

Year 1 Construction – Wheels & Axles

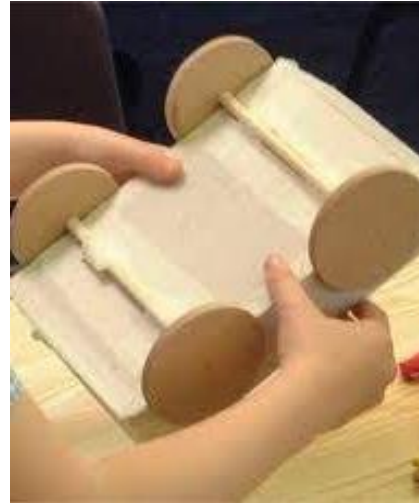
Prior Learning

In the EYFS represent their own ideas, thoughts and feelings through design technology.

They will be able to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Children will have explored using tools and begin to develop basic skills and techniques using a range of tools.

They select tools and techniques independently to shape, assemble and join materials they are using.



Key Vocabulary

Chassis - Base frame of a wheeled vehicle

Axle - a rod or spindle passing through the centre of a wheel

Body - The outer shell of a car

Wheel - a circular object that revolves on an axle and is fixed below a vehicle or other object to enable it to move easily over the ground.

Mechanism - part of a machine that has a particular function

Dowel - wooden rod used for making the axles

Key Knowledge

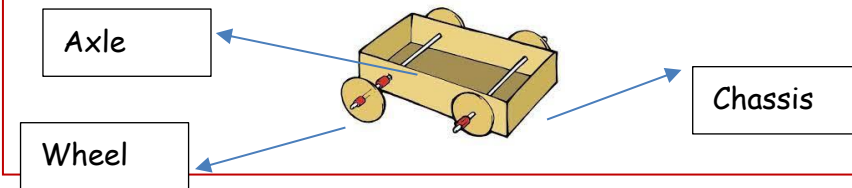
Know that on a vehicle:

- the wheels need to be fixed to an axle
- 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 Skills

- Make vehicles with construction kits which contain free running wheels
- Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels
- Attach wheels to a chassis using an axle
- Join appropriately for different materials and situations e.g. glue, tape

Learning Objectives

Design:

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make:

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate:

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge: build structures, exploring how they can be made stronger, stiffer and more stable

Health & Safety

All children need to be supervised closely when using scissors or other sharp implements.

End Point and Assessment of Core Learning

I can use my own ideas to make something.

I can describe how something works.

I can make a product which moves.

I can explain to someone else how I want to make my product.
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I can choose appropriate resources and tools.

I can make a simple plan before making.
