

# Key Question: *How can we make our pages pop?*

Explore how we can use mechanisms to make pictures pop up and out.

## Vocabulary

**Fold** to bend something, especially paper or cloth, so that one part of it lies on the other part, or to be able to be bent in this way

**Cut** to divide, break or make something smaller, using a sharp tool, especially scissors

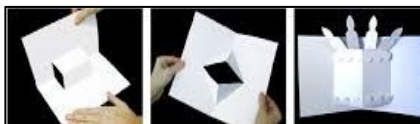
**Pinch** to press something strongly between two hard things such as a finger and a thumb, usually causing it to narrow

**Score** to make a mark or cut on the surface of something hard with a pointed tool, or to draw a line through writing

**Crease** a line on cloth or paper where it has been folded

**Tools** a piece of equipment that you use with your hands to make or repair something

**Insert** to put something inside something else



Layer Pop-Up Mouth Pop-Up Birthday Cake Pop-Up



Mammoth Pop-up Providence Pop-Up Bird House Pop-Up

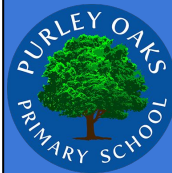


In this topic, **we are learning to:**

- **Explore** different types of mechanisms, equipment and materials to make a picture pop. .
- **Generate** different designs and evaluate their practicalities.
- **Decide** on strengths and areas for development. .
- **Create** joining card and mechanisms and add finishing touches. .
- **Evaluate** our final product should have five pop ups.

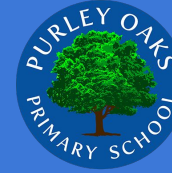
### Skills required:

- Cut
- Measure
- Join
- Finish



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## Assessment Focus:

### **Explore**

- develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.
- learn about inventors, designers, engineers, chefs and manufacturers who have developed ground -breaking products.
  - be able to disassemble and evaluate familiar products and consider the views of others to improve them.
  - evaluate the key designs of individuals in design and technology has helped shape the world.

### **Generate:**

- start to generate ideas, considering the purposes for which they are designing- link with Mathematics and Science.
- confidently make labelled drawings from different views showing specific features.
  - when planning consider the views of others, including intended users, to improve our work.
  - when planning explain our choice of materials and components according to function and aesthetic.
- Select a wider range of tools and techniques for making their product safely.

### **Decide:**

- identify the strengths and areas for development in our ideas and products.

### **Create:**

- know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.
- start to join and combine materials and components accurately in temporary and permanent ways.
- know how mechanical systems such as levers and sliders create movement.
- understand how to reinforce and strengthen a 3D framework.
- demonstrate how to measure, tape or pin, cut and join materials with some accuracy.
- begin to use finishing techniques to strengthen and improve the appearance of our product using a range of equipment including ICT.

### **Evaluate:**

- evaluate our products carrying out appropriate tests.
- start to evaluate our work both during and at the end of the assignment.