

# Year 6 Design Technology: Fairground Rides (Autumn 2)

**Prior Learning:** This unit consolidates previous experiences of simple mechanical systems as well as work incorporating simple electrical circuits and switches.

Building on previously taught skills, precise ‘measuring’, ‘cutting’ and ‘joining’ skills are developed to create a fairground ride with a specific audience in mind. We will further develop our understanding of circuits from Year 4 to allow our fairground rides to move on their own. Through focused tasks, we will learn about different sized ‘gears’, investigate ‘direction’ and ‘speed of rotation’, and build working circuits. We will develop ‘measuring’, ‘marking’, ‘cutting’, ‘shaping’ and ‘joining’ skills using a range of tools as appropriate.



**1. TWAL: To consider how fairground rides have developed over time**

We will discuss fairground rides and compare early and contemporary examples. We will investigate how the rides turn and how the mechanisms work. We will categorise different types of rides.

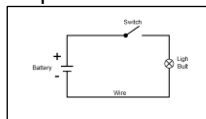


How different mechanisms produce different types of movement.



**2. TWAL: To explore electrical circuits that make parts move, light up, start/stop and make a sound.**

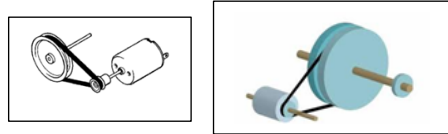
We will explore and construct simple and more complex circuits. We will begin to think about how this relates to fairground rides.



To know and understand the difference between parallel and series circuits.

**3. TWAL: To investigate ways of using electrical motors to create rotating parts.**

We will explore how to make a circuit that powers a motor and a pulley for a ride. We will make circuits that are suitable for different rides.



**4. TWAL: To design a fairground ride that uses electrical components.**

We will discuss and agree design ideas for a fairground ride. We will represent our ideas in drawings and diagrams and add annotations to make our designs clear.



To know how to communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.



**5. TWAL: To Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional fairground ride.**

We will use tools correctly and safely and follow our design making amendments if required. We will work cooperatively as a group and share tasks equally. We will think about the aesthetics of our fairground ride.

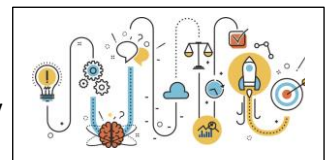


**1. How do we evaluate our work?**

We will evaluate our artwork and decide what we liked, what skills we have learned and what we will improve next time.



Great designers can say what they like and what they would do better next time to fulfil the brief!



**Words we will know!**

