Key facts

Use tools provided to cut materials safely.

Measure and mark out to the nearest cm.

Demonstrate a range of cutting and shaping techniques (tearing, cutting, folding and curling).

Demonstrate a range of joining techniques (gluing, hinges or combining materials to mention)

Create products using levers, wheels and winding mechanisms.

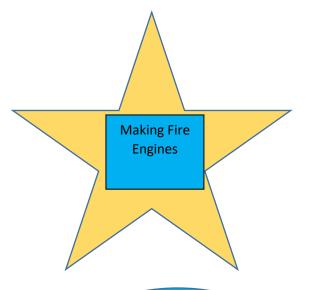
Resources

Wheels Dowel rods

Various cutting tools

Software and paper to design

Autumn 1 Year 2 DT overview



Brief summary/ overview

In this unit, children will work to design, construct and evaluate models of fire engines. They will investigate the key features of a fire engine, using appropriate vocabulary, design it using paper and design software and then create it using various materials and tools. They will use different techniques such as gluing, hinges and combining different materials to create wheels, levels and more.

Prior Knowledge

Children will have been introduced to using tools to manipulate materials and work to a design.

Key Vocabulary

Axle Chassis

Bolt Washer

Criteria

Evaluate

Decorate Design

Cross curricular links/visits

Art

Science - Materials

Key facts

- Use tools provided to cut materials safely
- Measure and mark out to the nearest cm.
- Demonstrate a range of cutting and shaping techniques (tearing, cutting, folding and curling).
- Demonstrate a range of joining techniques (gluing, hinges or combining materials to mention).
- Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.
- Design products that have a clear purpose and an intended user.
- Make products, refining the design as work progresses.
- Use software to design.
- Explore objects and designs to identify likes and dislikes of the designs.
- Suggest improvements to existing designs.
- Explore how products have been created.

Resources

PlanBee planning

Cardboard

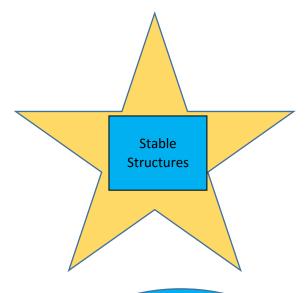
Wool

Wood

Paper

Card

Spring 1 Year 2 DT overview



Brief summary/ overview

During this topic, children will be designing, creating and evaluating stable structures. They will be creating a garage for toy cars.

Throughout the weeks they will be exploring examples of garages, investigating materials and finalising designs before making the structure.

Prior Knowledge

Children have experience of designing, making and evaluating products from the Autumn 1 DT project, making Fire Engines.

Key Vocabulary

Stable Lightweight Levels Flexible Ramps Stiff **Pillars** Manmade Product Strong **Purpose** Layering Raised Horizontally Effective Sections

Cross curricular links/visits

Art

Science (Materials)

Computing

Key facts

- Shape textiles using templates.
- Join textiles using running stitch.
- Colour and decorate textiles using a number of techniques (Such as dyeing, adding sequins or printing)
- Design products that have a clear purpose and an intended user.
- Make products, refining the design as work progresses.
- Use software to design.
- Explore objects and designs to identify likes and dislikes of the designs.
- Suggest improvements to existing designs.
- Explore how products have been created.

Resources

- Shape textiles using templates.
- Join textiles using running stitch.
- Colour and decorate textiles using a number of techniques (Such as dyeing, adding sequins or printing)

Summer 1 Year 2 DT overview



Brief summary/ overview

During this topic, children will be designing, creating and evaluating puppets. They will be creating puppets with the final lesson being a mechanism to show the progress.

Throughout the weeks they will be exploring examples of puppets and moving mechanisms, investigating materials and finalising designs before making their own.

Prior Knowledge

Children have experience of designing, making and evaluating products from the Autumn and Spring DT projects.

Key Vocabulary

Sew Components
Decoration Pivot
Running stitch Attach
Template Purpose
Evaluate
Appropriate

Cross curricular links/visits

Art

Science (Minibeasts)

History