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# Earth's resources

The Earth contains many different resources that we all use and depend upon on a daily basis. It is important to consider the types of resources we are using and compare their impact on the environment.

While the word, resource is derived from the old French word 'resourdre' meaning to rise again or to recover, we use it currently to discuss many types of resources, some that can be replaced and many that cannot.

## **Key facts**

#### What do humans use Earth's resources for?

Humans use Earth's resources for everything, from keeping us warm, to shelter, food and transport.

#### Finite or renewable

**Finite resources** are those which will **run out** because they cannot be **replaced**, such as fossil fuels. **Renewable resources** are those which will not run out as fast as they can be replaced, such as trees. This is why planting trees is so important, as they must be replaced at the **same rate** they are being used up.

#### Natural or synthetic products

**Synthetic products**, such as plastics, medicines and composites, are made by humans using **chemical reactions** in a **laboratory**. **Natural products** are formed from **plant** and **animal processes**, for example wood and silk.

### **Industrial processes**

While China is now the largest producer of **ammonia** (primarily used in agriculture in **fertilisers**), the **Haber process**, which is used to make ammonia, was developed in Germany.

#### **Metal extraction**

Guinea has the largest world reserves of **bauxite**, an **ore** which contains high amounts of **aluminium** and **gallium**. The aluminium is used for cars, planes, bicycles, window frames and cans.

## Did you know...?

While Guinea has the largest bauxite **reserves**, Australia is currently the world's largest **producer**.

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## **Building materials**

Mined mostly in Spain, **slate** is a **metamorphic rock** that is commonly used as roofing for houses. It is also an example of a **finite resource** as it will run out.

## **Energy sources**

Saudi Arabia is the second largest **producer** of oil, behind only the United States. This oil is **refined** and then we use it as **fuels** for cars, lorries, boats and planes.

# Did you know...?

Venezuela has the largest oil reserves in the world. Reserves are an estimate of the amount of a resource that has the capacity to be extracted in the future.