

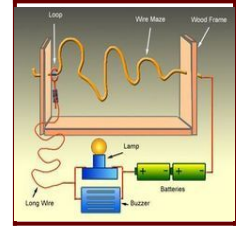
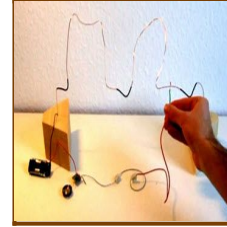
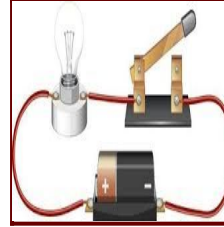


**Aspire Curriculum Knowledge Organiser:
Grand Designs**

Big Question: How does an electrical circuit enhance entertainment?

Year 6

Spring 1



Big Ideas
I can develop ideas from research, interviews or questionnaires.
I can create a design using annotated sketches/pictorial representations, different viewpoints and computer-aided design.
I can independently create a design specification for my design.
I can consider time, resources and cost.
I can create a product that is innovative, functional, appealing and fit for purpose.
I can present my ideas/product using a range of technical language.
I can identify famous designers and critically discuss their impact on the world.

What? Key Knowledge Takeaways
I know the more complex your wire shape, the harder your steady hand game will be, especially if the bends are close together.
I know that 'form' means the shape and appearance of an object.
I understand that 'fit for purpose' means that a product works how it should and is easy to use.
I know that 'form over purpose' means that a product looks good but does not work very well.
I know the importance of 'form follows function' when designing: the product must be designed primarily with the function in mind.

Key Vocabulary	Definition
Circuit	Circular path that electricity flows through
Assemble	Gather together
Purpose	Reason something is being created
Function	Purpose of an object
Insulator	A material which does not easily allow heat and/or electricity to pass through it.
Component	A part of something

Who? Famous People			
Ole Kirk Kristiansen	Sir James Dyson	Michael Faraday	John Spinello
Founder of the LEGO company	Inventor who created new technology to solve everyday problems	Created the first electric motor in 1822	Inventor - Operation Games that tests gross motor and hand eye coordination