

Wheels and Axles: Design, make and evaluate a moving ambulance

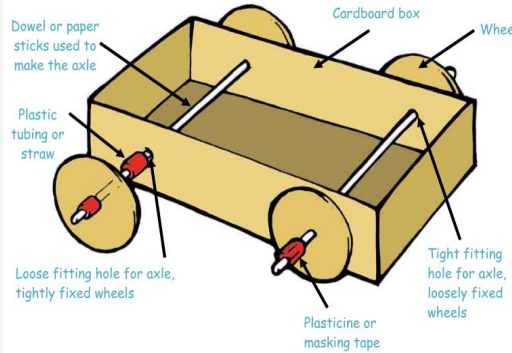
Key People and Events

1822-1873	Robert William Thomson invented the first inflatable tyre.
1886	Karl Benz invented the first vehicle powered by a gas engine.

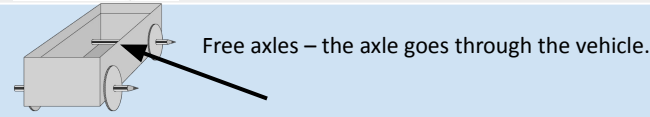
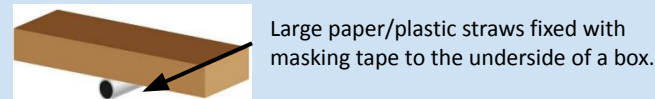
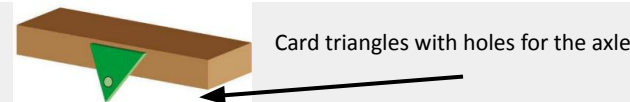
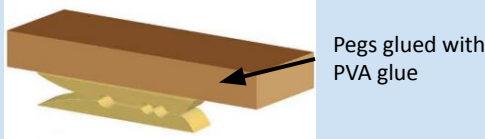


Key Knowledge and Skills

Two different ways to fix wheels



Ways to hold the free moving axle



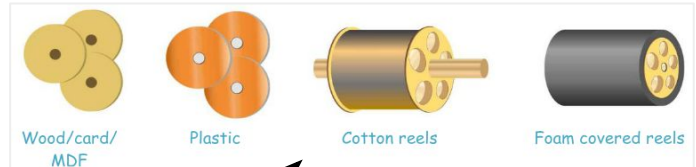
Real World Examples

Crimean War started in 1845 AD. Only a few ambulances were taken to the war.

Florence Nightingale, Elizabeth Garrett Anderson and Mary Seacole all had a profession in the medical industry.

Key Vocabulary

vehicle	Something used to carry and move people or things. <i>Cars, buses and airplanes are vehicles.</i>
wheel	A circular object that turns round. It can be fixed to a vehicle like a car or bicycle to allow the vehicle to move easily on the ground.
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.
free axles	The axles go through the vehicle.
washer	A flat ring of rubber, metal or other material used with a nut and bolt to make a tight fit.
chassis	The frame or base on which a vehicle is built.
moving parts	A part in a machine or product that has power to move.
saw	A tool with a thin metal blade that has sharp teeth along the edge. Saws are used for cutting hard materials such as wood or metal.
tools	An instrument that is usually held with the hands and helps one to do something.
durable	Not easily broken or worn out, lasting and sturdy.
functional	Having a practical purpose.



Types of wheels