

MAKING A LIVING

If you were asked what industry means, you would likely think of factories, chimneys, machinery and lorries in places where things are made. This would not tell the whole story of industry however.

Industry is to do with any sort of work done in order to make a living

It is in people's nature to work - yes *even pupils* ! All over the world people work in all the different types of industry. The most basic form of work is when people hunt for or gather their own food. In the U.K. today we have come a long way from the early days of hunting and gathering for a living. Nowadays we depend on others to produce all our food, goods, services and information. We buy these with money we earn from working in an industry.

The list of different types of jobs people can work in is endless but industry can be sorted or classified into four main types - **primary, secondary, tertiary and quaternary** (fig.191). There have been many changes in the type of work people do (fig.192).

Before 1800AD, most of the people in Scotland worked and lived on the land in primary industries. During the Industrial Revolution, the rise of manufacturing or secondary industries employed over 50% of the workforce. Today, the tertiary industries employ over 60% of the workforce, services (fig.193).

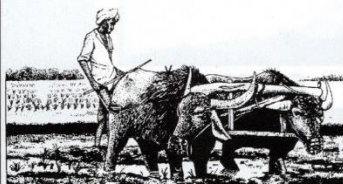
Geographers study industries as **systems** with inputs, processes and outputs (fig.194). Industries make profits (money) where the value of the outputs is more than that of the inputs and processes. Industries can be linked together to form **chains** (fig.195). Many chains can be complicated since several different products or services may be involved.

The main types of Industry



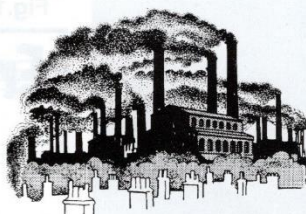
Fig.191

Primary Industry



Primary industry often involves mining or extracting resources from the land or sea. These industries **take** or extract raw materials from the Earth such as coal, oil, wood, diamonds and crops. Examples of primary industries are mining, quarrying and farming.

Secondary Industry



Secondary industries manufacture or **make** products. They mostly use the raw materials from primary industry to make finished products such as steel, biscuits, beer and paper. Some secondary industries **assemble** (put together) components to make a finished product such as cars and computers.

Tertiary Industry



Tertiary industries provide a service to people and the community. Service industries include transport, delivery companies, banks, building societies, shops, entertainments, doctors, the police, fire-brigade, teachers, the armed services, civil service, dentists, hairdressers, etc.

Quaternary Industry

Quaternary industries are the information and office-based industries such as insurance, stock exchange, television and media, computer software designers and financial advisers. These industries provide expert advice and information - just like spies !



Changing Industry in Scotland

Fig.192

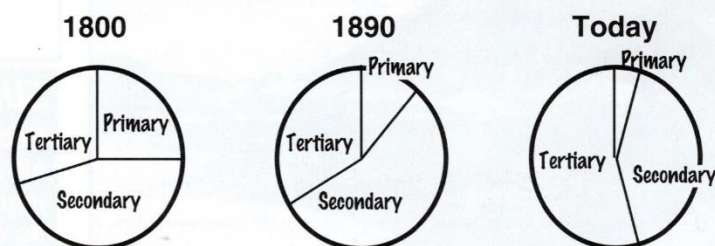




Fig.193 Glasgow's Argyll Street.

