The background of the entire page is a detailed, light-colored technical drawing of a mechanical engine, showing various components like pistons, valves, and gears in a cutaway view.

**HAYNES**  
INTERNATIONAL  
**MOTOR MUSEUM**

EDUCATION

A JOURNEY  
THROUGH TIME

Name .....

School .....

Date of visit .....

## The first cars

This is a photograph of the first car ever sold. The car was made by Karl Benz in 1886 in Germany.



Karl Benz



Bertha Benz



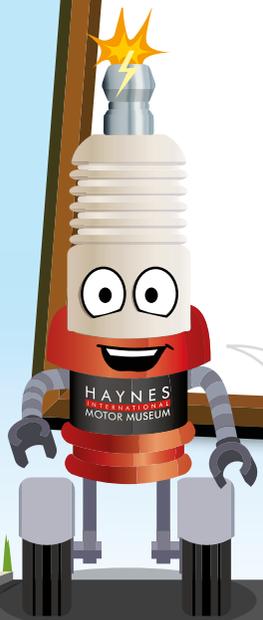
Karl's wife Bertha and her two sons, Eugen and Richard, became the first people to complete a long distance car journey. Bertha drove the car 65 miles from her home in Mannheim to her mother's house in Pforzheim. It took her 17 hours to complete.

Can you see how thin the tyres are? .....

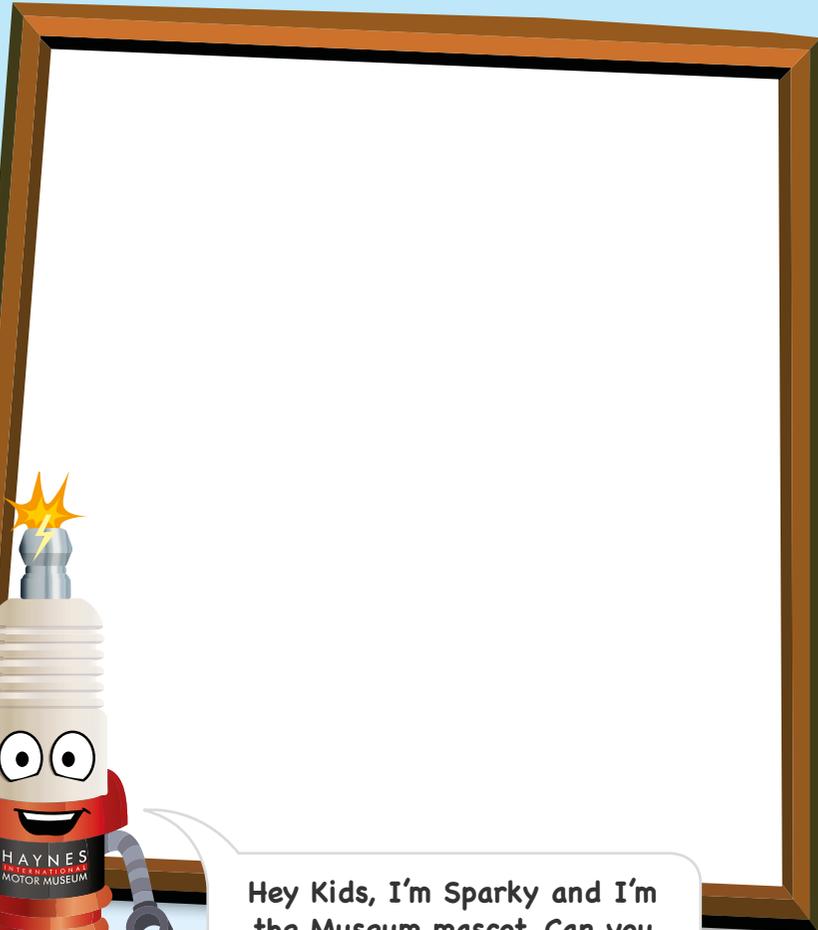
What does the car remind you of? .....

Where is the engine? .....

Can you see how you would steer the car? .....



Hey Kids, I'm Sparky and I'm the Museum mascot. Can you design a car of the future?



# Parts of early cars

The first cars did not have horns and lights powered by electricity as we do today.

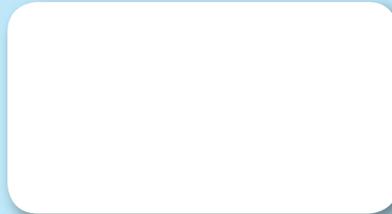
Find out how lights and horns worked before the invention of electric power.

