



As a Year 2 Designer I will know...

Unit title Making a moving monster	To know that mechanisms are a collection of moving parts that work together as a machine to produce movement.	To know that there is always an input and an output in a mechanism.	To know that an input is the energy that is used to start something working.
FOCUS: Mechanisms	To know that an output is the movement that happens as a result of the input.	To know that a lever is something that turns on a pivot.	To know that a linkage mechanism is made up of a series of levers.
Unit title Baby Bear's Chair	To know that materials can be manipulated to improve strength and stiffness.	To know that a structure is something which has been formed or made from parts.	To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.
FOCUS: Structures	To know that a 'strong' structure is one which does not break easily.	To know that a 'stiff' structure or material is one which does not bend easily.	
Unit title A balanced diet (Hidden			



sugars in drinks) FOCUS: Food and Nutrition			
Unit title Fairground wheel FOCUS: Mechanisms	To know that different materials have different properties and are therefore suitable for different uses.	To know the features of a ferris wheel include the wheel, frame, pods, a base an axle and an axle holder.	To know that it is important to test my design as I go along so that I can solve any problems that may occur.



As a Year 2 Designer I can...

Mechanisms: Making a moving monster

- ✓ Creating a design-criteria for a moving monster as a class.
- ✓ Designing a moving monster for a specific audience in accordance with a design-criteria.
- ✓ Making linkages using card for levers and split pins for pivots.
- ✓ Experimenting with linkages adjusting the widths, lengths and thicknesses of card used.
- ✓ Cutting and assembling components neatly.
- ✓ Evaluating own designs against design criteria.
- ✓ Using peer feedback to modify a final design.

Structures: Baby Bear's Chair

- ✓ Generating and communicating ideas using sketching and modelling.
- ✓ Making a structure according to design criteria.
- ✓ Creating joints and structures from paper/card and tape.
- ✓ Building a strong and stiff structure by folding paper.
- ✓ Testing the strength of own structures.
- ✓ Identifying the weakest part of a structure.
- ✓ Evaluating the strength, stiffness and stability of own structure.



As a Year 2 Designer I can...

Food and nutrition: A balanced diet (Hidden sugars in drinks)

- ✓ Designing a healthy wrap based on a food combination which works well together.
- ✓ Slicing food safely using the bridge or claw grip.
- ✓ Constructing a wrap that meets a design brief.
- ✓ Describing the taste, texture and smell of fruit and vegetables.
- ✓ Taste testing food combinations and final products.
- ✓ Describing the information that should be included on a label.
- ✓ Evaluating which grip was most effective.

Mechanisms: Fairground wheel

- ✓ Selecting a suitable linkage system to produce the desired motions.
- ✓ Designing a wheel Selecting appropriate materials based on their properties.
- ✓ Selecting materials according to their characteristics.
- ✓ Following a design brief.
- ✓ Evaluating different designs.
- ✓ Testing and adapting a design.