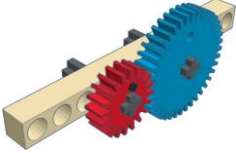
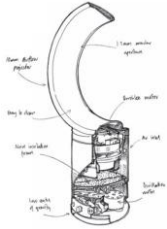


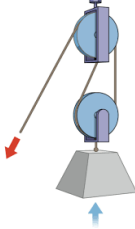
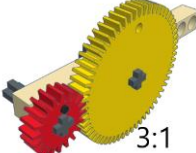



“Feel the force: What would life be like without them? (D&T)”

Vocabulary

coaxial gears	exploded diagram	gear	prototype	pulley	ratio	teeth
						
Gears on the same axle.	Shows how the separate parts fit together.	A rotating part of a machine.	Early sample model of a product	Small, fixed wheel or a group of wheels with a rope or chain that is used to lift.	The relationship between two or more things (usually quantity, amount, or size).	The grooves that interlock.

Important People

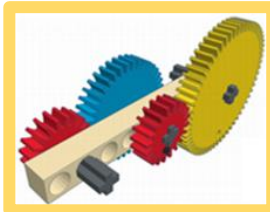
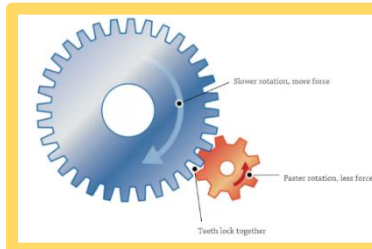
James Dyson (1947 - now)



- After five years and **5,127 prototypes later**, he invented the **world's first bagless vacuum cleaner**.

Big Ws: Gears

- Gears come in **different sizes** and have different amounts of **teeth**.



- They fit together on an **axle** to create a **gear train**.

- When a larger gear is connected to a smaller gear, the **larger gear turns slower** whereas the **smaller gear turns faster and with a greater force**. The gears also turn in **different directions**.

Big Ws: Pulleys

- Looping the rope over **more wheels increases the upward force**.
- Using **two wheels** means you can lift something **twice as heavy** using the same force.

SCAN ME



fixed pulley	moveable pulley	compound pulley