This is the sort of horn that you would see on an early car. It is called an air horn.



Can you find one on a car in the Museum and draw it?

What is the name of the car?



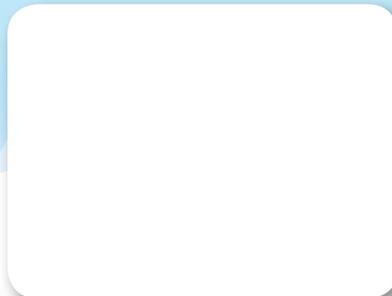
This is a photograph of a lamp from an early car. It is called a gas lamp.



Can you say why? .....

Look at the old cars in the Museum and draw a different sort of lamp.

Write the name of the car you have chosen here.



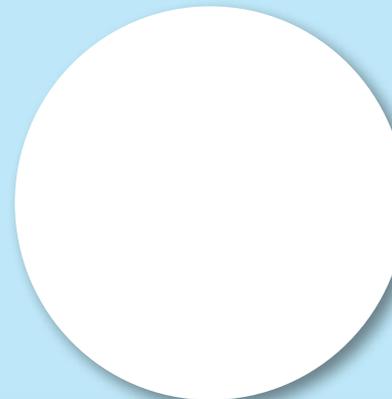
# Wheels

These are the wheels of an early car. They are wooden spoked wheels.



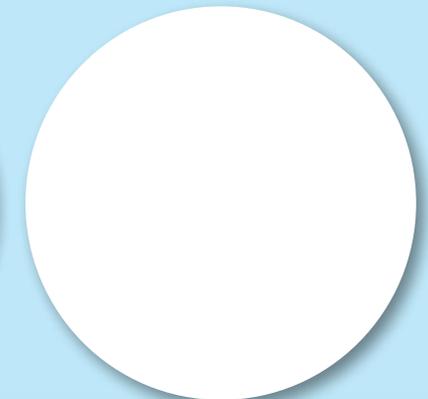
Find an **old** car in the Museum and draw the wheel.

Find a **modern** car in the Museum and draw the wheel.



**Old**

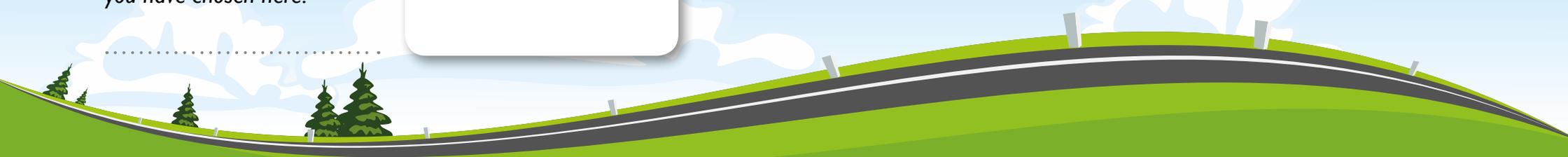
Which car did you choose?



**Modern**

Which car did you choose?

.....



## A special colour

In the Museum there is an exhibition where all the cars are the same colour.

What colour is this? .....

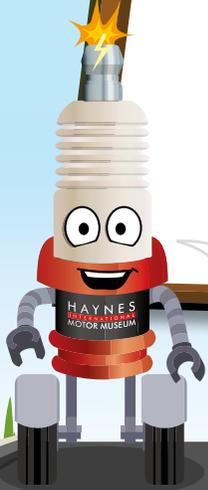
Which is your favourite car in this room? .....

.....

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## Car mascots

We can also identify some cars by the mascot that might sit on the front.



Pick one mascot and draw it here.

## A car or a horse?

Before the motor car, people either had to walk or they used horses and carts.

To own a car was very expensive. This changed in 1915 when Henry Ford made the Model T Ford, or the Tin Lizzie, using an assembly line for production. He said that you could buy a car for £160 and, at the time, it was cheaper to buy than a horse! Over 17 million were made.



# A journey through time...

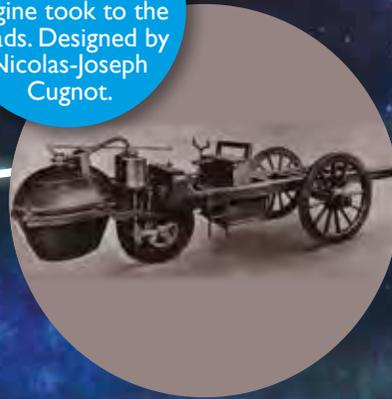
**3500 BC**  
Bronze Age.  
Earliest  
mention of using  
a wheel on a  
vehicle.



