



Mind map

THIS IS A TEAM TASK

Write down your ideas about nuclear energy:

- What have you heard about nuclear energy in the news?
- What do different countries feel about nuclear energy?
- What arguments do people use for and against nuclear energy?
- Do you know how nuclear reactions are turned into electricity?



Meet the experts

THIS IS A TEAM TASK

During today's session you will have the chance to hear short talks from some experts. After they are finished you will meet each of them.

As a group, think of four questions you want to ask each expert. Will they be different questions or the same? Here are some ideas to help you come up with questions.

- Use what you learned doing the tasks and use your time with the experts to help make up your mind.
- Find out about the expert's opinion on nuclear energy.
- Find out about how the expert started their career or what they find interesting about their job.





sciZmicville

THIS IS A GROUP TASK

During the day you will participate in a simulation where you will imagine you are citizens in the town sciZmicville. The town of sciZmicville is going to have a new nuclear reactor and you need to play a character and help the city decide what will happen to the waste produced by the reactor.

During the simulation the whole group will be split into three working groups. You may be split up from members of your team. After you finish the simulation, discuss with your team what happened in your working group, and whether you agreed with the opinion of the character that you were playing.



Energy chart

THIS IS A TEAM TASK

With the help of your facilitator, work as a team to complete the **Energy Chart**. Do this task only after your team has completed all of the other tasks.

To fill in the chart you will need to share information from each of the different tasks you worked on, as well as discuss what you think about each of the different issues.





Internet search - nuclear accidents

FOR 2 TEAM MEMBERS

Use the Internet to find out information about two famous nuclear accidents: the incident at Three Mile Island and the incident at Chernobyl. Record your findings on the **Nuclear Accident Recording Sheets**.

Use an Internet search engine such as *www.google.com*.

Internet search engines use keywords to match your question to a list of websites.

Instead of:

WHAT HAPPENED TO THE NUCLEAR REACTION IN CHERNOBYL?

You might write:
CHERNOBYL

Or:

CHERNOBYL AND NUCLEAR SAFETY.



Fact sheets - nuclear accidents

FOR 2 TEAM MEMBERS

You have been given two fact sheets about nuclear accidents. Use these to find out information about two famous accidents: the incident at Three Mile Island and the incident at Chernobyl.

Record your findings on the **Nuclear Accident Recording sheets**.





Public service announcements

FOR 2-3 TEAM MEMBERS

Use old magazines and art materials to create a public service announcement for a bill poster.

Public service announcements are like advertisements, but are used to tell the public a message instead of selling a product.

Your public service announcement will need:

1. A slogan - a distinctive phrase that summarises your message. This could either be a message in favour of or against nuclear energy, a safety warning, or a question designed to promote debate in a community.
2. Images - use images from old magazines or your own drawings to illustrate your point further. What do people imagine when they hear your slogan?
3. Contact information - include a way for people to get more information if they want it.



Building a nuclear reactor

FOR 2-3 TEAM MEMBERS

You have been given a **Reactor Plan**, **Building Cards** and **Information Cards**.

Use the **Building Cards** to label the parts of a boiling water nuclear reactor on the **Reactor Plan**.

Attach the relevant **Information Cards** to describe what each part of the reactor does.





Fuel cycle

FOR 1-2 TEAM MEMBERS

You have been given two sets of cards: **Process Cards** and **Description Cards**.

Arrange the fuel cycle **Process Cards** in order: from the start of the life cycle of uranium through to after the nuclear reaction.

Put a fuel cycle **Description Card** next to each **Process Card** to explain the process.



Newspaper and magazine articles

FOR 2-3 TEAM MEMBERS

Use the two news articles provided with two different coloured highlighters.

Use one colour to highlight which parts of the article are fact, and the second colour to highlight which parts are opinion.

When you have finished write down whether you think that the article is "for" or "against" the issue.

Describe the article to the other person working on the task, and decide whether you think the article will help you to make a decision on the issue.





Energy use

FOR 1 TEAM MEMBER

Find out how much fuel is used to light your home for one year.

We will be comparing the amount of coal that is burned with the amount of uranium that is used.

To do this, use a calculator to complete the **Energy Use Challenge Sheet**.



Cartoon opinions

FOR 2-3 TEAM MEMBERS

Use your imagination to draw cartoons showing how different people might feel about the nuclear energy debate.

Try to imagine what these characters might say:

- Someone who works for an oil company
- Someone who works at a nuclear energy plant
- A doctor
- Someone trying to pay lower energy bills
- You!





Nuclear proliferation - Statement sorting

THIS IS A TEAM TASK

You have been given a set of statements about nuclear energy.

Work as a group to place the six statements into order from the one your group agrees with MOST to the one it agrees with LEAST.

Remember, you may not all agree, and might have to make compromises to make an order that best reflects the feelings of the group.



Presentations

THIS IS A TEAM TASK

After completing the other tasks, create a five minute group presentation to share your group's views on nuclear energy with everyone else.

All members of your group should have a role in the presentation or have taken part in its preparation, and it should include work from at least three of your other tasks.

Here are some ideas for a presentation:

1. A television commercial
2. A news broadcast with "live footage"
3. A dramatic piece showing how a group of citizens may feel about nuclear energy

Or any of your own ideas!





CHECKLIST

Mind map					
Meet the experts					
sciZmicville					
Energy chart task					
Internet search					
Fact sheets task					
Public announcement					
Building a reactor					
Fuel cycle					
Newspaper task					
Energy use					
Cartoon opinions					
Nuclear proliferation					
Presentations					
1 x the energy chart					
4 x nuclear accident recording sheets					
1 x nuclear reactor cards					
1 x nuclear reactor plan					
1 x fuel cycle cards					
2 x energy use calculating sheet					
Newspaper articles					
Fact sheets					

