

DT—Year 2—Vehicles

Design Brief

To design and make a vehicle that moves with axles, wheels and a chassis.



Vocabulary

vehicle	hacksaw	tools
John Dunlop	cut	
Henry Ford	materials	
wheels	glue	
chassis	drill	
axle	nail	
dowel	strengthen	

Year 1 Design Skills

- Explain what they are making and which materials they are using.
- Design products that have a clear purpose.
- Use pictures and words to convey what they want to make.
- Make products, using a range of tools to cut, shape, join and finish.
- Say what they like and don't like about their product.
- Talk about how closely their finished product meets their design criteria.
- Begin to use software to represent 2D designs.
- Explore objects and designs to identify likes and dislikes.
- Explore how products have been created.

Year 2 Design Skills

- Explain what they are making and which materials they are using and why they have chosen them.
- Design products that have a clear purpose and an intended user.
- Use pictures and words to convey what they want to make.
- Make products, using a range of tools to cut, shape, join and finish.
- Say what they like and don't like about their product and explain why.
- Talk about how closely their finished product meets their design criteria.
- Confidently use software to represent 2D designs.
- Explore objects and designs to identify likes and dislikes.
- Explore how products have been created.

Mechanical Systems Skills

Year 1

- Explore and include slider and lever mechanisms in their product.
- Understand about the movement of simple mechanisms (levers, sliders).
- Explore how to make structures stronger.
- Test different methods of enabling structures to remain stable.

Year 2

- With support cut strip wood/dowel using a hacksaw.
- 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 and cotton reels.
- Cut materials safely using tools provided.

Design Process

Research

Look at a product to see how it has been made.

Skills

Practise and learn new skills to make the final product.

Design

Design the product using knowledge from research and skills learned.

Make

Make the final product using skills learned.

Evaluate

Evaluate the final product.