



Vehicles

Design, make and evaluate a vehicle for Bob to help him show tourists around the moon

Working towards ...each child making a vehicle using a small cardboard box, shaping and cutting features, attaching wheels and axles and decorating with tissue papers.

Links to English—Man on the Moon, Bob's space buggy

Prior Learning (skills and knowledge)

Previously, Chn have ...

- Experience and awareness of different vehicles
- Using scissors to cut and shape materials
- Using glue and sellotape to join materials

They have learnt about...

- Able to give simple explanation of how wheels work

Links to other curriculum areas

- Science—materials, changing states and selecting the right materials for the job
- Maths—measuring and marking
- Art and Design—developing imaginative ideas and decorating
- Links to English—Man on the Moon, Bob's space buggy

Essential skills

This time Chn will ...

- Understand what a vehicles is, draw and label different parts
- Build simplistic versions of vehicles using kits
- Build their own version of vehicle using found materials
- Design a moon buggy and label imaginative features
- Assemble and join a cardboard box
- Use shears to cut and shape materials
- Measure, mark and cut dowel to make axles
- Join paper materials using PVA glue
- Decorate in an imaginative way using different paper materials

Key content

- Investigate vehicles—Children discuss different vehicles, job and features and complete spider diagram listing everything they know about vehicles. Children label image of a car showing its features. Children draw an example vehicle and label features
- Build wheels and axles—Children see examples of wheels, axles and chassis, commenting on how they work and how they fit together, children build simple ones using construction kits. Children then given a range of different materials and make their own examples of wheels, axles and chassis.
- Design vehicles—Teacher model drawing design ideas and children draw and label ideas for what their own vehicles could look like, encourage imagination and outlandish ideas, paying attention to the shape of the vehicle, placement of wheels and additional features.
- Make vehicles—Children construct cardboard box, then draw with markers doors and windows, children also draw in any shaping they want to do. Children cut windows and door shapes with shears. Children measure and cut axles and attach wheels and axles to vehicles using axle holders.
- Decorate vehicles—Children use tissue paper and PVA glue to cover and decorate vehicles. Children can also use card, straws, other materials to add other features to their vehicles.
- Evaluation—children comment on what they have learned this unit, what skill they were very good at and why and also what they would want to do better. Children also comment on how they feel about their final outcome and discuss their thoughts with others

Key vocabulary to be taught/embedded

Vehicle, wheel, axle, chassis, body, window, door, windshield, lights, mirror, radiator, move, forwards, backwards, rotate, spin, line, reciprocal, axle holder, card, assemble, cut, join, shape, finish, fixed, mechanism, shears, scissors, parcel tape, masking tape, cardboard box, PVA glue, spreader, tissue paper, features, decoration

Linked texts

- Man on the Moon
- The Ultimate Book of Vehicles from around the world
- Wheels and Axels: Simple Machines Fun!