



Law and Order – Keeping the Peace

How are levers and linkages used in construction?

What will we be learning in Design Technology?

- To understand and use the mechanical systems, levers and linkages.
- To construct some of the examples of levers and linkages
- To design, make and evaluate a product

What will we be doing in Design Technology?

- We will look at different leavers used in construction and identify their purpose
- We will look at how items can be linked together.
- Using our knowledge of leavers and linkages we will design our own celebration card by making labelled sketches
- We will make and evaluate our product.

Prior Learning:

Decide how to cut, shape, combine and join materials – Land Ahoy (Year 2)
Select from a range of tools and equipment – Athens V Sparta (Year 3)
Strengthen and reinforce structures – Athens V Sparta (Year 3)

Future Learning:

Measure, mark, cut and shape a range of materials – Under the Canopy (Year 4)
Investigate ways of meeting design challenges with a construction focus – You're not invited (Year 5)

Words we will be using

paper fastener

(split pin)

A clip for holding paper together.



link

To join things together



rotate

A circular motion of an object around a centre point.

model

A miniature (small) version of something.

slide

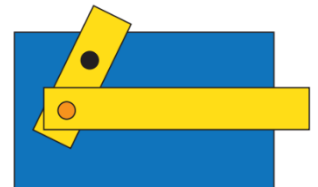
A mechanism that moves up, down or across something in a smooth way.

operate

To work or cause something to work.

pivot point

The point around which the object can rotate or turn.





Under the Canopy

How can we use natural materials to design a product?

What will we be learning in Design Technology?

- To generate, develop and explain ideas for products to meet a range of needs
- Identify a purpose and establish criteria for a successful product
- Evaluate work, adapting and improving where appropriate
- Communicate design ideas in different ways
- Selecting appropriate tools and techniques, name and describe them
- Measure, mark, cut out and shape a range of materials and assemble, join and combine components and materials with some accuracy

What will we be doing in Design Technology?

- We will identify a 'persona' for our design using the information available.
- We will consider what a tribal child would like
- We will have to consider the types of materials available in the rainforest (natural materials) and the lack of electricity (technology) to design our product.
- We will design a prototype for the toy (and make product if time)
- Then we will evaluate the design and consider how the product could be improved.



Prior Learning:

Identify a purpose for what they intend to design and make – Land Ahoy! (Year 2)
Establish criteria for a successful product - That's All Folks (Year 3)

Future Learning:

Generate and clarify ideas for products, considering intended purpose – A World of Bright Ideas (Year 6)

Words we will be using

user

The person who will need to use your product.

evaluate

Looking at whether a product can be improved or corrected in any way.

traditional

The handing down of a culture's beliefs and customs over many years.

needs analysis

Identifies the main problem that needs to be solved.

design

To 'think' of or plan something based on a set of information or criteria.

natural materials

Materials that are found in nature and have not been made by humans.

product

The end result of a design, or the object that is made.

purpose

The reason why something needs making.