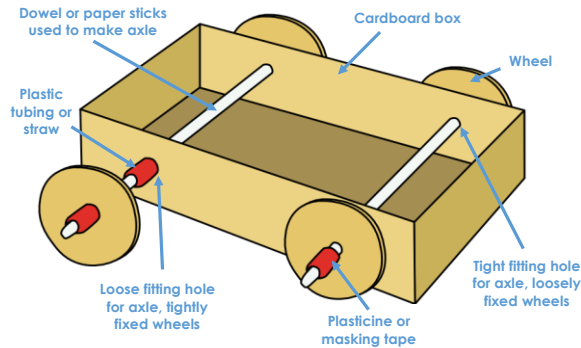


Wheels and Axles

Ways to Fix Wheels



Types of wheels

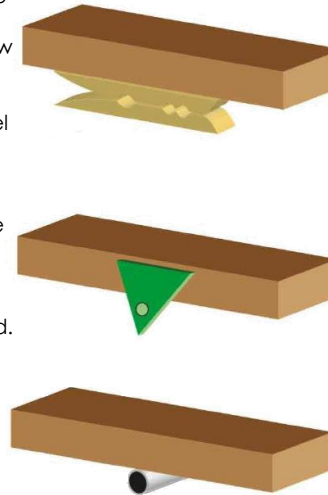


Ways to hold moving axles

Use **pairs of clothes pegs** glued with PVA to the underside of a box. Check the peg holes are large enough to allow axles to move freely. Make sure they are aligned carefully so the vehicle moves in a straight line when the wheel and axle mechanism is added.

Use **card triangles** with holes for the axle. Check the holes are large enough to allow the axle to move freely. Make sure opposite triangles are aligned carefully so the vehicle moves in a straight line when the wheel and axle mechanism is added.

Use **large paper/plastic straws** fixed with masking tape to the underside of a box. Check straws are positioned carefully so the vehicle will move in a straight line when the wheel and axle mechanisms are added. Make sure the straw hole is large enough to allow the axle to move freely. The wheels must be fixed tightly to the axle.



Vocabulary

Axle: a rod on which one or more wheels can rotate, either freely or be fixed to and turn with the axle.

Axle holder: the component through which an axle fits and rotates.

Chassis: the frame or 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.

Engineer Study

George Stephenson

- ✓ He is known as the 'Father of the Railways'.
- ✓ He played a key role in developing the railways system in Britain.
- ✓ The train helped people move around the country.

