



# Year 1 - Summer – Design & Technology Knowledge Organiser



## What I already know...

In EYFS, I learnt different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. Children have had opportunities to develop their ideas and decide which materials to use to express them. Children will have explored moving wheels through play.

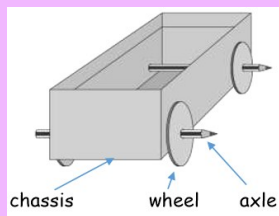
## What I will learn...

The wheels need to be fixed to an axle but the axle needs to move freely in the chassis

Explain how a wheel and axle move on a vehicle.

Know that some materials are stronger and more rigid (stiffer) than others e.g. thick card is stronger and more rigid than paper.

Use the vocabulary: wheel, axle, chassis, body to describe the parts of the vehicle correctly.



## Key Vocabulary

vehicle	Something that transports people or objects.
wheel	are circular objects that roll on the ground, helping vehicles and other objects to easily move
axle	a rod that enables a wheel to turn
axle holder	Keeps the axles attached to the chassis but enable the axle to turn.
chassis	the base on which a vehicle is built
mechanism	is the part that makes something work. The wheels and axles are mechanisms that will make the vehicle move.
dowel	wooden rod used for making the axles

## Making a difference at The Merton

We receive a request from Hamley's toy shop in London to design and create toy vehicles. We will explore different types of vehicles found in London and use these to inspire us to design our toy for their latest display– and create a catalogue of new toys to send to them. We will also think about good and bad impact that real life vehicles have had on people and the world, including the air pollution and contribution to global warming they are having, and how in the future real vehicles will need to be designed with zero emissions in to look after our planet.

## DT Skills

### Disciplinary Knowledge: Skills I will learn...

- To explore how wheels and axles can be assembled as either fixed or free axles.
- To investigate different ways of making axles holders.
- To mark out, hold, cut and join materials.
- To be able to use a coping saw.