

Elements on Earth

Introduction

Elements are the basic substances from which everything in the Universe is made.

In this activity you will be using your research skills to find out about the wide variety of chemical elements that are found on Earth.

You will be using your literacy skills to:

- prepare a presentation about the elements
- make sure your presentation is clear and interesting for your audience.

Brief

You are going to make a PowerPoint presentation about the elements.

Your presentation should:

- include a definition of what an element is
- contain some fascinating facts about different elements
- contain five slides after the title slide.

Step 1

Make sure you know some basic information about elements:

- What are they?
- What are they made of?
- How are they represented by symbols?

Step 2

Choose one of these areas to research: the elements in the air, the elements in the human body, or the elements in the Earth's crust. Then find out about some unusual elements we use in everyday life.

Step 3 (extension)

Find some data to support your information in Step 2.

Step 4

Plan what you will have on your five PowerPoint slides. Remember to have brief, clear points not lots of text. Include a picture on each slide.

Step 5

Now make your presentation, remember to make sure it is interesting for other people.

Sources

Elements: the basics

This website has some basic information about elements, atoms, and symbols:

http://www.bbc.co.uk/bitesize/ks3/science/chemical_material_behaviour/atoms_elements/revision/1/

Elements in the human body

These websites list the elements that make up the human body:

<http://www.lenntech.com/periodic-chart-elements/human-body.htm>

<http://www.livescience.com/3505-chemistry-life-human-body.html>

Elements in the air

Which elements are in the air we breathe?

<https://www.bbc.co.uk/bitesize/guides/zt6g87h/revision/1>

Elements in every-day life

Which elements do we use in every-day life?

<https://www.enotes.com/homework-help/what-5-pure-elements-that-can-found-your-home-603994>

Elements of the Periodic Table

Interactive resource that gives you amounts of elements in air, the Earth, and our bodies:

<http://www.open.edu/openlearn/science-maths-technology/science/chemistry/elements-the-periodic-table?gclid=CIGyrIe6s7cCFRTMtAodMVkAMA>

Writing frame

You are going to make a presentation containing five PowerPoint slides about the elements.

Slide 1: What is an element?

Slide 2: Atoms and symbols

Slides 3–5

Interesting elements – elements in the air, the human body, or the Earth's crust

Elements in every-day life

Important points

- Make sure you have no more than five slides after the title slide.
- Keep your information brief and clear – for example, use bullet points to summarise your main findings.
- Make sure that your presentation is interesting for other people, and include a picture on every slide.

Your work

You have made a PowerPoint presentation.

Look at the questions below and think about whether you have met the brief:

- Have you defined what an element is and referred to atoms and symbols?
- Have you identified the elements in at least one of the human body, the air, or Earth's crust?
- Have you got at least one fascinating fact about an element we use in every-day life?
- Have you made five interesting slides?
- Is your text brief and clear?
- Have you added a picture to each slide?