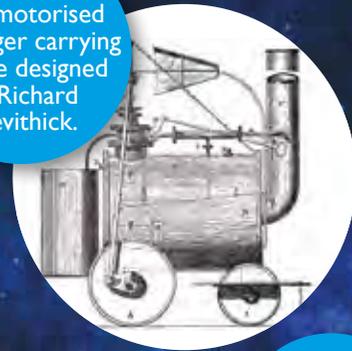
**1493**  
Leonardo da  
Vinci drew a  
design for  
a bicycle.



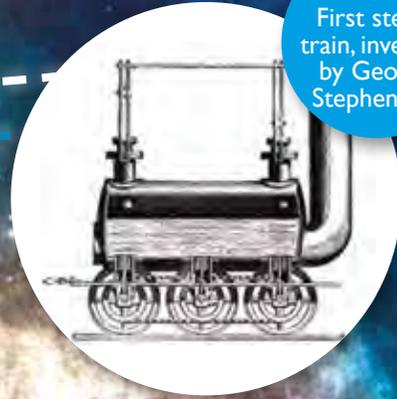
**1769**  
The first self-  
propelled steam  
engine took to the  
roads. Designed by  
Nicolas-Joseph  
Cugnot.



**1801**  
First motorised  
passenger carrying  
vehicle designed  
by Richard  
Trevithick.



**1814**  
First steam  
train, invented  
by George  
Stephenson.



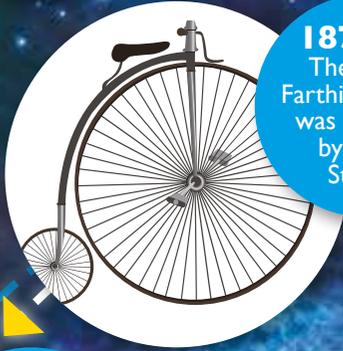
**1828**  
First electric  
car invented by  
Anyos Jedlik, a  
Hungarian.



**1863**  
Bone Shaker  
(also known as  
a Velocipede)  
invented.



**1870-72**  
The Penny  
Farthing bicycle  
was invented  
by James  
Starley.



**1886**  
Karl Benz is  
credited with the  
invention of the  
first motor  
vehicle.



**1908**  
Ford Model T  
invented. Cheaper  
than a horse  
making motoring  
affordable  
for all.



**1959**  
Alec Issigonis  
designs the Austin  
Mini – as popular  
today as when  
first built.

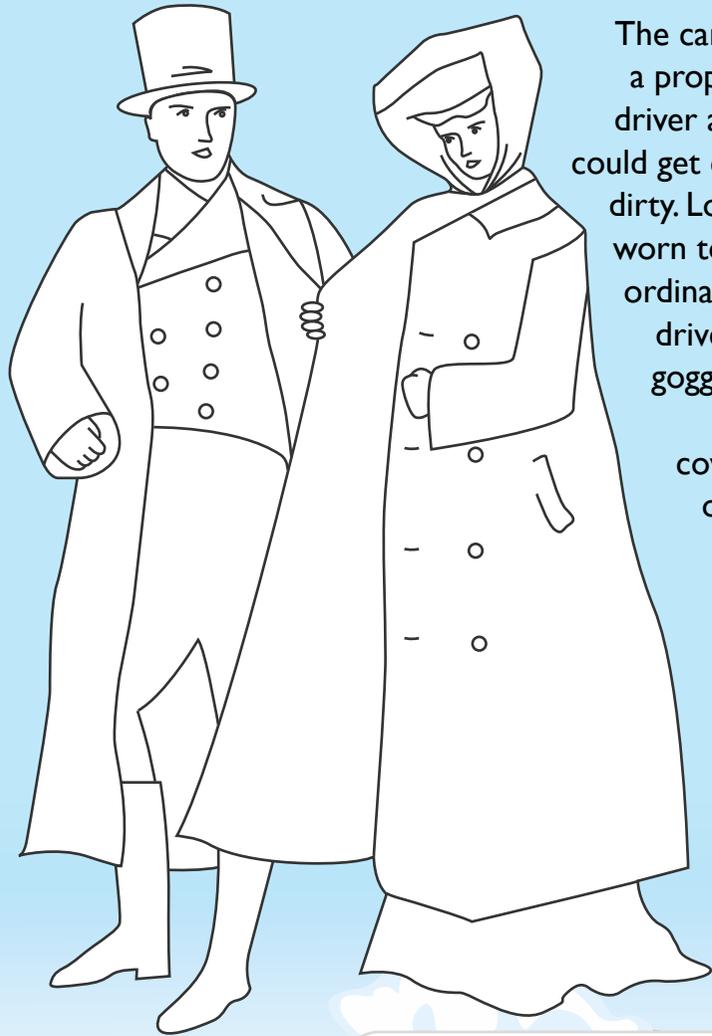


**Into  
the future**  
What will the  
cars of the future  
look like, and  
what will power  
them?



# Clothes for motoring

The man and woman below are dressed in the sort of clothes people wore in the early days of motoring.



