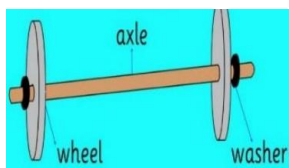
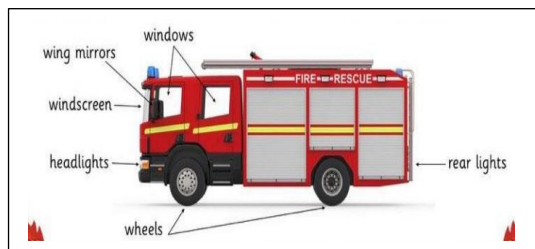




Knowledge Organiser Y1 & 2 Fire Engines



Before	Now	Next
Y1 Making a robot	Y2 Fire Engines	Y4 Moving toy (with CAMS)



Will your axel be held in place by holes in the chassis or through a cylinder? Or any other way?

Challenge yourself!!

Can you use any joins or mechanisms to give your Fire Engine moving parts?

Split pins, sliders, levers or wheels – for example.

Watch - BBC teach about axels

<https://www.bbc.co.uk/teach/class-clips-video/design-and-technology-ks2-axles/zmhfvk7>

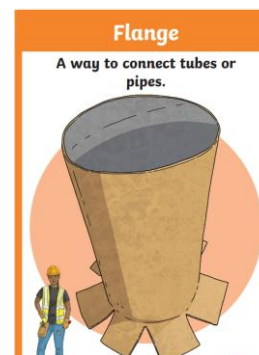


Make sure you use all equipment carefully and safely – listen carefully to the advice and guidance your adults give you.

Vocabulary

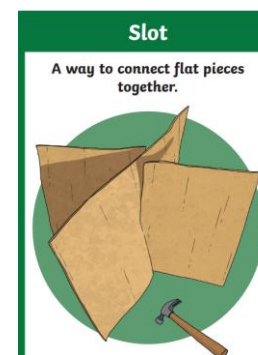
Spelling	Definition/Sentence
Fire engine	a fire engine is a large vehicle which carries firefighters and equipment for putting out fires.
Vehicle	any means in or by which someone travels or something is carried
wheels	a circular frame or disk arranged to revolve on an axis
chassis	the supporting frame of a structure
axels	a pin or shaft on or with which a wheel or pair of wheels turns.
dowling	a round wooden rod of relatively small diameter
plan	a plan is typically any diagram or list of steps with details of timing and resources, used to achieve an objective to do something.
design	the art or process of planning and creating something
materials	a material is a substance or mixture of substances that constitutes an object.
evaluate	to judge the value or worth of something.

STEM attachment techniques



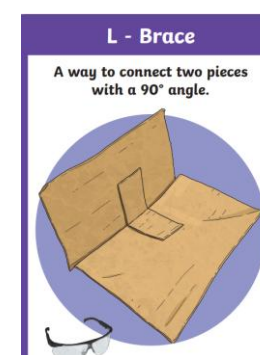
Flange

A way to connect tubes or pipes.



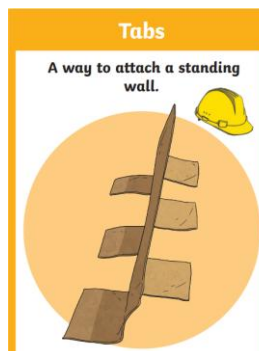
Slot

A way to connect flat pieces together.



L - Brace

A way to connect two pieces with a 90° angle.



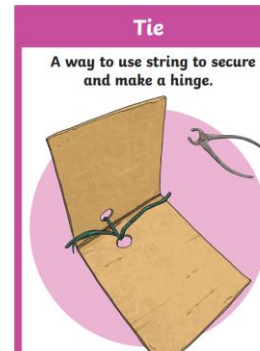
Tabs

A way to attach a standing wall.



Fold

A way to attach two lengths.



Tie

A way to use string to secure and make a hinge.