

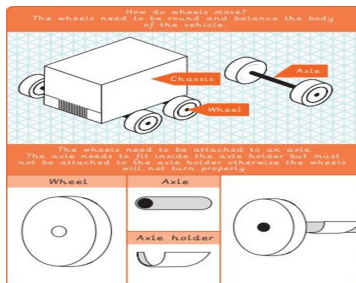
# Year 1 DT Wheels and Axles

## Key Skills

1. Exploring - looking at various mechanisms that have moving wheels.
2. Labelling - a diagram of an axle, wheel and axle holder.
3. Problem-solving - examining a broken wheel and thinking of how to fix it so that it turns again.
4. Designing - drawing a model of a vehicle that includes details and fits the agreed design criteria.
5. Create - a vehicle with moving wheels using a design and by selecting tools that are appropriate.
6. Testing - the effectiveness of wheels and evaluating.

## Key Knowledge

- The wheels need to be attached to the axle.
- The axle needs to fit inside the axle holder but must not be attached to the axle holder, otherwise the wheels will not turn.



Respect, Believe, Achieve

## Vocab/Key Words

**Accurate** - neat, correct size shape and pattern with no mistakes.

**Axle** - a long straight rod which connects to a moving part, such as a wheel.

**Axle holder** - a part that holds the axle steady.

**Chassis** - the body of a car.

**Fix** - to correct something that wasn't working.

**Mechanic** - a person who can fix or mend vehicles.

**Mechanism** - parts of an object that move together to make something work.

**Model** - a practise version of something so you can see how it works, it's usually much smaller.

**Test** - to find out if something works as it should.

**Wheel** - a circular object that is fixed to something (like a car or bike) and allows it to move smoothly over the ground.

## What I will know/be able to do by the end

- I can explain how a wheel moves.
- I can identify what stops a wheel from moving and fix it.
- I can design my own vehicle and label it using the correct vocabulary.
- I can measure lengths.
- I can make a wheel and axle mechanism.
- I can build a vehicle by following my design, using appropriate tools/materials and by being accurate.
- I can test the effectiveness of my wheels by having a 'whacky race'.

## Websites/Signposting/ Connection to a famous person

Watch some soap box car races, can you spot the wheels, axels and axel holders on them?