The cars did not have a proper roof so the driver and passengers could get cold, dusty and dirty. Long coats were worn to protect their ordinary clothes. The drivers often wore goggles, and special gloves which covered the ends of their sleeves. The ladies tied scarves over their hats so that they would not blow away.



Some people wear special clothes for motoring today. Racing car drivers have to wear it. Why do you think that is?

.....

.....

.....

.....

.....

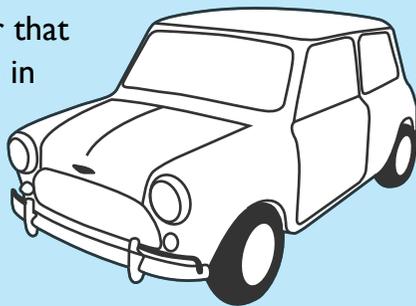
Colour this picture!



## Large and small

The Mini was designed in this country by Alec Issigonis in 1959.

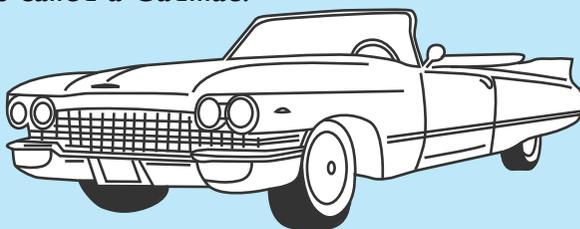
He was asked to design a car that was small, ideal for the roads in this country and did not use a lot of petrol.



Colour this Mini in your favourite colour.

In America, at the same time as we were making the Mini, they were making cars which were bigger. One of these was called a Cadillac.

Colour this Cadillac in your favourite colour.



## American cars



Some of the biggest cars in the Museum are American cars.

At the far end of the Museum are three very “special” cars standing on their own.

What are they called?

.....

What are their registration numbers?

.....

Why do you think they are special? .....

.....

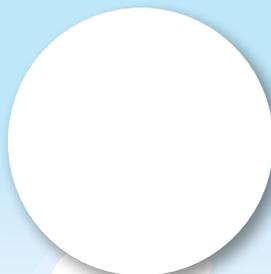
Draw an interesting part of any of the cars, such as a wheel, headlight, or bumper.



## Car badges

A car is usually identified by its badge.

When you are looking around the Museum pick out the badges that you like. Draw some of these and write the name of the car under the drawing.



.....



# Pedal cars

We have lots of children's pedal cars in the Museum.



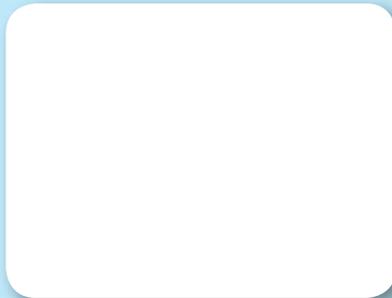
Can you draw your favourite?

What colour is it? .....

Why do you like it? .....

.....

.....



# The Mini

We have two red Minis in the Museum.



Can you find them and write down their registration numbers?

**This is a Mini Moke.**

The Mini Moke was originally designed for use by the Army and was made so that it could be dropped by parachute. It is now used by many people as a 'fun car'.



# Your favourite car

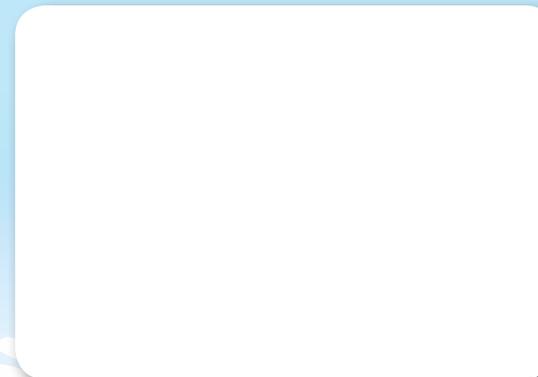
Which is your favourite car in the Museum? .....

