

Suggested prior learning [Mechanical systems: Pneumatic toys](#)

Intended outcome of the unit

Pupils who are **secure** will be able to:

- Work independently to produce an accurate, functioning car chassis.
- Design a shape that is suitable for the project.
- Attempt to reduce air resistance through the design of the shape.
- Produce panels that will fit the chassis and can be assembled effectively using the tabs they have designed.
- Construct car bodies effectively.
- Conduct a trial accurately and draw conclusions and improvements from the results.

Key Vocab

chassis
energy
kinetic
mechanism
air resistance
design

structure
graphics
research
model
template

Unit specific links:

[Knowledge organiser: DT - Y4 Making a slingshot car](#)

Week 1

[Lesson 1: Chassis and launch mechanism](#)

Week 2

[Lesson 2: Designing the car body](#)

Week 3

[Lesson 3: Making the car body](#)

Week 4

[Lesson 4: Assembly and testing](#)

Suggested Next Steps

[Mechanical systems: Pop-up book](#)