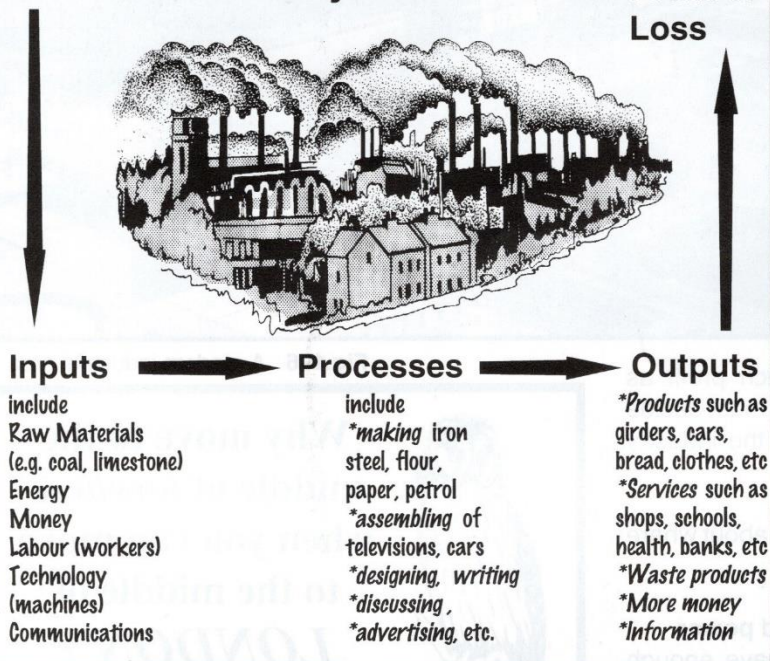
Making a Living Tasks

- 1
 - i. What does **industry** mean ?
 - ii. What are the main industries in the area in which you live ? Make a list.
- 2 Make a larger copy of and then fill in the following table for the main types of industry. Some examples are done already for you but give at least **two** more examples of each of your own.

Main type	Examples of industry	Name of a company
Primary	Oil drilling	Shell Oil
Secondary	Bakery	Greigs
Tertiary	Shops	Primark
Quaternary	Computer Software	Microsoft

- 3 Add another column for **Jobs** to your table above. Then put each of the following jobs into the correct column.
Fisherman, banker, fireperson, jeweller, research scientist, teacher, car mechanic, shepherd.
- 4 Use the words below to write out four sentences to describe the main types of industry - **make, inform, take, serve, quaternary, tertiary, primary, secondary.**
- 5 List the main industries shown in figure 193.
- 6 Work out industrial chains for the following -
pottery, newspapers, bread, your own choice of industry.

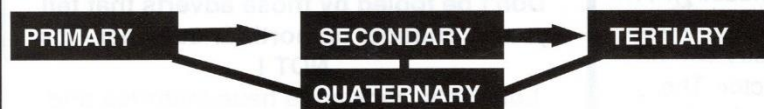
The Industrial System



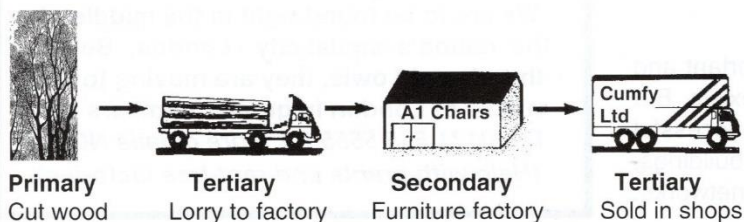
Industrial Chains

Fig.195

Industries are linked together in **chains** where one type provides raw materials, products & services for the next. A simple chain is shown below:



Below is a **furniture chain** showing how industries are closely linked -



SUMMARY

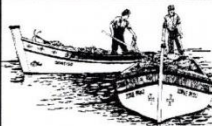



Industry to do with any sort of work done in order to make money. There are four main types of industry - **primary (take), secondary (make), tertiary (serve) and quaternary (inform).** Industries can be thought of as a system of inputs, processes and outputs. Most industries can be linked together to form chains.

Making a Living

4. Why is this the case ?

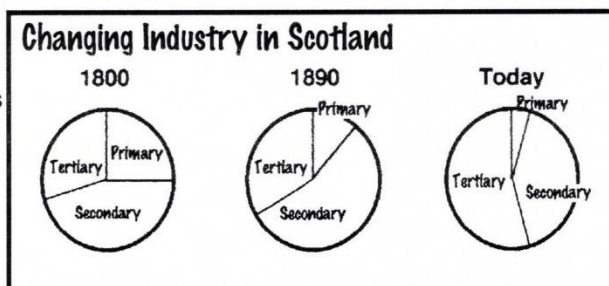
1. _____
2. _____
3. _____
4. _____

[illegible]

- | Sketch of Work | Main Type of Industry | Examples of Industry | Name of a Company | Jobs in this type of industry |
|---|-----------------------|--------------------------------|-------------------|-------------------------------|
|  | Primary Industry | 1. Farming
2.
3. | | |
|  | | 1. Building Houses
2.
3. | Toyota | |
|  | | 1. Hospital
2.
3. | | Doctor |
|  | | 1. Media
2.
3. | BBC TV | |

Making a Living 2

1. Look at the diagram alongside. It shows the numbers of people working in different types of industry in Scotland. Note that the Tertiary sectors of each pie-chart include the Quaternary industries.



