

Autumn 1 Year 2 DT overview

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.

Making Fire Engines

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, levers 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

Resources

Wheels
Dowel rods
Various cutting tools
Glue

Software and paper to design

Cross curricular links/visits

Art

Science - Materials

Spring 1 Year 2 DT overview

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

Stable Structures

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 |
| Strong | Product |
| Purpose | Layering |
| Raised | Horizontally |
| Sections | Effective |

Cross curricular links/visits

Art
Science (Materials)
Computing

Summer 1 Year 2 DT overview

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.

Puppets / Moving Mini Beasts

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 | |

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)

Cross curricular links/visits

Art
Science (Minibeasts)
History