

Selecting a material

You have been asked to select an appropriate **material** for manufacturing a **turbojet fan blade**.

- Research the **properties** of each of the **materials** shown in the table.
- Select the most **appropriate** material for this application.
- **Justify** your choice.

Material type	Material
Ferrous metal	Cast iron
Non-ferrous metal	Aluminium
Alloy	Aluminium alloy
Polymer	Acrylic
Manufactured board (timber)	Plywood
Composite	Structural concrete



Now do this:

Produce a **presentation** of your findings. You should include:

- The **material selected** and **why** its **properties** make it suitable.
- **Other factors**, such as cost, environmental impact and machinability of the selected material.
- Information about the **materials not selected** and **why** they were **unsuitable**.