



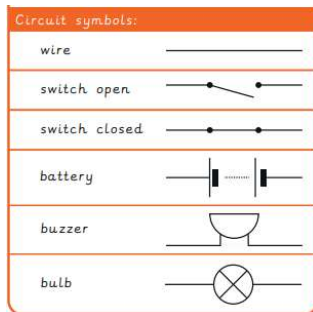
Subject: DT

Year group: 6 Term: Autumn

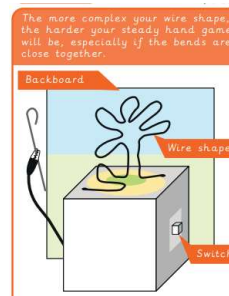
Title: Electrical Systems – Steady hand games

**What should I already know?**

- How to make a simple circuit.
- Circuit symbols.
- Understand that mechanical and electrical systems have an input, process and output with electrics used to make functional products.

**Facts I will learn**

- How to identify components in a steady hand game.
- How to describe the function of each component in the circuit.
- How to make and test a functioning circuit and assemble it within the case.

**Key questions**

- Why is it essential that form follows function?
- Can a toy (product) have more than one function?
- What makes the buzzer sound? (When the handle touches the wire, it closes the circuit, which allows the electricity to flow into the buzzer and make a noise).
- What are design criteria for?
- In what ways could we change the difficulty of this toy?


**Key Skills**

- To investigate and analyse a range of existing products
- To model ideas through prototypes.
- To select from and use a wide range of tools and equipment to perform practical tasks.
- To understand and use electronics in products.

**Experiences that school will provide**

Analysing existing steady hand games.  
Making a circuit using a buzzer.  
Designing and making a steady hand game.

Key vocab	Definition
circuit	A collection of components that make an electrical system.
conductor	A material that allows electricity to flow through it.

<ul style="list-style-type: none"> <li>• To develop design criteria to inform design and functionality.</li> <li>• To evaluate ideas and products against a success criteria and consider the views of others to improve work.</li> </ul>		insulator	A material that does not allow electricity to flow through it.
		series circuit	A closed circuit where the current only follows one path.
		function	How an object or product operates or works.
<p style="text-align: center;"><b>Web links</b></p> <p><a href="https://www.bbc.co.uk/bitesize/topics/zj44jxs/articles/zhkgvwx">https://www.bbc.co.uk/bitesize/topics/zj44jxs/articles/zhkgvwx</a> (What are conductors and insulators?)</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/zj44jxs/articles/zqryn9q">https://www.bbc.co.uk/bitesize/topics/zj44jxs/articles/zqryn9q</a> (Circuit symbols)</p>		prototype	A simple model that lets you test out your idea. How it will look and work.
	<p style="text-align: center;"><b>Experiences that could be provided at home</b></p> <p>Playing steady hand games. Evaluating products and considering how they could be improved.</p>		