What colour is it? .....

How many seats does it have? .....

What year was it made? .....

Draw a picture of your favourite car in the box opposite.

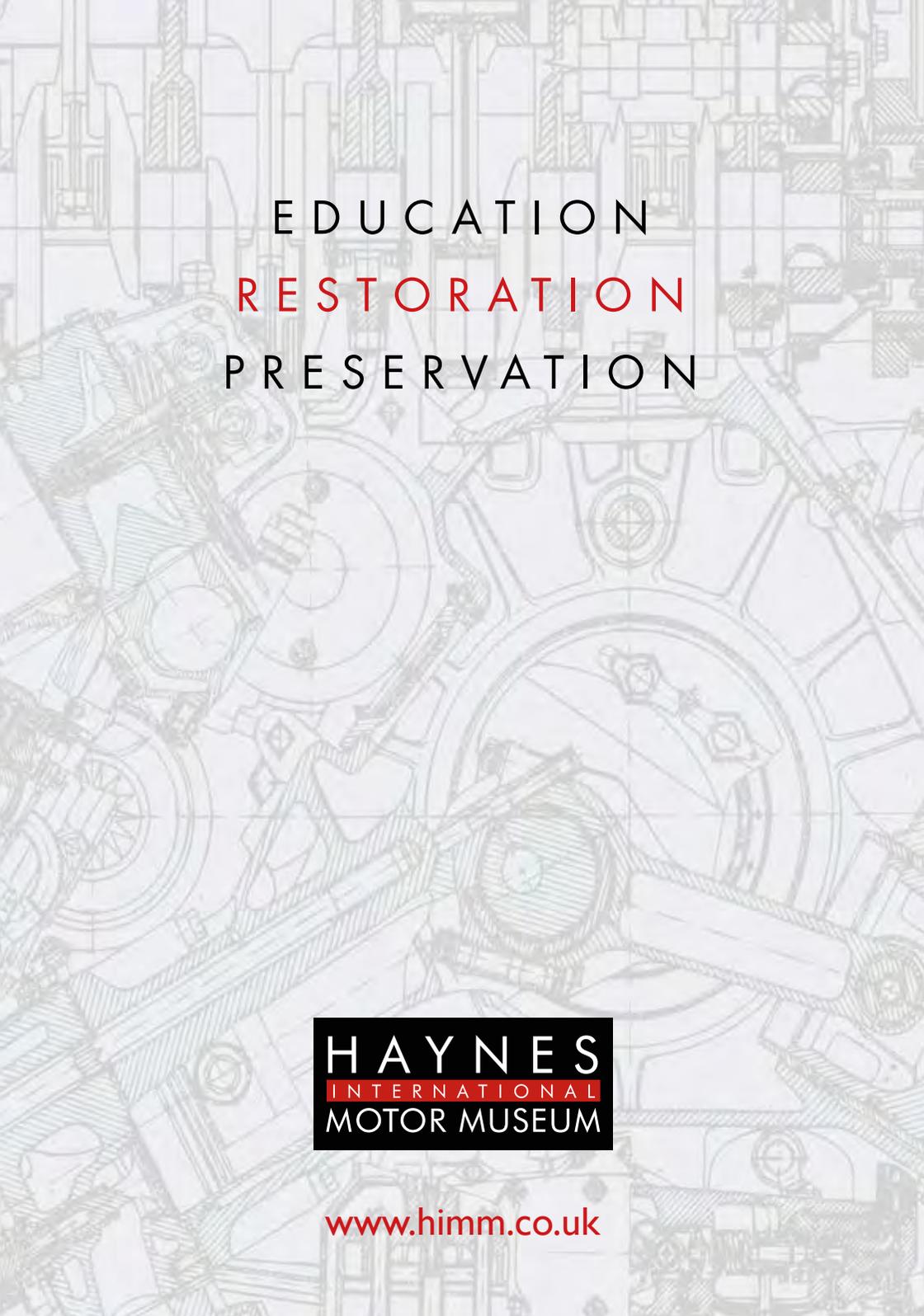


Why is this car your favourite?

.....

I'm Sparky and, along with all the content in this work book, am copyright protected.



A detailed technical line drawing of an engine, showing various components like pistons, valves, and gears, rendered in a light, faded style. The drawing is overlaid with a faint grid pattern.

EDUCATION  
RESTORATION  
PRESERVATION

**HAYNES**  
INTERNATIONAL  
MOTOR MUSEUM

[www.himm.co.uk](http://www.himm.co.uk)