

Key Vocabulary

Key Word	Definition
Pulley	A grooved wheel over which a drive belt can run.
Drive belt	The belt which connects and transfers movement between two pulleys.
Spindle	A round stick with tapered ends used to form and twist a pulley
Driver	The gear or pulley that provides the input movement to the system.
Follower	The gear or pulley that provides the output movement to the system.
Ratio	A relationship between two things when it is expressed in numbers or amounts.
Transmit	Cause (something) to pass on from one person or place to another.
Circuit diagram	Drawing of the connections and components of a circuit through lines and symbols.
Annotated drawings	Drawings that combine text and sketches to illustrate ideas.
Exploded diagrams	Drawings that show how a product can be assembled and how the separate parts fit together.
Innovation	A new idea, design or product
Authentic	Something that is original, not false or an imitation

Y5 Autumn Term Mechanisms Pulleys & Gears (Design)

Pulleys rotate in the same direction

Driver Follower

Pulleys rotate in different directions

Driver Follower

Motor held with elastic band

Belt

Motor

A

B

The small pulley (B) rotates much more quickly than the large pulley (A)

Learning Sequence

- 1 Explore a range of existing products to generate ideas.
- 2 Select materials, components and kits according to their function with support.
- 3 Generate a range of design ideas.
- 4 Use annotated drawings/diagrams to communicate ideas.
- 5 Make a step-by-step plan as a guide to making.
- 6 Critically evaluate my design with support of others.