

Lunt's Heath Primary School - Design and Technology Knowledge Organiser

Mechanisms

Wheels and axles

Year 1

Term: Spring 2

What? (Key Knowledge)

Prior Learning

- Assembled vehicles with moving wheels using construction kits.
- Explore moving vehicles through play.
- Gained some experience of designing, making and evaluating products for a specified user and purpose.
- Developed some cutting, joining and finishing skills with card.

Designing

- Generate initial ideas and simple design criteria through talking and using own experiences.
- Develop and communicate ideas through drawings and mock-ups.

Making

- Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.
- Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.

Evaluating

- Explore and evaluate a range of products with wheels and axles.
- Evaluate their ideas throughout and their products against original criteria.

Technical knowledge and understanding

- Explore and use wheels, axles and axle holders.
- Distinguish between fixed and freely moving axles.
- Know and use technical vocabulary relevant to the project.

Possible Experiences

Design, make and evaluate a product that moves.

- Explore and evaluate a range of wheeled products such as toys and everyday objects.
- Make a product that moves using construction kits with wheels and axles.

What? (Key Vocabulary)

Spelling

Definition/ Sentence

Wheel

a circular object that moves on an axle.

Axle

a rod that enables a wheel to rotate. The wheel can rotate freely on the axle or be fixed to, and turn with, the axle.

Axle holder

the component through which an axle fits and rotates.

Chassis

the frame or base on which a vehicle is built.

Friction

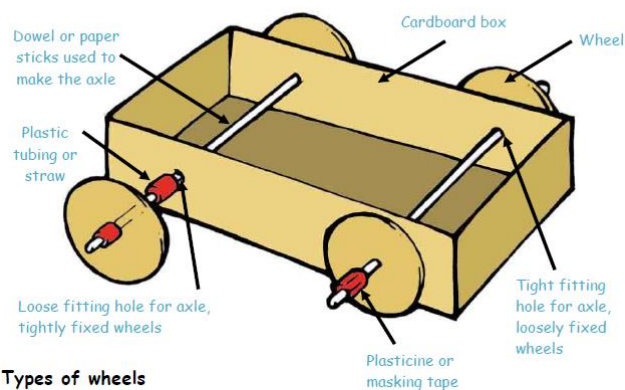
resistance which is encountered when two things rub together.

Dowel

wooden rods used for making axles to hold wheels.

Diagrams and Symbols

Example of two different ways to fix wheels



Types of wheels

