

Nuclear Energy Web Quest

Objectives:

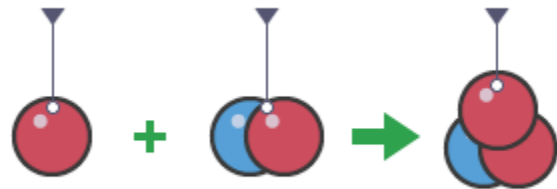
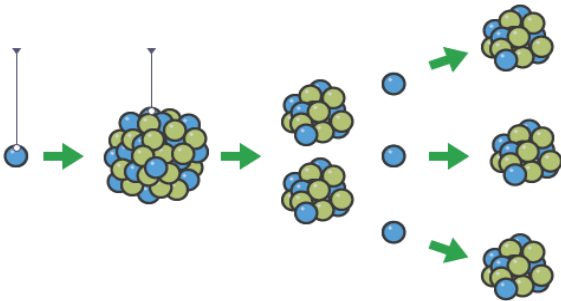
- Describe the process used to obtain energy from radioactive elements
- Analyze the pros and cons of using nuclear energy

Task 1: Use the sites provided in order to describe the process of nuclear fission and fusion by answering the questions below.

Nuclear power

1. What is a fissile isotope and why is it important to fission?
2. what element/isotope is used in nuclear power plants?
3. What is a chain reaction?
4. Label and use the diagrams below to explain fission and fusion

<https://www.bbc.co.uk/bitesize/guides/zggrr82/revision/3>



Go to: <http://www.howstuffworks.com/nuclear-power.htm>

1. What is induced fission?
2. How does a nuclear power plant work?

Complete the diagram and use it to explain. **(see appendix)**

4. What precautions are taken on the outside of a nuclear power plant?

Go to: http://fusioned.gat.com/what_is_fusion.html

1. What is fusion?
2. What is necessary in order to make fusion happen?
3. Why is fusion preferred over fission?

Task 2: Use the sites below to investigate repercussions and disasters related to radiation.

Repercussions and disasters

Go to: <http://science.howstuffworks.com/nuclear-power5.htm>

1. What was the prime-worst nuclear disaster?
2. What happened at Chernobyl?
3. What happened in Japan in March 2011?
4. Why didn't the safety measures stop radioactivity at the plant?

Task 3: Use the site below to investigate the pros and cons of nuclear energy

Go to: <http://www.howstuffworks.com/nuclear-power.htm>

1. What are the pros of nuclear power plant?
2. What are the cons of nuclear power plant?

