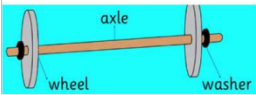
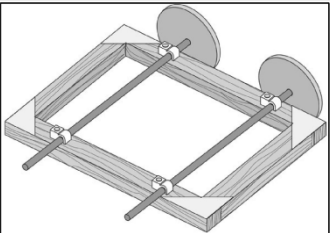
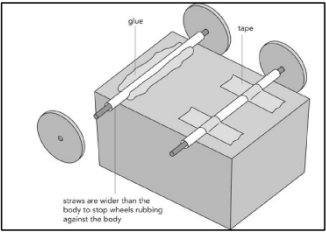


Caroline Haslett Primary School - DT

Topic: Mechanics	Year 1	Wheels and axles
<p>Knowledge</p> <ul style="list-style-type: none"> Wheels must be secured to an axle  <p>The diagram shows a horizontal axle with two wheels on either side. A washer is placed on the axle between the two wheels to secure them.</p> <ul style="list-style-type: none"> Examples of how to fix wheels and axles.  <p>The diagram shows a rectangular chassis made of four wooden beams. Two axles are inserted through the beams, and two wheels are mounted on each axle.</p>  <p>The diagram shows a rectangular box with two axles passing through it. Two wheels are mounted on each axle. The axles are secured to the box with glue and tape. A note below the diagram says: "straws are wider than the body to stop wheels rubbing against the body".</p> <ul style="list-style-type: none"> An axle can either be fixed or move freely. If the axle is fixed the wheels must be able to rotate on the axle. If the axle is free the wheels must be secured to rotate with the axle. 		<p>Vocabulary</p> <ul style="list-style-type: none"> Wheel - a round circle shape for moving. Axle - a rod that enables a wheel to rotate and turn with the axle. Chassis - the frame or base on which the vehicle is built. Axle holder - the component through which an axle fits and rotates. Circular dowel - wooden rods used for making axles to hold wheels. Rotate - a turn around a fixed point.
<p>Design, make, evaluate</p> <ol style="list-style-type: none"> Explore and assemble moving vehicles using construction kits. Practise methods of cutting, shaping and strengthening materials (e.g. card for the fire engine body) and using a junior hacksaw to cut a measure piece of dowel. Identify features of a fire engine and design their own using an annotated diagram. Follow design to make product, refining the design as work progresses. Evaluate process, suggesting improvements to existing designs. 		
<p>Skills</p> <ul style="list-style-type: none"> Cut safely using tools provided. Use scissors and hacksaws to cut accurately. Measure to the nearest cm. Understand that combining materials can provide additional strength. Use a range of joining techniques-such as gluing and taping. 		