

Impact on the environment

Name: _____

Natural materials are those taken from the environment:

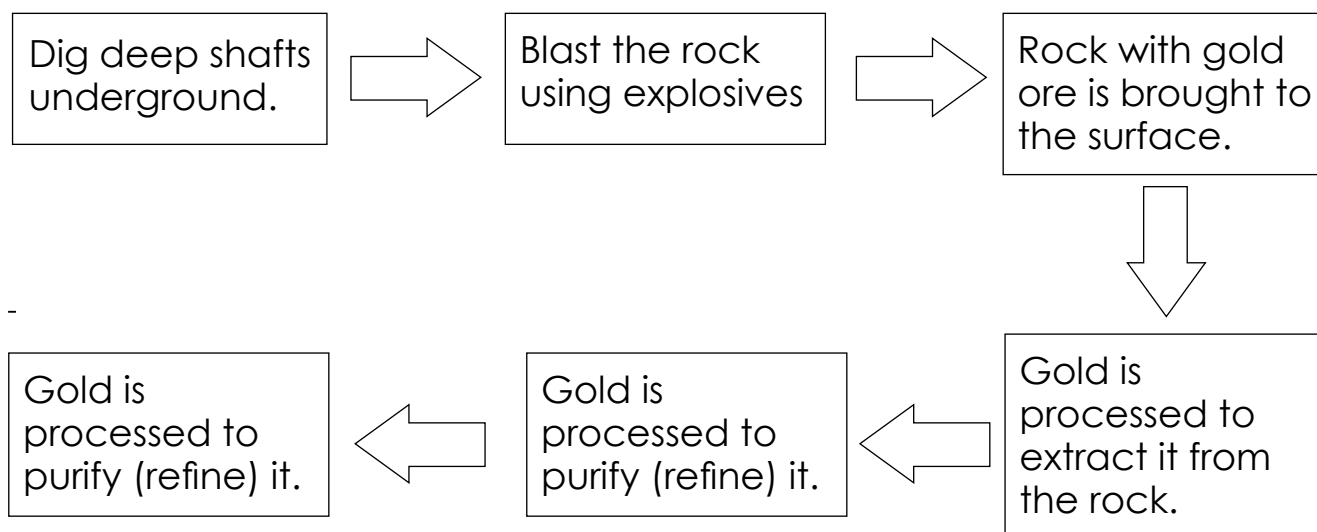
Synthetic materials are those that are made in factories, and are not natural:

There is always a cost to the environment when manufacturing and using materials.

The environmental impact of mining precious metals

What is mining? _____

What is the impact of the mining process on the environment?



The mining industry has recognised the negative impact it has on the environment and has implemented strategies to limit this impact. It is also their responsibility to see that an area affected by mining is rehabilitated.



Image: Creative Commons

The environmental impact of plastics

Why are plastic bags useful to us? _____

If they are so useful, how can they have a negative impact on the environment?

Non-recycled waste is dumped on landfills. Some plastics that are dumped here can take **1000 years** to decompose. When they do decompose, they release harmful chemicals into the soil.

What can you do?

Try to reuse plastic items (eg: shopping bags and bottles). Use products with less packaging to reduce waste. Use products made of glass rather than plastic. Recycle plastics if you can not reuse them.

The environmental impact of fuels

Some examples of fossil fuels are COAL, OIL and NATURAL GAS. Fossil fuels are a non-renewable resource!

COAL	OIL	NATURAL GAS
Used to generate electricity. Needs to be <u>mined</u> from underground.	Used to make petrol and diesel. Found in the ground between layers of rock. Have to drill and 'oil well' and pump it to the surface. Transported in pipeline under the sea from oil-rigs or in ocean tankers.	Energy source for heating and cooking as well as for vehicles and to generate electricity in some countries.

What are the negative impacts these fossil fuels have on the environment?

Answer sheet

Natural materials are those taken from the environment:

Wood, Gold, Crude Oil, etc.

Synthetic materials are those that are made in factories, which are not natural:

Plastics, Petrol, Glass, etc.

The environmental impact of mining precious metals

What is mining? The process of extracting precious metals and stones from underground.

What is the impact of the mining process on the environment?

Soil is damaged and changed because of the chemicals used and the blasting of bedrock. Processed rock is dumped on mine-dumps, the dust from which is harmful to people and the soils cannot support plant life. Chemicals used seep through the ground into ground water, poisoning it. Because the soil and water is affected entire ecosystems that rely on this area are negatively affected.

The environmental impact of plastics

Why are plastic bags useful to us? They are light-weight, easy to carry, strong and inexpensive, they carry things, are waterproof and are used in many types of packaging to keep food items fresh.

If they are so useful, how can they have a negative impact on the environment?

Made from polyethylene which is made from natural gas and petroleum (non-renewable resources). Plastic litter is unattractive and can cause blocked drains and sewage systems which can lead to flooding. Animal eat or get tangled in the litter and can suffocate or starve. Plastic takes a long time to decompose. Decomposing releases harmful chemicals that can seep into ground water poisoning it.

The environmental impact of fuels

What are the negative impacts these fossil fuels have on the environment?

Fossil fuels have to be burnt to produce energy – this causes air pollution and the release of toxic gases into the atmosphere.

They have to be mined in some or other way which impacts the environment in many ways (as we have already seen earlier).

The transportation of crude oil for example is very risky, if a pipeline from an oil rig bursts, or a tanker is damaged or runs aground, oil spills out into the marine ecosystems and destroys plant life and animal life.