the importance of and how to keep log of practical work through a manufacturing diary and learn how to reflect of manufacturing through product evaluation.	
Skills	In no particular order, pupils will learn the following skills; Measuring and cutting wood accurately, measuring carving out a lap joint, using masking tape to clamp wood when glueing, using a pillar drill, using 2Design, problem solving, and analytical skills.	In no particular order, pupils will learn the following skills; Safe use of the fabric shears, pins and seam strippers. Measuring and cutting fabric accurately, cutting then positioning appliques pieces, develop committent skills with the sewing machine, problem solving, and analytical skills.	
Key words	Timber, sustainability, hardwood, softwood, manufactured board, lap joint, tenon saw, bench hook, tri square, CAD/CAM, Evaluation, Manufacturing, Evergreen, PPE	Textiles, Fibres, Sustainability, Cellulose, Protein, Synthetic, Seam allowance, Seam, Applique, Shears, Client, Evaluation, Manufacturing,	
End point	By the end of this project, pupils should know the basic safety rules when working in the school workshop. They should know the different categories of timber and be able to identify some individual types. Pupils should be able to independently use the tools and machines related to the scheme. Pupils will recognise the importance of computers when using CAD/CAM and have a basic understand of how 2D is navigated and programmed. Pupil will be more confident in secondary D&T practical setting which will contribute majorly to their development for the rest of the Key stage.	By the end of this project, pupils should know the basic safety rules when working in the school workshop. They should know the different categories of textiles and be able to identify some individual types. Pupils should be able to independently use the tools and machines related to the scheme. Pupil will be more confident in secondary D&T practical setting which will contribute majorly to their development for the rest of the Key stage.	
Assessment Methods	Key assessment pieces includes design, manufacturing , literacy (Usually in the form or evaluation or analysis) and technical assessment (Socratic online assessment assessing theoretical understanding of the chosen materials and its processes.)	Key assessment pieces includes design, manufacturing , literacy (Usually in the form or evaluation or analysis) and technical assessment (Socratic online assessment assessing theoretical understanding of the chosen materials and its processes.)	