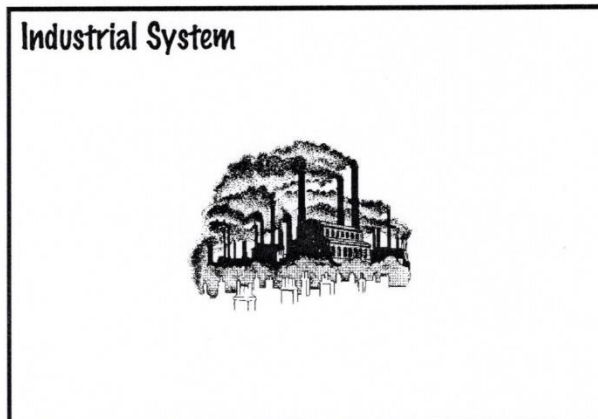
- Which type of industry had or has the most jobs in
 - 1800** _____
 - 1890** _____
 - Today** _____ ?
- Since 1800 which type of industry has
 - decreased most** _____
 - Increased most** _____ ?
- Before 1800, in which type of industries did most of the people of Scotland work ?

- What was the major period of **change** from Primary to Secondary industries in the late 1700s and early 1800s called ?

2. Use the sketch in the box alongside to draw a simple diagram to show how an **industrial system** works.

Write the following labels on your diagram :-
Processes Outputs Inputs
Profit or Loss

List **three** Inputs and three Outputs on your diagram.



3. Industries can often be linked together in **chains**. This happens where one industry provides **raw materials**, products and services for the next.

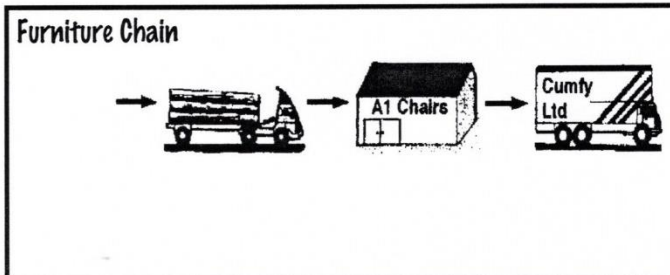
- Draw a **simple** industrial chain in the box alongside (see fig.195)

Simple Industrial Chain

- Fill in the missing information on the **furniture chain** alongside.

- On a separate sheet, work out and draw industrial chains for the following -

doughnuts magazines



WHY HERE ?

