

Design Technology Year 3

Will a vehicle use more force with fixed axles and moving

How to measure, make cuts and holes accurately

1. Measure using a ruler, flat on the surface and ensure the measurement 0cm is at the beginning of the length you wish to measure.

2. Make cuts using scissors or scoring with a knife using a guard for safety.

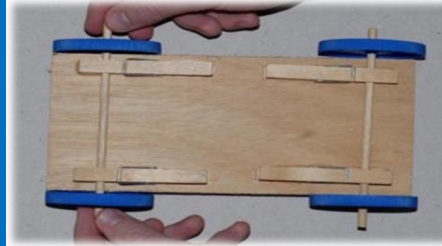


3. Make holes using a paper punch or a paper drill.

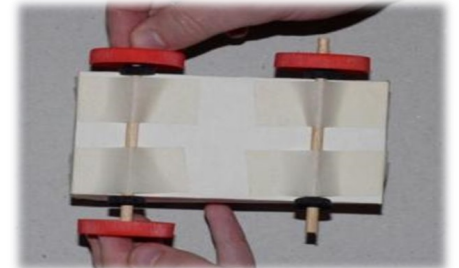


Design Criteria

- 4. The vehicle should have round wheels that balance the body.
- 5. The wheels need to be attached to an axle.



6. The axle needs to fit inside an axle holder but not be attached to the axle holder if you are wanting to create moving axles.



7. The axle needs to be attached securely to the chassis if you are wanting to create a fixed axle.

Key Vocabulary

8. **Axle**—A long straight piece of material which connects to a rotating component.

9. **Axle holder**—The part of a mechanism which holds the axle steady.

10. **Wheel**—A circular object that turns round.

11. **Chassis**—The body of a car.

12. **Mechanism**—The parts of an object that move together as part of a machine.

13. **Dowel**— Wood in the shape of a cylinder. Dowels come in all different sizes and thicknesses

