

Where does this learning link to aspirations for the future?

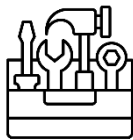
Airfix has been creating kits for toy cars since 1939. You could create kits for different toys.

In DT we follow this five step process.

Research



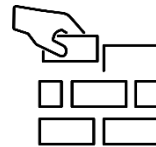
Skills



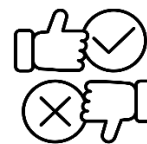
Design



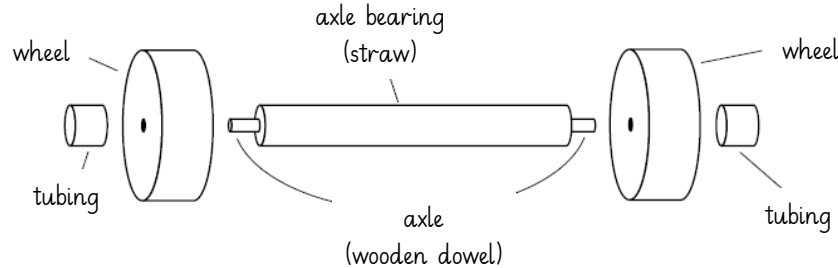
Make



Evaluate



Exploded diagrams are used to show how different parts of an object fit together.



Some of the first toy cars were made in 1901. That's over 100 years ago!

### Glossary

- chassis** The body of a car.
- force** A push or a pull that can cause an object to move, stop moving, or change direction.
- machine** A device with a system of parts that work together to perform a task.
- mechanism** The parts of an object that move together as part of a machine.
- prototype** A detailed model that helps users understand how a product will work.
- target audience** A group of people that might like the idea.
- wheel mechanism** The axle spins freely inside the bearing, while wheels are secured to the axle so they spin with it, allowing the car to roll.

A prototype is a simple model of a design before making the final product.



Prototype one mechanism: an inclined plane (ramp) is used to make the car roll.



Prototype two mechanism: a rubber band is used to slingshot the car forwards.



Prototype three mechanism: a rubber band is wound around the back axle and unwinds to make the car move.

The parts of a **machine** that move together are called a **mechanism**.  
 When a machine has more than one mechanism, it is called a **mechanical system**.