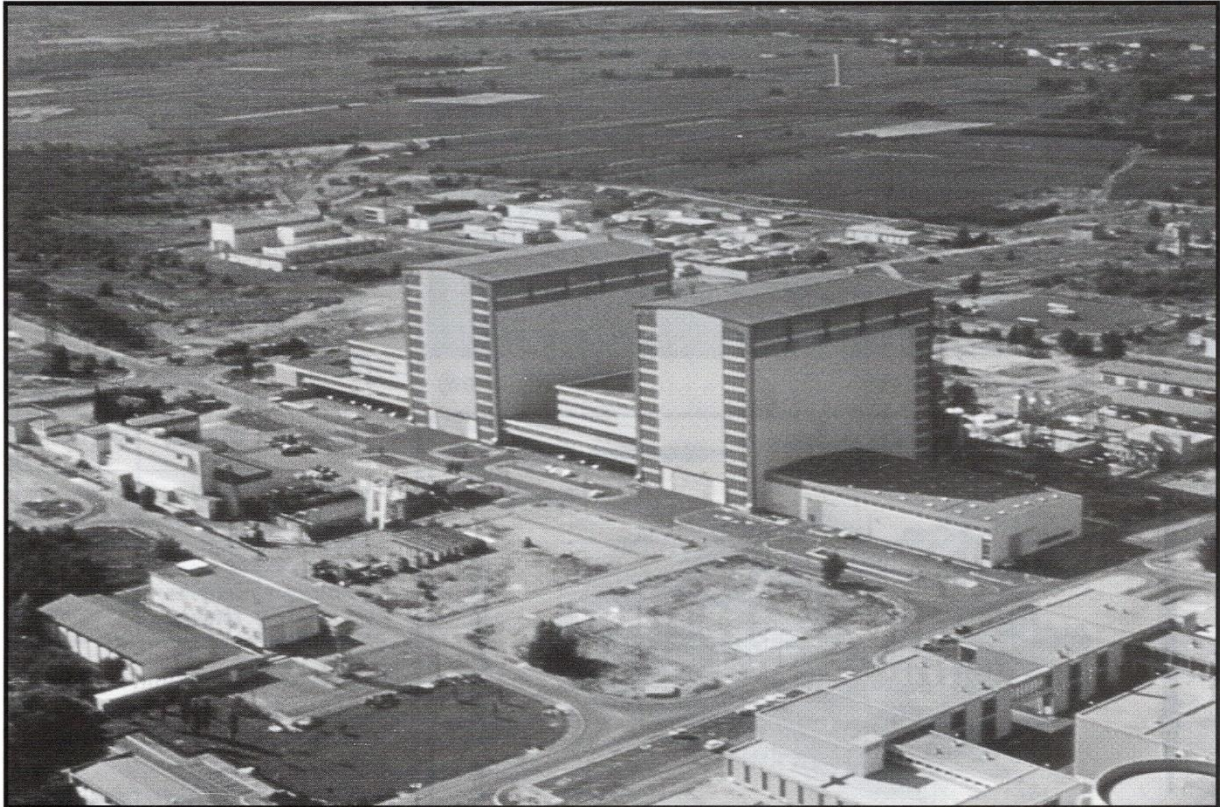


Fig.196 A modern industrial area

Most industries try to make as much profit as possible. This means that the owners must decide where to **locate** (choose the place) the industry very carefully (fig.196).

Location factors affect the decisions about where to locate industries (fig.198).

Successful industries need a **fuel** and **power** supply. The **site** must be flat and have enough room for the buildings needed. **Raw materials** must be easily brought to the factory and good **transport links** are very important. All industries need a **labour force** who live nearby and **capital** (money needed for investing in the industry). A nearby **market** (a large town for example) where the products or services from the industry can be sold may also be an important location factor. The **Government** can also help industries locate in some areas by giving them grants or rent-free factories (fig.197).

Location factors are not all equally important and the perfect location for industry rarely exists. But wherever industry is located it will not be successful unless there is a good **infrastructure** - buildings, power & water, and good communication networks.



Why move to the middle of *nowhere* when you can move to the middle of *LONDON* ?

Don't be fooled by those adverts that tell you it's cheaper up north or out west - it's NOT !

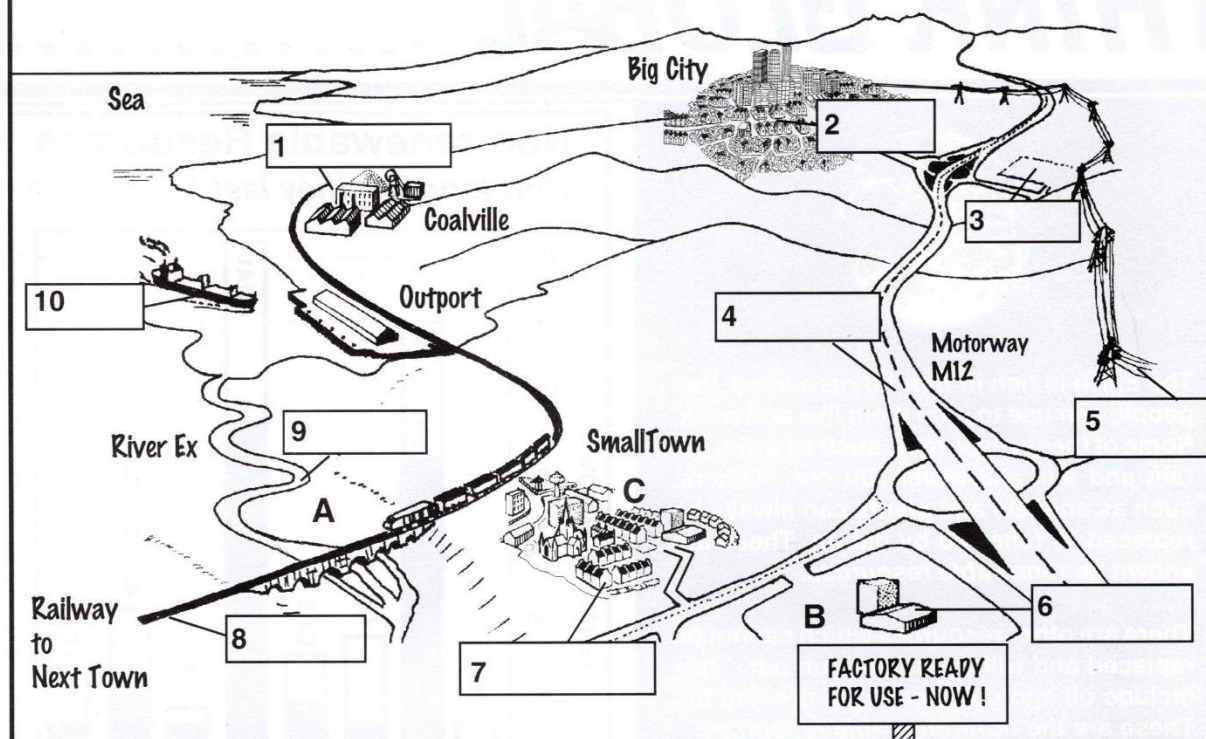
London's Docklands have factories and offices ready for you right NOW - and at prices that your business can afford.

