

## Using Materials in a Car

Use your knowledge of density work about the materials used in a car, motorcycle or other vehicle.



Your work could include the following things:

1. Identify parts.
2. Describe the most useful material in a engine, wheel or the exhaust, or other parts.
3. Draw sections of a wing, describing the structural considerations and the differences between structural and other areas materials.
4. Describe the materials used in a body shell.

These ideas might help you get going:

- a. **Wheels**
  - What properties do different types have?
  - Why are they used?
  - What are the advantages?
  - What is special about the tyres and the wheels?
- b. **Frame**
  - Why is it made of steel or aluminium?
  - Why are the wheels made of steel?
  - What are the advantages?
- c. **Body**
  - What properties do different types have?
  - Why are they used in a car body?
- d. **Wings**
  - What are the problems with using structural materials?
  - How is the wing protected?
  - What are the advantages of using steel?
- e. **Exhaust**
  - What are the best materials for a car? Why are they used in a car?
  - What are the advantages of using steel?
- f. **Other**
  - What are the best materials for a car?
  - What are the advantages of using steel?

Think of the other materials used and ask other questions of them.