# How Do Solar Panels Work?



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#### Quick Start - Retrieval

## Which sources can provide renewable energy?

Before we look at why renewable energy is important, it is important to know exactly what renewable energy is. It comes from nature and can be provided by things like the sun, wind, and water. It can even be made from poo! It is also called green energy or clean energy because it does not cause any pollution when we use it to power our homes.



### Where would solar panels be installed?



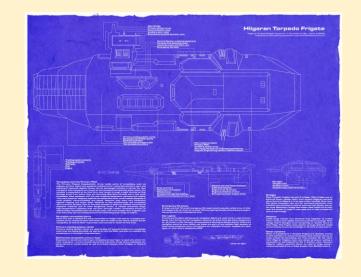
# HOW DO SOLAR PANELS WORK FOR KIDS

You have probably seen a lot of solar panels recently, as more and more people are having them installed on their roofs. However, do you know what they are or how they work? Take a look at this exciting guide and find out just what solar power is!

Wind is actually a form of solar power. It is created by the uneven heating of the Earth's surface.

Solar panels can work for decades. In fact, some of the panels that were installed in the 1970s are still working and generating electricity today.

The solar cell was invented by Russell Ohl in 1941
The photovoltaic effect, which explains how electricity
can be generated from sunlight, was discovered by
Alexandre Edmond Becquerel in 1839.



#### In which year was the solar cell invented?

How long would it take to replace non-renewable sources of energy?



At the moment, we rely on energy made from the Earth's resources. These are things like coal and natural gas. We call these fossil fuels because they started forming during the age of the dinosaurs, and are even made from plants and animals from that period.

The problem with fossil fuels is that they won't last forever and we are already starting to run out, which is why renewable energy has started to become so important. Once they are gone, they cannot be replaced – at least not for another million years or so. Plus, they cause a lot of pollution, which is damaging our planet.

#### Vocabulary Check

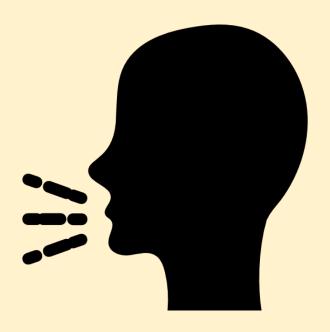
Renewable energy is important because it doesn't damage our planet



#### Vocabulary Check

We won't be breathing in nasty toxins or pollution



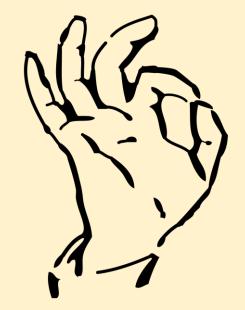


### Vocabulary Check

#### They **require** little **maintenance**

#### They are **reliable**







#### Summarise

Summarise how solar panels work.



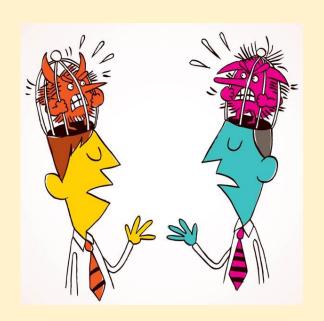


### Explain

Using your knowledge of renewable sources of energy and what you have just read, why might it be important to start using renewable energy now for a better future?

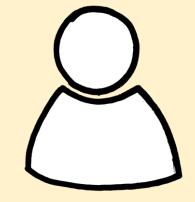
#### Summarise





What are the arguments against using renewable sources such as solar power as a source of electricity?

# Explain



You will now have 5 minutes to list any new facts you have learned about solar panels and solar power.