



WJS - Knowledge Organiser

Subject	Topic	Year	Term
DT	Light up models	3 & 4	Autumn 1

N.C. Statements	Design Context
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Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts. In addition to this, evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

Light up models are great fun. They appeal to children and grown-ups alike. They vary immensely in terms of sophistication and complexity. The most basic model with a single light can make us smile. The children will be excited by the possibilities they see as they learn how to construct a model with a circuit. This topic will be linked to our core stories The Iron Man and The Whale.

Key Vocabulary	Key Questions	Important Diagrams
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Spelling	Definition	Information
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Circuit	A complete and closed path for electricity to flow through.	Can I understand design specifications and safety?
Design	A plan or drawing used to show the final product outcomes, before it is built or made.	Can I evaluate existing designs?
Component	A part of a whole, especially part of a machine.	Can I design a light up model?
Research	Investigate product needs, materials, use and understand what it is you've been asked to create.	Can I recall electrical knowledge and design a simple circuit?
Evaluate	The process which allows us to decide if our product meets the job it was made to do and if there could be any improvements made to it.	Can I create a step by plan?
Function	An activity that is the purpose of a person or thing.	Can I construct my light up model?
Target market	Who you are intending your product to be made for.	Can I reflect on my successes and give areas for improvement?

Types of Light up model



Health and Safety

- Understanding how to use and carry tools such as scissors, rulers and pencils correctly.
- Using electrical equipment safely.
- Move around the room safely and stay at your workstation wherever possible.