



**ALEC REED  
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PROUD TO LEARN



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## Year 2 DT Mechanical Mechanisms - Vehicles

Design a purposeful product based on a design criteria

Generate develop their ideas through drawing and templates



### Star Vocabulary

Wheel

Axles

Chassis

Joining

Template

Vehicles

Decoration

Mechanism

Body

Framework

### Research

#### Vehicles

What types of Vehicles can you think of?

### TYPES OF VEHICLES



Aerial tramway



Airplane



Ambulance



Baby carriage (US)



Hot-air balloon



Bulldozer



Bicycle



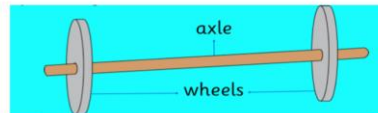
Boat



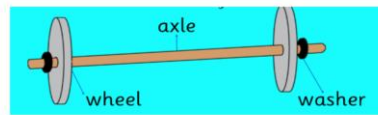
Bus



Carriage



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.

### Key Skills - Designing

**Purpose -What it is for? User - Who will use it?**

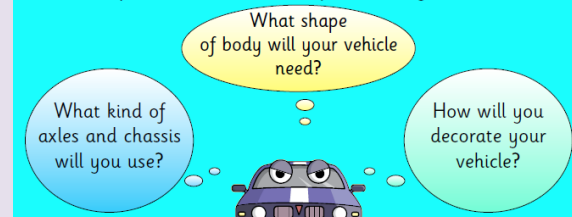
#### Materials

Explore different materials which can be used to make wheels, axles and chassis. To be able to investigate ways of creating and decorating the body of a vehicle.

#### Design

Design your vehicle taking into consideration the materials you will need. Create a plan and label your materials.

There are lots of things to think about when you are designing a product. Discuss these questions together...



### Making

Read your plan carefully

Make sure you are prepared

Collect and prepare your resources

Think about how you will cut your materials to form the correct shape/

Think about finishing techniques- glitter, adding features

### Making and Evaluating

### Evaluating

Which materials did you choose and why?

Would your user like it?

How did you attach your materials

Did your mechanisms spin correctly/ work?

How could you improve your final product?

To investigate a variety of vehicles and their uses and features.

To investigate wheels, axles and chassis.

To be able to investigate ways of creating and decorating the body of a vehicle.

To be able to make a vehicle based on a design.

To be able to evaluate a finished product.

### Timeline