



St Andrew's C of E Maghull Knowledge Organiser

Year 2 - Autumn 2 - DT - Wheels and Axles



Knowledge:

Know that:

An axle is a rod on which one or more wheels can rotate, either freely or be fixed to.

Difference between fixed and freely moving axles.

An axle holder is the component through which an axle fits and rotates.

A chassis is the frame or base on which a vehicle is built.

A dowel is wooden rods used for making axles to hold wheels.

Skills

Select from a range of materials and components according to their characteristics

Use a range of materials and components, including construction materials and kits and mechanical components

Use finishing techniques, including those from art and design

Describe what their products are for

Say how their products will work

Say how they will make their products suitable for their intended users

Use simple design criteria to help develop their ideas

Develop and communicate ideas by talking and drawing

Model ideas by exploring materials, components and construction kits and by making templates and mockups

Vocabulary:

Vehicle - a thing used for transporting people or goods

Wheel - a circular object that revolves around an axle

Axle - a rod that goes through the middle of a wheel

Chassis - the bottom of a vehicle

Cutting - using scissors or another sharp object to shape materials

Joining - to connect materials

Evaluate - to say what is good or how to improve a product

Lesson Sequence:

Lesson 1:

Evaluating existing products.
LO : I can evaluate existing products.

Lesson 2:

Establishing a design criteria
LO: I can establish the design criteria.

Lesson 3:

Generating ideas for a design
LO: I can generate ideas.

Lesson 4:

Planning the making stage
LO: I can plan the making stage.

Lesson 5:

Making your product
LO: I can make the end product.

Lesson 6:

Evaluating your product
LO: I can evaluate my end product against the design criteria.

