

International Space Station

Introduction

The International Space Station is a manned satellite orbiting Earth. Astronauts from many countries live on the Space Station, carrying out scientific research.

In this activity you will use your research skills to find out about:

- how man-made satellites orbit Earth
- the International Space Station and who works there
- experiments that are carried out on the International Space Station
- what it is like to live and work in zero gravity.

You will be using your literacy skills to produce a presentation for other students to tell them about the International Space Station.

Brief

Produce a presentation for students who want learn about the International Space Station.

Your presentation should:

- begin by explaining what man-made satellites are and how they orbit Earth
- include one slide saying what the International Space Station is
- include one slide explaining why the International Space Station was launched and who works there
- include two slides describing one or two experiments carried out on the International Space Station – choose interesting experiments you can explain to other students
- include one or two slides describing what it is like living and working in zero gravity and the effects it has on astronauts.

Step 1

Research the following topics:

- what man-made satellites are and how they orbit Earth
- what the International Space Station is, why it was launched, and who works there
- experiments that are carried out on the International Space Station
- what it is like living and working in zero gravity.

Step 2

Find some pictures to include in your presentation. These could include pictures of people who work on the International Space Station or diagrams explaining how satellites orbit the Earth.

Step 3 (extension)

Some people say that money spent on the International Space Station should be spent on health and education. Research some of the benefits of having scientific research carried out in zero gravity.

Step 4

Plan some sub-headings to structure your presentation and the important information you want to include.

Step 5

Make your presentation and practise it.

Sources**What are satellites?**

This website contains information on satellites and how they orbit Earth:

www.esa.int/esaKIDSen/SEMQ3VXDE2E_Liftoff_0.html

The International Space Station

This contains information about the International Space Station:

www.nasa.gov/audience/forstudents/5-8/features/what-is-the-iss-58.html

Experiments in zero gravity

This contains information on some experiments in zero gravity, but there are lots of other websites describing experiments too:

www.esa.int/esaKIDSen/SEMYWUOZVAG_LifeinSpace_0.html

Living on the international Space Station

These contain information on life on the International Space Station including the crew on board:

www.nasa.gov/audience/foreducators/teachingfromspace/dayinthelife/index.html

www.nasa.gov/mission_pages/station/expeditions/index.html

Benefits of space research (extension)

This website contains information about some benefits of space research. The benefits are also called spin-offs:

spinoff.nasa.gov/Spinoff2008/tech_benefits.html

Writing frame

Produce a presentation for students who want to learn about the International Space Station.

Summarise your research findings on the key areas below.

What are man-made satellites and how do they orbit Earth?

What is the International Space Station and why was it launched?

Who works on the International Space Station?

Experiments: what did scientists do and what did they find out?

Living in zero gravity – some effects

Presentation sub-headings

Important points

- Make sure your presentation includes about eight slides.
- Use interesting images.
- Use language which can be understood by students your age.
- Do not include too much information on each slide. Summarise the points.

Your work

You have now made a presentation about the International Space Station.

Look at the questions below and check whether you have met the brief.

- Have you explained how man-made satellites orbit Earth?
- Have you said what the International Space Station is?
- Have you said why it was launched?
- Have you included information about people working on the International Space Station?
- Have you described at least one experiment?
- Have you described some effects of living or working in zero gravity?
- Does your presentation include the right number of slides?
- Have you used pictures and language suitable for people your age?