



**Year 7
Spring Term**

Pathway 2/3/4

**Subject: Design Technology (Resistant Materials)
Recap to Workshop Health and Safety and
JitterBug project**

Learning Intention: Woods categories and Processes This Unit will re introduce students to the workshop and run through the basic health and safety. The main project is to make a small electronic bug that vibrates to move. So this will be an introduction to electronic components and soldering depending on the group and further use of coping saw.

Key knowledge that should be learned during this SoW

All (Pathway 2)

Most (Pathway 3)

Some (Pathway 4)

Concept:

To understand the health and safety rules of the workshop

To learn about basic electronic components and how a circuit works in DC making examples of circuits with components. To achieve this students will design and make a vibrating jitterbug in MDF and certain components.

Knowledge:

All students should be able to understand the health and safety rules .

All students will be able to use the tools safely.

All students will make 1 design of there bug

All students will learn about basic electronic components. And how to

Most students will be able to understand the health and safety rules for the workshop

Most Students will be able to use and name the tools safely.

Most students will be able to make 2 design ideas of their bug.

Most students will learn about basic electronic components needed for

Some students can understand health and safety rules for the workshop and explain them

Some Students will be able to use and name what each tool is used for including safety procedures independently. the tools safely.

Some students will make 4 design ideas for there bug.

	<p>make a simple circuit with support.</p> <p>All students will be able to construct a working jitterbug with assisted use of the coping saw. complete support.</p>	<p>the jitterbug and cut out the shapes and to make a simple circuit with a little support.</p>	<p>Some students will learn about basic electronic components and name the ones needed for the jitterbug and cut out the shapes and to make a simple circuit independently.</p>
<p>Key Skills:</p>	<p>To know the main safety rules and how to use the tools safely.</p> <p>To know the names of the electronic components and make a simple circuit</p> <p>To know the names of some of the different tools to be used.</p> <p>To know how to use a coping saw</p>	<p>To know all the main safety rules for the workshop and safety protective equipment and how to use the tools safely.</p> <p>To know the names and what the electronic components do and make a simple circuit with a switch.</p> <p>To know the names of the tools for this project and what they are used for.</p> <p>To know how to use a coping saw and cordless drill</p> <p>To assemble the jitterbug.</p>	<p>To know all the main safety rules for the workshop and safety protective equipment and how to use the tools safely.</p> <p>To know the names and what the electronic components do and make a simple circuit with a switch.</p> <p>To know the names of the tools for this project and what they are used for.</p> <p>To know how to use a coping saw and cordless drill</p> <p>To assemble the jitterbug.</p>
<p>Language and/or communication skills:</p>	<p>Safety rules. Apron ,goggles, hard shoes, ear defenders.</p> <p>Coping saw, bench hook,G clamp, screwdriver vice steel ruler cordless drill.</p>	<p>Electronic components</p> <p>Motor,wires,eccentric cam ,batteries,battery pack,screws, motor clip ,connector bar. wires</p>	<p>Mdf Dowel</p>

Curricular Links

Links to other learning within the subject are: Science ,maths