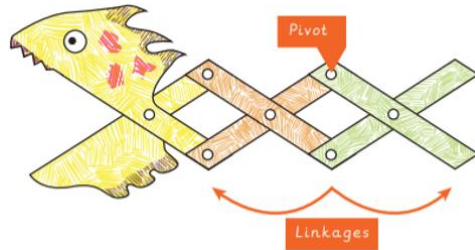




TOPIC:

Mechanisms – Moving Monsters



TOPIC:

Mechanisms – Moving Monsters

YEAR GROUP:

Y2

TERM:

Spring

What I already know...

Continuing to build on the KS1 Design Technology curriculum:

Design:

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria Technical knowledge
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products

What I will know after this unit...

- I will understand inputs and outputs of mechanisms and they are collection of moving parts that work together in a machine
- I will be able to identify mechanisms in everyday objects
- I will be able to understand the purpose and functions of levers, linkages and pivots
- I will be able to design and make a moving monster
- I will be able to evaluate my monster against a success criteria

Key Vocabulary

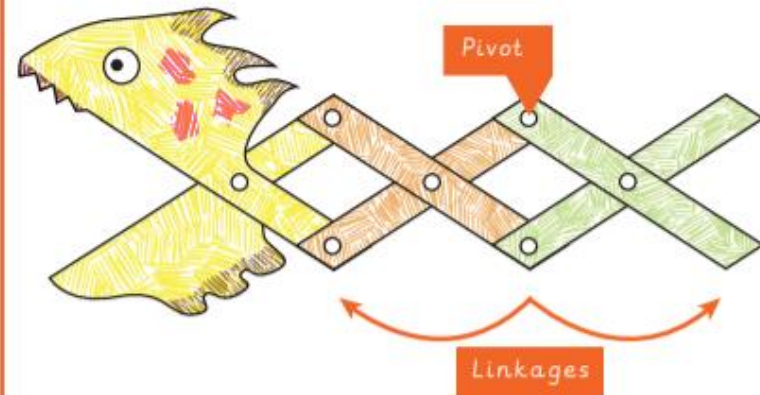
evaluation, input, lever, linear motion, linkage, mechanical, mechanism, motion, oscillating motion, output, pivot, reciprocating motion, rotary motion, survey

Mechanisms - Making a moving monster

Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Input	The energy that is used to start something working.
Linkage	Lengths of material (for example, metal or card) that are joined together by pivots, so that the links can move as part of a mechanism.
Mechanical	Something that can move because several pieces work together like a machine.
Mechanism	A collection of parts that work together to create a movement, eg: a bicycle.
Output	Output is the motion that happens as a result of starting the input.
Pivot	The central point, pin, or shaft on which a mechanism turns or swings.
Survey	To ask a group of people questions about something and to use their answers to make improvements.

Key facts

Moving monster



What materials could you use to represent fur, scales and claws?

The four types of motion:



Linear motion
Movement in a straight line in any one direction.



Reciprocating motion
Movement in a straight line, back and forth, in any direction.



Rotary motion
Movement in a circular motion.



Oscillating motion
Movement in a curve, back and forth.