



Hot Air Balloons Lesson Plan

Aim

To help young people to learn about engineering job roles by learning about the laws of motion and doing a related experiment

Mapping

CES 'I Can' Statements	CMS Themes and competencies
<ul style="list-style-type: none"> ★ I can discuss the relevance of skills to the wider world and make connections between skills and the world of work ★ I can demonstrate and apply the skills I have learnt across the curriculum in relation to the world of work 	<ul style="list-style-type: none"> ★ Horizons

Learning Outcomes

Young people will understand:

- ★ Learn about how hot air balloons stay in the air
- ★ Be introduced to Newton's Laws of motion
- ★ Using a step by step guide, construct a hot air balloon
- ★ Investigate job roles related to the experiment.

Activity on next page...



Development of Activity

Instructions

Before you start

- ★ Print off the Hot Air Balloons worksheet.
- ★ To do the experiment, you'll need:
 - two thin bin liners
 - a pair of scissors,
 - sticky tape
 - a hairdryer
- ★ An adult should oversee the experiment

Follow-up

The activity looks at the jobs related to engineering. There are lots of related job profiles on My World of Work that the young person could find out more about:

[Aerospace engineer](#) [Materials technician](#) [Physicist](#) [Energy engineer](#)
[Structural engineer](#) [Chemical engineer](#) [Materials engineer](#)

They can find out about related apprenticeships on Apprenticeships.scot

Foundation Apprenticeships - [Engineering](#) [Scientific technologies](#)

Modern Apprenticeships – [Engineering](#) [Process Manufacturing](#)

Graduate Apprenticeships - [Engineering: Design and Manufacture](#)
[Engineering: Instrumentation, Measurement and Control](#) [Data Science](#)