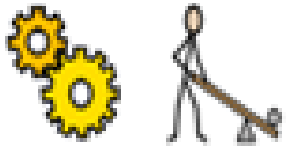
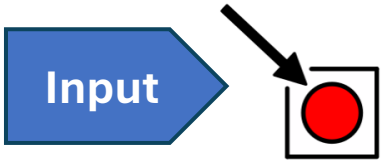
Preston Primary School Knowledge Organiser

DT: How do pulleys help us move and lift things more easily?	Term: Summer 1	Unit 4 – Year 5 & 6	Duration: 5 Weeks

Mechanical Systems



Mechanical devices all have an input motion, which transforms into force to make an output motion.

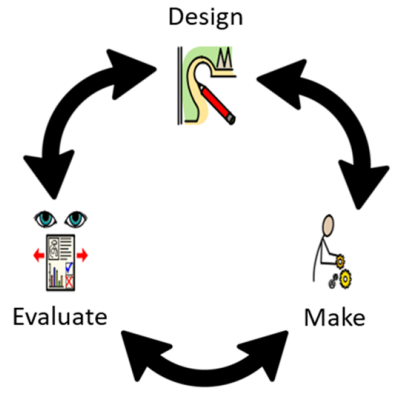


A design brief tells us how we can be successful.

Design Criteria

Design Brief:
Aim: Design a simple pulley system that can be used to make a fairground ride.
Client: Children in KS1
Purpose: To entertain younger children during lunchtime in the undercroft.

After researching the problem and looking at existing systems, we will create our own design criteria.



There are 4 different types of motion (movement) that different mechanisms can make:

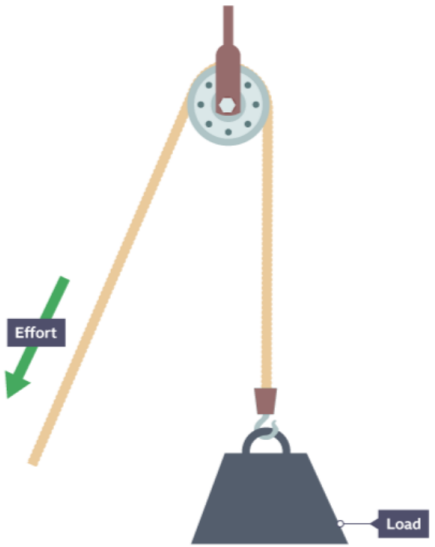
- linear

- rotary

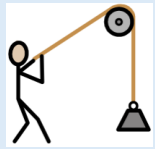
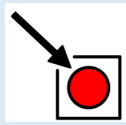
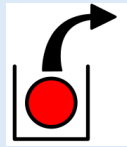
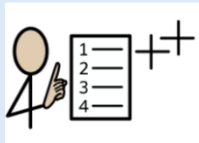
- reciprocating

- oscillating

A pulley is a simple mechanism made of a grooved wheel and a rope or string, designed to make lifting objects easier



Key Vocabulary

Mechanism		A device that uses moving parts to control, transmit, or change movement.
Pulley		A simple mechanism made of a grooved wheel and a rope or string, designed to make lifting objects easier.
Input		The motion or force you use to start a mechanism moving.
Output		The motion or movement that happens as a result of the input.
Design brief		What needs to be made, who is the client and what is the purpose of the product.
Design criteria		The specific requirements at produce must achieve to be successful.