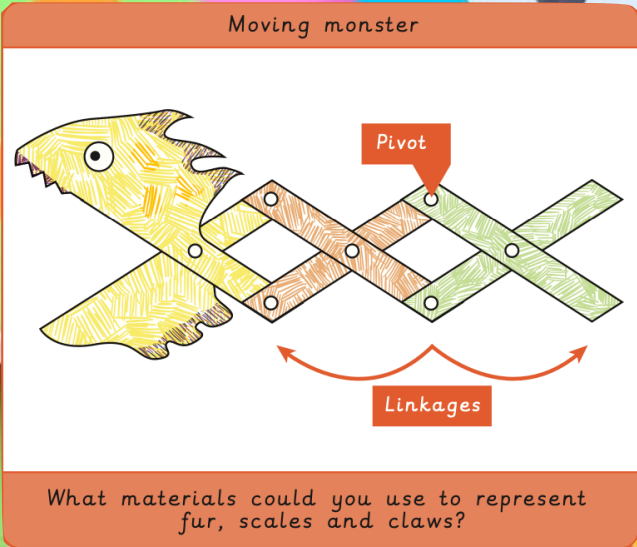


Year 2 - Mechanisms - Moving Monster - Term 3

Key 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 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.



To know statements	✓ X
I know how to use the correct terms for levers, linkages and pivots by analysing popular toys with the correct terminology	
I know how to design monsters suitable for children, which satisfy most of the design criteria.	
I know the suitable linkage system to produce the desired motions.	
I know how to evaluate two designs against the design criteria, and deciding selecting a favourite based on this and the feedback of their peers	
I know how to create functional linkages that produce the desired input and output motions	
I know how to select and assemble a planned monster features, assembling the monster to the linkages without affecting the function of them and evaluate the final product against the design criteria	

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.

What can you remember from previous units?

What is a stable structure?

How did your fairground wheel spin?

What is more important - how it looks or if it works?

Anything else you have learnt? What have you enjoyed?