## Objectives and Sticky Knowledge

**Previous Knowledge Recap:**
*Safely explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and func[tion]
*Share their creations, explaining the processes they have used.

**Land Objectives and Sticky Knowledge:**

### To create a moving car

To sketch, measure and plan the chasse of the vehicle

To investigate how wheels work as part of a full mechanism including axels and axel holders

To adapt mechanisms, measure and cut accurately to a design brief

To follow a design brief to achieve an end product

**Links with 'Communication' Golden Thread:**
- To communicate their design brief
- To talk about what they would do next time to make their toy vehicle even better

**Links with CST:**
- Participation – taking part
- Subsidiarity – everyone should have a say

**Links with CKA Values Crown:**
- Service, hope, justice

CHRISTUS REGNAT

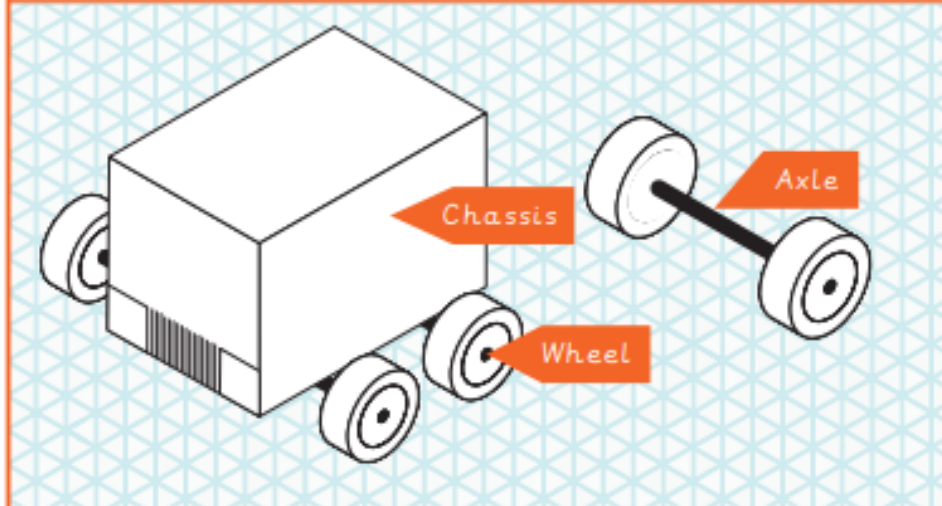## Mechanisms – Wheels and axles

Kapow Primary

| Accurate | Neat, correct shape, size and pattern with no mistakes. |
|---|---|
| Axle | A long straight rod which connects to a rotating part (e.g. the wheels of a car). |
| Axle holder | The part of a mechanism which holds the axle steady. |
| Chassis | The body of a car. |
| Design | To make, draw or write plans for something. |
| Fix | To mend something so that it will work properly again. |
| Mechanic | A person who can build or mend vehicles or other machines. |
| Mechanism | Parts of an object that move together to make something work. |
| Model | A practise version that lets you test out your idea and see how it will look and work. |
| Test | To find out whether something works as it should. |
| 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 over the ground. |

**Sky objectives:**
1. Create designs following a clear criteria.
2. Use tools to create with increasing accuracy e.g. scissors, chopping knives etc.
3. Suggest plausible ways in which their final design could be improved.

### Key facts

**How do wheels move?**
The wheels need to be round and balance the body of the vehicle.

Axle

Chassis

Wheel

The wheels need to be attached to an axle. The axle needs to fit inside the axle holder but must not be attached to the axle holder otherwise the wheels will not turn properly.

| Wheel | Axle | |
|---|---|---|
| | Axle holder | |