

What I should already know : How to select appropriate resources and tools for their building projects. How to make a simple plan before making an object. How to make a structure using different materials How to describe the materials using different words

Enquiry Questions

- Can we explore modern fire engines?
- Can we investigate wheels, axles and chassis?
- Can we investigate ways of creating and decorating the body of a fire engine?
- Can we design a model fire engine?
- Can we make a fire engine based on a design?
- Can we evaluate a finished product?



Key Vocabulary

axle - a rod passing through the centre of the wheel.
chassis - the base frame of a car or other wheeled vehicle.
criteria - a principle or standard by which something can be judged or decided.
design - a plan or drawing of something used to help make it.
evaluate - to look at something to decide how good or bad it is.
extendable - can be made longer.
function - how something works, what something is used for.
 investigate - find out about.
join - where two things are fastened together.
wheel - a circular object that revolves on an axle.



National Curriculum

Pupils will be taught:

Design

1) design purposeful, functional, appealing products for themselves and other users based on design criteria.
 2) generate, develop, model, and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Make

1) select from and use a range of tools and equipment to perform practical tasks, e.g. cutting, shaping, joining and finishing.
 2) select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

1) explore and evaluate a range of existing products.
 2) evaluate their ideas and products against design criteria.

Technical Knowledge

1) build structures, exploring how they can be made stronger, stiffer and more stable.
 2) explore and use mechanisms (e.g. levers, sliders, wheels and axles) in their products.