We are to be found right in the middle of the nation's capital city - London. Be like the wise old owls, they are moving to the middle of London in greater numbers too. Tel. 0171 555 5555 for more details NOW ! (Help with grants and rent-free factories)

Fig.197 A newspaper advert for London's Docklands

Locating Industries

Fig.198



Why here?

Tasks

1.
 - i. Make your own copy of and then fill in the missing words on figure 199 - Location Factors for Industry.
 - ii. Sort out (or classify) the location factors above into **physical** factors (to do with the landscape or environment) and **human** factors (to do with people).

2 What does **location** (of industry) mean?

3 Look at figure 196.

- i. What types of industry are shown here?
- ii. What sort of **location** is shown in the photograph?

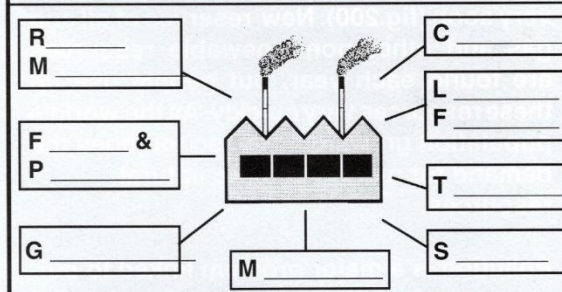
4 Copy the following sentences and then fill in the missing words -

The land the factory is built on is its _____.
 Goods are moved to market by _____.
 The basic ingredients or components that are made into or assembled into products are called the _____.
 The people who make goods or provide services are the _____.
 Places that the goods or services are sold to are _____.
 The energy used to make goods is the _____.
 Loans and grants are made available from the _____.
 _____ is the money invested in the industry.

5.
 - i. Make a simple copy of figure 198.
 - ii. Fill in boxes 1 to 10 from the list below - **site, market, labour force, transport, water, fuel & power, raw materials, government** (Hint: some labels may be used more than once)

Location Factors for Industry

Fig.199



- 6 Look at **sites A, B and C** on figure 198.
 - i. Choose a **site** (A, B or C) for each of the following new industries - **car plant, bank, caravan park**
 - ii. Give reasons for each of your choices.

- 7 Look at figure 198.
 Write a newspaper **advert** which will attract new industries to the place in which you live.

SUMMARY

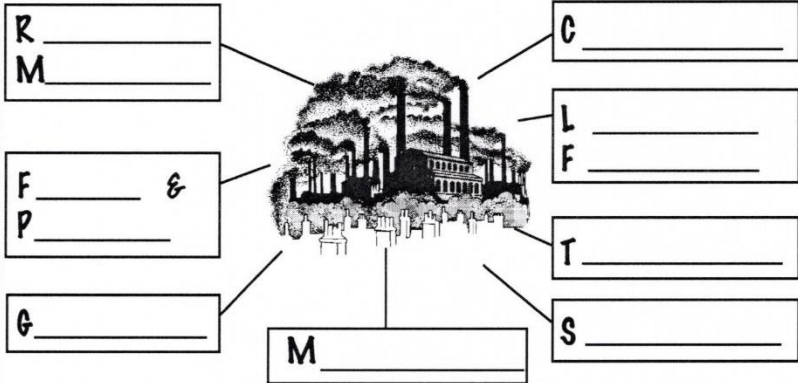
Different factors affect where industries are located. Some are physical factors to do with the environment or landscape (such as raw materials or site). Others are human factors to do with people (such as labour or transport). Most successful businesses choose the best location from which to make a profit.

