



Moving Pictures

Design, make and evaluate a moving picture that uses levers and linkages

Working towards ...children investigate levers and how they work, making a range of prototype linkages. Children then design ideas for how they could use these linkages to make a moving picture. Children build paper models mapping out the parts of the picture that will move and then use paper and card materials to build a final moving picture.

Prior Learning (skills and knowledge)

Previously, Chn have ...

- Experience of building and using paper materials to create pictures
- Building simple mechanisms, wheels and axles and using split pins

They have learnt about...

- Simple wheels and how to turn thing and will have some awareness of levers in the world around them

Possible links to other curriculum areas

- Science—Understanding how force and load acts on levers, linkages systems and what a pivot is and how much load different structures can bear
- Maths—3D shapes, making these in a variety of ways, measuring accurately.

Essential skills

This time Chn will ...

- Explain what levers and linkages are
- Make working examples of linkage systems
- Attach paper accurately with split pins
- Make paper strips move smoothly and correctly
- Decorate in an imaginative way
- Pay attention to quality of finish

Key content

- Investigate levers—Children join discussion about levers and linkage systems, children build simple levers and pivots and test weights and length of weight to see how they work.
- Example levers—children make paper models of 6 different linkage systems and comment on where in the real world they would see these systems
- Design—children draw ideas for moving picture, using linkage systems as a base for drawing ideas on
- Paper Model—Children map out and plan their moving picture, creating a template showing where levers will go, where to slit paper to make lever stick out and allowing movement of linkage system.
- Make—Children use paper and card materials to create final moving picture
- Evaluation—children comment on what they have learned this unit, what skill they were very good at and why and also what they would want to do better. Children also comment on how they feel about their final outcome and discuss their thoughts with others

Key vocabulary to be taught/embedded

Lever, linkage, pivot, fulcrum, rotate, spin, backwards, forwards, movement, background fore-ground stability, shape, join, fold, force, weight, support, frame, curve, measure, mark, construct, secure, tight

Linked texts

- Paper Engineering
- AlphaBugs pop ups
- Various Pop-up books