



## Y1 Thinking like an engineer

### Axes and Wheels

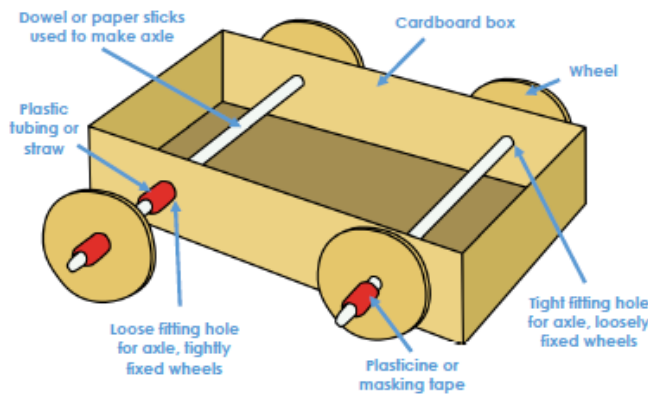
#### Key Knowledge:

- Wheels and axles are mechanisms that help things to move.
- On a toy car the wheel is usually fixed to the axle, which means the wheel and axle will spin.
- Roller skates have four wheels. Often the wheels rotate free from the axles.

#### Types of wheels



#### Two different ways to fix wheels



#### Vocabulary

Wheel	Wheels are circular objects that roll on the ground helping vehicles and other objects to easily move.
Axle	A rod on which one or more wheels can rotate, either freely or be fixed to an turn with the axle
Axle holder	The component through which an axle fits and rotates
Chassis	The frame of base on which a vehicle is built
Friction	Resistance which is encountered when two things rub together
Dowel	Wooden rods used for making axles to hold wheels.

## Learning Questions

What kinds of objects use wheels and axels?

How are wheels attached?

Using what I know, can I design a moving object?

Can I make an object by following a design?

Was the project successful?

What else do you know?