



Design and Technology: Gears

Sticky Knowledge

Key Knowledge

Gears are part of a mechanical system with parts to create movement.

Gears are a wheel with teeth around its circumference.

A driver gear provides input movement.

A follower gear provides the output movement.

Mesh is the point where two gears join together and create movement.

Puzzles are way more fun when it appeals to the target user.

Designers create a product that meets a design criteria.



Design Criteria

Your moving puzzle should:

- Appeal to children aged 2-4 years old.
- Use a gear mechanism.
- Having working, moving parts.
- Work with ease.
- Look colourful.
- Be chunky (for small hands).



Key Vocabulary

Gear	A wheel with teeth around its circumference.
Mechanical system	A set of related parts or components used to create movement.
Driver	The gear that provides the input movement to the system.
Follower	The gear that provides the output movement to the system.
Mesh	The point where two gears join together and transfer movement.
Gearing up and down.	changing the speed of a gear. E.g. when a small gear is used to drive a larger one, the speed is reduced and the product has been geared down.

