

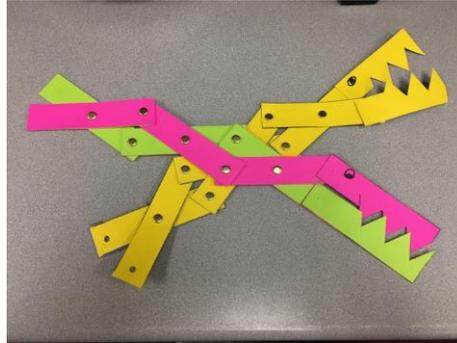


Lowerhouse Junior School

Design & Technology Overview Sheet



Year 3 – Levers and Linkages – make an interactive book



Key Learning: Pupils who are **secure** will be able to:

Levers & Linkages (year 3)

- ● **Develop vocabulary related to the project.**
- **Use mechanical systems such as, levers and linkages.**
- **Cut slots.**
- **Cut internal shapes**

Planning

- Plan a sequence of actions to make a product.
 - Record the plan by drawing using annotated sketches.
 - Use prototypes to develop and share ideas.
 - Think ahead about the order of their work and decide upon tools and materials.
 - Propose realistic suggestions as to how they can achieve their design ideas.
 - Consider aesthetic qualities of materials chosen.

Making

- Prepare pattern pieces as templates for their design.
- Use tools with accuracy.
- Select from techniques for different parts of the process.
- Select from materials according to their functional properties.
- Plan the stages of the making process.
- Use appropriate finishing techniques.

Evaluation – of their finished product.

- Consider and explain how the finished product could be improved.
- Discuss how well the finished product meets the design criteria of the user.
- Identify the strengths and weaknesses of their design ideas in relation to purpose/user.

Learning Intentions

- Lesson 1: LI: To research and understand how levers and linkages are used.
- Lesson 2: LI: To design my final product.
- Lesson 3: LI To plan my final product.
- Lesson 4: LI: To make my final product. (may take 2 lessons).
- Lesson 5: LI: To evaluate my final product.

Overview:

- Lesson 1: How are linkages and levers used and understand how people of key influence (Mary Anderson) had on Technology using levers and linkages.
- Lesson 2: look at different design examples. Design and label your interactive card using levers and linkages.
- Lesson 3: Plan steps to make my final product. And make prototype.
- Lesson 4: Make the levers and linkages for your interactive card.
- Lesson 5: Finish making you interactive card.
- Lesson 6: Evaluate your final interactive card.

Cross Curricular Links

Links to English unit The Iron Man

Resources

Different coloured card, split pins (10 per child), scissors, blue tac

Key Vocabulary

mechanism, lever, linkage, pivot, slot, input, process, function, purpose