Why here? - Industrial Location

1. Read the text on page 100 then fill in the missing information about location factors on the diagram alongside.

2. What does **location** of industry mean?

LOCATION FACTORS FOR INDUSTRY 1

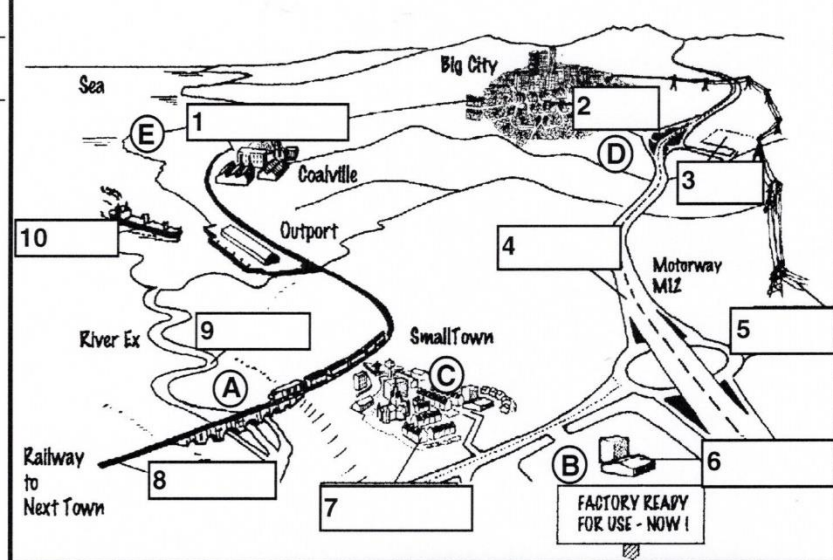


3. Look at the diagram alongside. Fill in boxes 1 to 10 from the list below -

site market transport
labour force water
fuel & power
raw materials
government

(Hint: some labels may be used more than once)

LOCATION FACTORS FOR INDUSTRY 2



Answer on a separate sheet...

4. Where would you locate the following industries on the diagram above? Choose from sites A to E. Choose any **two** and for each, give reasons for your answer -

New Premier Division Football Stadium
Electronics/Computer Factory
Caravan Park
Nuclear Power Station

5. Look at the advert alongside.

- What is the main **message** of the advert?
- Make up **your own advert** which will attract new industries to the place in which you live.



Why move to the middle of nowhere when you can move to the middle of LONDON?

Don't be fooled by those adverts that tell you it's cheaper up north or out west - it's **NOT!**

London's Docklands have factories and offices ready for you right NOW - and at prices that your business can afford.

We are to be found right in the middle of the nation's capital city - London. Be like the wise old owls, they are moving to the middle of London in greater numbers too.
Tel. 0171 555 5555 for more details NOW!
(Help with grants and rent-free factories)

THINK GLOBAL



The Earth is rich in *natural resources* that people can use to help them live and work. Some of these resources, such as wind, air, rain and sun will never run out. Others, such as animals and plants can always be replaced or renewed by nature. These are known as *renewable resources*.

There are other resources which cannot be replaced and will eventually run out. They include oil and gas, coal, iron-ore and tin. These are the *non-renewable resources*.

In recent years people have become very concerned about how quickly we are using up the Earth's non-renewable resources. Many may run out (become *exhausted*) very soon (fig.200). New reserves of oil and gas and other non-renewable resources are found each year, but people use up these resources very quickly. As the world's population grows quickly, so too does the demand for more and more natural resources.

Pollution is a major problem linked to our over-use of natural resources. People mine for oil, gas and coal which are all *fossil fuels*. Burning fossil fuels releases gases such as CO₂ and NO₂ into the atmosphere which help cause acid rainfall, the greenhouse effect and bigger ozone holes (fig.201)

One way of making sure our reserves of non-renewable resources last longer is by *recycling*. This happens when goods such as glass bottles, paper, metals, plastics, even whole cars are re-used and not thrown away. Scotland is still far behind other European countries when it comes to recycling. But people and industries are slowly becoming more aware of bottle and paper banks and metal recycling centres.

Non-renewable Resources

How long will they last ?

