

What should I already know?

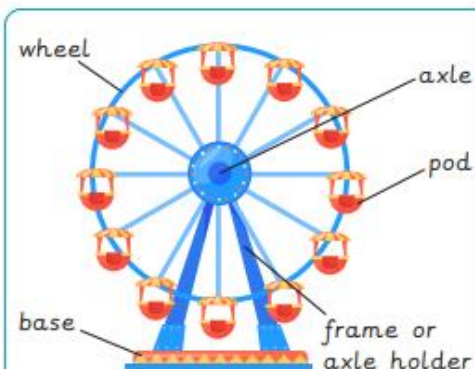
- How to plan, make and evaluate.
- How to select appropriate tools, such as scissors.
- How to and the reason for decorating.
- How to cut/ stick carefully and use a template.

Key Knowledge and skills gained

- Everyday objects have mechanisms.
- Many things that move have parts inside to help them work.
- Mechanisms usually limit unwanted movement.
- Everyday objects utilise wheels and axles.
- Wheels must be able to turn to work effectively.
- Axles allow wheels to turn without falling off.
- The features of a fairground wheel include the wheel, frame, pods, axle and axle holder.

Key Vocabulary and definitions

Axle	A long, straight piece of material which connects to a rotating part (e.g., the wheels of a car)
Design brief	A challenge that asks for something to be designed.
Design criteria	A set of instructions for the project.
Evaluation	Looking at what is good and bad about something and thinking about how to make it better.
Ferris wheel	A ride at a fairground which carries passengers around a large, vertical wheel.
Ferris wheel pod	The container which carries passengers around the around the ferris wheel.
Mechanism	The parts of an object that move together as part of a machine.
Stable	Object does not easily topple over.
Strong	Something that is not easily broken (e.g. wood, brick, building).
Test	To find out whether something works as it should.
Weak	Something that is easily broken (shells).
Survey	Questions used to find out what people like.



Materials have different properties. A **fairground wheel** design needs to be **stable** and **strong**. Which materials could be used?



Bricks are made from clay. They are stiff and strong.



Wood comes from trees. It is strong and flexible.



Metal comes from mining ore in the ground. It is strong and hard.