

DT

Mechanical Systems: Making a moving monster

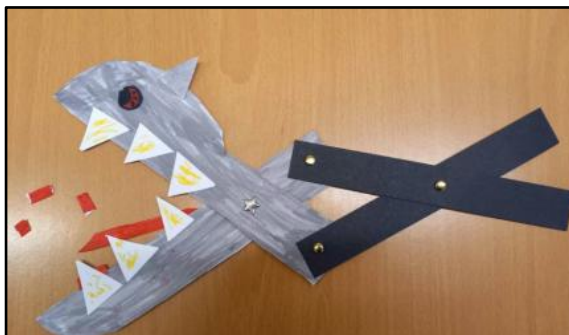
Year 2

What I should already know

- A slider mechanism moves an object from side to side.
- It is important to test my design as I go along so that I can solve any problems that may occur.
- Different materials have different properties and are therefore suitable for different uses.

Sticky Knowledge

- Mechanisms are a collection of moving parts that work together to produce movement.
- There is always an input and output in a mechanism.
- A lever is something that turns on a pivot.
- A linkage mechanism is made up of a series of levers.
- An output is the movement that happens as a result of the input.
- The input is the energy that is used to start something.



Technical skills

Design:

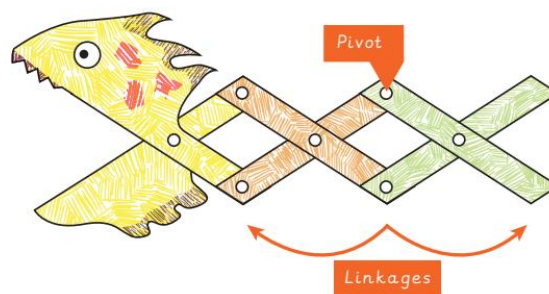
- Creating a design criteria for a moving monster as a class.
- Designing a moving monster for a specific audience in accordance with the design criteria.

Make:

- Making linkages using card for levers and split pins for pivots.
- Experimenting with linkages and thickness of the card used.
- Cutting and assembling components neatly.

Evaluate:

- Evaluating own designs against a design criteria.
- Using peer feedback for modify final design.



Vocabulary

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.
Linkage	Lengths of a material that are joined together by pivots, so that the links can move as part of the mechanism.
Mechanical	Something that can move because several pieces work together like a machine.
Mechanism	A collection of moving parts that work together to create movement.
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.
Rube Goldberg	Rube Goldberg was an inventor and cartoonist known for creating humorous machines that used many complicated steps to complete simple tasks.

