

Design Technology Year 2 Spring: Great Fire of London Fire Engines

Key Knowledge to know and use

- Fire engines nowadays are large trucks with equipment to help firefighters do their jobs. However, in the time of the Great Fire of London, firefighters had to use carts that were pushed and pulled along by hand. They had a short hose and a hand pump.
- In the seventeenth century, petrol-powered engines had not been invented, and electricity was not used to power machinery. Wheels were made of wood.
- A chassis is the basic body of a car, truck or cart. You then build on it and add things to it depending on what you want to make. The axles and wheels are fixed underneath the chassis so that it moves. The chassis has to be stiff and strong to support everything on top of it.
- A good fire engine needs to be mobile (it has to be able to move around), carry firefighters and all of their firefighting equipment.

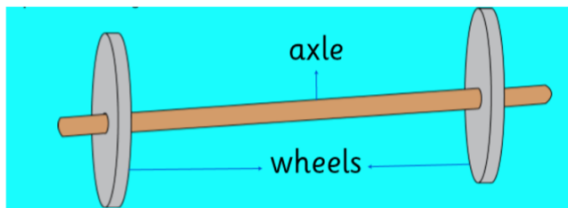


Early Fire Engines

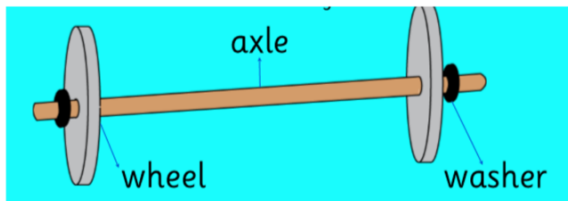
This is a fire engine from the time of the Great Fire of London. It is very different from today's fire engines, and couldn't put the fire out. Our task is to design something that will do a better job!

Key Vocabulary to learn and use in your learning

Word	Definition
fire engine	A vehicle that carries firefighters and fire fighting equipment.
wheel	A circular piece of wood or metal fixed to an axle underneath a vehicle that helps it move along the ground.
axle	A rod or pole that goes through the middle of a wheel or a group of wheels.
chassis	The base frame of a wheeled vehicle.
pump	A device that can move water by sucking it up and then shooting it out somewhere else.
hose	A moveable hollow tube for liquids, especially water, to move through.



Axles are attached firmly to the wheel so the axle rotates and the wheels turn with it.



The wheels are placed loosely on the axle so that the wheels turn around the axle. If the wheels are not attached to the axle, you need to use something to stop the wheels from falling off.