

# A Nuclear Power Plant

## Unit 8



### Reading Comprehension

Read the article below and match the answers to the questions.

In any power plant, the first thing you need is fuel. Usually, this fuel is coal, oil or gas. But in a nuclear power plant, the fuel comes from uranium.

Uranium is a very heavy metal. We get nuclear fuel from the nucleus [middle] of uranium atoms. Scientists separate the nucleus from the other parts of the atom. This process is called 'nuclear fusion.'

The nuclear fuel is heated inside a containment building, made of thick concrete. It stops dangerous, radioactive gas escaping. When the fuel is heated, it generates steam. The steam is then pushed into thin pipes.

The pressure from the steam makes the turbine spin around. This powers the generator, which makes electricity. The electricity must go into a transformer to become the correct voltage. If it is strong, it cannot travel through power lines to customer's homes.

After this process, the steam is changed back to water. The temperature of the water is reduced in a cooling tower.

### Nuclear power around the world.

Thailand has no nuclear power plants, though it could get some in the future. Compared to traditional power stations, they produce very little pollution.

However, nuclear power plants can be dangerous. There was an accident at a plant in Fukushima, Japan in 2011. Radioactive gas escaped, and caused serious damage to the environment. Radioactive gas can also cause cancer and other diseases in humans. After the Fukushima accident, a lot of people thought we should stop using nuclear power.

China, India, Russia and South Korea are still building new plants, while many European countries are closing theirs. It is not clear whether global use of nuclear power will go up or down in the coming years.

The separation of the nucleus from other parts of the atom.

Radioactive gas escaped and caused serious damage to the environment.

From uranium.

From the nucleus of uranium atoms.

It can cause cancer and other diseases in humans.

The pressure from the steam.

Coal, oil or gas.

Fuel.

It must go into a transformer.

It generates steam.

1	What makes the turbine spin around?	
2	How harmful is a radioactive gas?	
3	What's the first thing that power plants need?	
4	What happened to the Fukushima Nuclear Power Plant?	
5	What is nuclear fusion?	
6	What happens after the fuel is heated?	
7	Which substances is the fuel made from?	
8	How can electricity become a correct voltage?	
9	Where does fuel in a nuclear power plant come from ?	
10	Where can we usually get nuclear fuel?	



## Listening Activity

## Life in Fear

The terrorist ..... have scared a lot of people from studying abroad. Many students go to big cities to take pictures, shop, and ..... Terrorists attack ..... big cities though, because they ..... that there will be a lot of people. The truth is, we should not stop people from studying abroad. These terrorist attacks can happen anytime. We can't ..... in ..... We must do the things we love.

People are also scared to travel in general, because of ..... accidents. Terrorists ..... bring explosives on planes. ..... people are also scared of dying on a plane. All the passengers in Malaysia Airlines Flight 370 are ..... We ..... don't know what happened to them. Not too long after, all the passengers in Malaysia Airlines Flight 17 ..... It was a very tragic event.