Year 2 Moving Monsters

Key Skills

1. To look at objects and understand how they move.
2. To explore different design options.
3. Generate, develop, model and communicate design ideas through drawing, discussing, mock-ups and use of IT.
4. Evaluate ideas against design criteria.

Vocab/Key Words

Design criteria - A set of rules for designers to help focus their ideas and test the success of them.

Evaluate - when you look at the good and bad points of something, then think about what you can change to improve it.

Input - the energy that is used to start something working.

Linkage - lengths of material that are joined by pivots to make the mechanism move.

Mechanical - a collection of parts that work together to make something move. Eg a bike.

Output - is the motion that happens as a result of the input.

Pivot - the central point, pin or shaft on which a mechanism turns or swings.

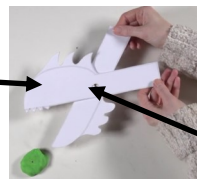**Survey** - to ask a group of people questions about something and use their answers to help improve it.

Respect, Believe, Achieve

Key Knowledge

- There are 4 types of movement; linear, reciprocating, rotary and oscillating.
- Every mechanism has an input/output and has a system of levers connected by pivots. This creates movement.
- It's important to have a design and design criteria before creating the monster.

Pivots

Linkages

What I will know/be able to do by the end

I can explain what a mechanism is and give examples of everyday objects.

I can explain what levers, pivots and linkages are.

I know that every mechanisms have an input and an output.

I can help devise whole-class design criteria for the moving monster.

I can design my own moving monster.

I can select the tools I need to make my monster.

I can design and make my monster.

I can select materials based on their characteristics.

I can evaluate how functional my monster is by

Websites/Signposting/Connection to a famous person

 Look at some other moving monsters and discuss what features you like/dislike about each