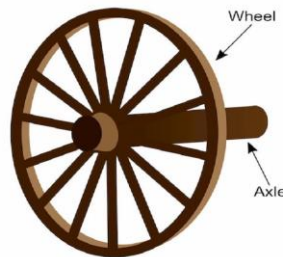
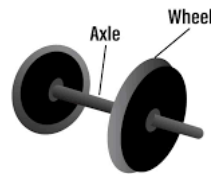


- Mechanisms are the **parts that make something work**
- Mechanisms are all around us! Most objects that help us in our lives are made up of different mechanisms
- **Wheels and axles** are mechanisms that help things to move
- **Wheels** are circular objects that roll on the ground, helping vehicles and other objects to easily move
- **Axles** are rods that help wheels to rotate. The wheel can either rotate freely on the axle, or can be attached to (and turn with) the axle



Key vocabulary

Axle	A rod which helps a wheel to rotate
Chassis	The frame or base on which a vehicle is built
Design	To plan and create something using a plan
Dowel	A cylindrical rod, often made from wood
Friction	The action of one surface or object rubbing against another
Mechanism	The parts that make something work
Wheel	A circular object which rolls on the ground Can be fixed to the axle or free If not attached, they will need a stopper to prevent them from falling off

Example mechanisms



Ferris wheel

- A Ferris Wheel is one example of a wheel and axle mechanism in action
- Normally, Ferris Wheels are fixed to the axle
- Force is applied to the axle to make it spin



Roller skates

- Roller skates are another example of wheel and axle mechanisms
- Often, the wheels rotate freely from the axle, but sometimes they are fixed



Toy car

- Toy cars (and real cars) use wheel and axle mechanisms to move
- On toy cars, the wheel is normally fixed to the axle, meaning both the wheel and axle spin
- It is important that there is not too much friction acting on the axle, or the wheel will not move!

Health and safety

- Tie back long hair
- Walk safely and calmly around the classroom
- Follow the teacher's instructions carefully
- Make sure that you are using the right equipment for the task
- If you need to move around with scissors, hold around the closed blades, facing down

