	Year 7 Summer Term	**Pathway 2/3/4**	**Subject: Design Technology (Resistant Materials) To Design and make a linkage toy and Mechanical picker using linkages and levers.**
Learning Intention: Woods categories and Processes This Unit will re introduce students to the workshop and run through the basic health and safety requirements in the workshop as well as using basic tools. The main project is to make a linkage toy and a mechanical picker using linkages'. With the introduction to the 3 types of levers and how pivots work to make linkages.			
Key knowledge that should be learned during this SoW	All (Pathway 2)	Most (Pathway 3)	Some (Pathway 4)
Concept:	To Understand the concept of levers and linkages in mechanisms		
Knowledge:	All students should be able to understand the health and safety rules. With support All students will be able to use the tools for the project safely. All students will learn about the different classes of levers and what a linkage is. All students will be able to construct a linkage toy which is a focused	Most students will be able to understand and use the health and safety rules for the workshop. Most Students will be able to use and name the tools safely. Most students will learn about the 3 classes of levers and be able to name them and what a linkage Most students will be able to construct the linkage toy a FPT .With	Some students can understand health and safety rules for the workshop and explain and put them into action independently.me independently. Some Students will be able to use and name what each tool is used for including safety procedures independently. Some students will learn about the 3 types of levers and their names and

	practical task and the construction of their mechanical picker. With support.	little assistance following the diagram and prompting.	what they are used for as well as how this relates to linkages. Some students will be able to complete the FPT independently using the instructions and make their picker project with little help.
Key Skills:	To know the main safety rules and how to use the tools safely. To know the names of the materials being used. To know the names of 2 types of levers To know the names of some of the different tools to be used. To be able to assemble component parts of the toy and picker	To know all the main safety rules for the workshop and safety protective equipment and how to use the tools safely. To know the names of the materials being used for both projects To know the names of the tools for this project and what they are used for. To know how to use a coping saw tenon saw ,clamp and cordless drill To assemble and know the names of the parts for the toy and picker as well as understanding why they work.	To know all the main safety rules for the workshop and safety protective equipment and how to use the tools safely. To know the names of the materials To know the names of the tools for this project and what they are used for. To know how to use a coping saw ,tenon saw, clamp cordless drill To be able to assemble the linkage toy using the components independently. The construction of the picker being able to mark out and cut all the parts and assemble the picker by bending the wire and drill all pivots.

Language and/or communication skills:	Be able to name following words Safety rules. Apron ,goggles, hard shoes, ear defenders, Gloves. Coping saw, bench hook,G clamp, screwdriver vice steel ruler cordless drill. MDf dowel.pine copper wire.	Be able to list the tools with uses of the tools. Safety rules. Apron ,goggles, hard shoes, ear defenders, Gloves. Coping saw, bench hook, g clamp ,screwdriver vice steel ruler cordless drill . MDf dowel.pine copper wire.	Be able to list the tools with uses of the tools and materials . Safety rules. Apron ,goggles, hard shoes, ear defenders, Gloves. Coping saw, bench hook, g clamp ,screwdriver vice steel ruler cordless drill . MDf dowel.pine copper wire.
Curricular Links	Links to other learning within the subject are: Science ,maths		