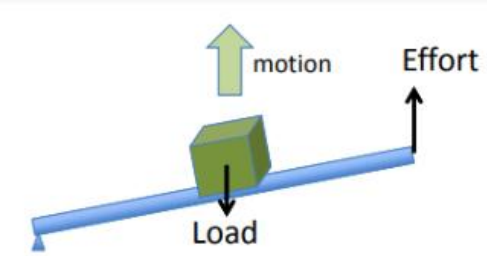
St Andrew's Church of England Primary School

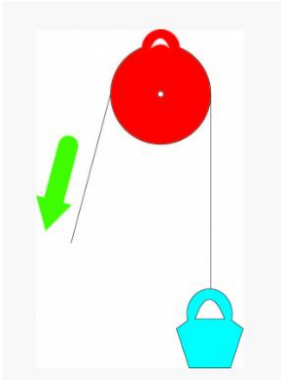
LKS2 Knowledge Organiser – Term 5 DT – Winding mechanisms

Outcomes
• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).
• Design with purpose by identifying opportunities to design.
• Make products by working efficiently (such as by carefully selecting materials).
• Refine work and techniques as work progresses, continually evaluating the product design.
• Use software to design and represent product designs.
• Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.
• Improve upon existing designs, giving reasons for choices.
• Disassemble products to understand how they work.

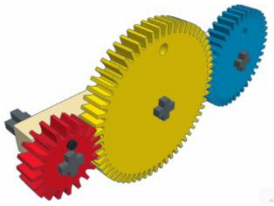
Lever



Pulley



Gears



Winding mechanism



Key vocabulary
evaluate – consider something in order to make a judgement.
force – pushes or pulls that can change the motion of an object.
gears – part of a machine which transfers power from one part of the machine to another.
key – a device used for turning something.
levers – a rigid bar resting on a pivot.
mechanism – a system of parts working together in a machine
pulleys – a wheel with a grooved rim around which a cord passes, which acts to change the direction of a force applied to the cord and is used to raise heavy weights.
tension – the state of being stretched tight