Fig.200

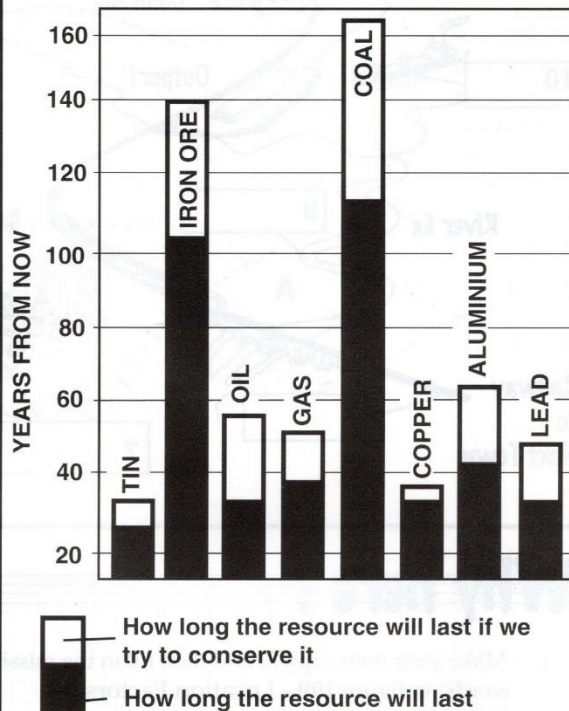


Fig.201 Power stations burn fossil fuels



ACT LOCAL

Only 30 years ago there was pollution but it was found mainly on a local level at the council dump, the large factory and tankers leaking oil. Today **pollution** (wastes that spoil and destroy the environment) is a world-wide problem.

There are many problems but as human numbers grow quickly, thousands of plants and animal species have become extinct. People are using up the Earth's riches and poisoning the planet's atmosphere. Humans are also making a rubbish tip of the Earth.

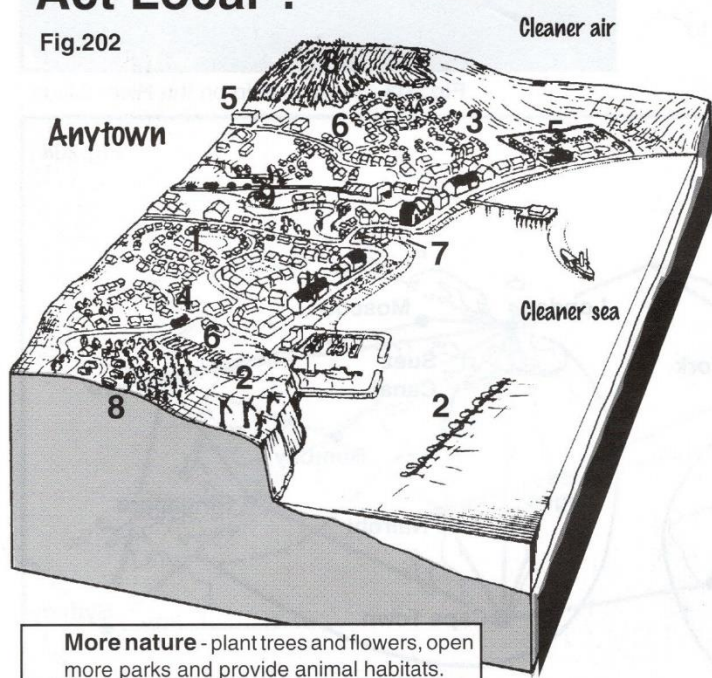
Many people are now asking are we on the brink of chaos across the planet ?

A sustainable life - one which does not destroy the planet or use up all its natural resources too quickly, must be our aim. Recycling and other **conservation** methods are long overdue. We all talk about the planet's problems but all too often we fail to take our action to help out.

While the world's leaders, scientists and conservationists argue about what should be done, who should pay and how long it will take to save the Earth's resources, the diagram below (fig.202) shows what could be done on a local level to do something to help. Acting locally would mean that everyone could start to do something for the planet.....

Act Local ?

Fig.202



- 1 **Conserving Energy** by using new solar panels, insulating homes and buying energy saving machines to reduce energy use.
- 2 **Alternative Energy** (other than fossil fuels and nuclear power) use wind power, wave and tidal power and solar energy for heating and lighting.
- 3 **Recycling Waste** - all papers, metals, glass, plastics sent to recycling plant.
- 4 **Use non-polluting transport** - electric buses and cars are quiet and clean.
- 5 **Low pollution industry** - laws and grants could be used to make sure all industries clean up their working practices and not waste energy or dump wastes.
- 6 **Recycling organic waste** - all kitchen waste can be recycled into compost and used as garden fertiliser. All animal manure can be used as fertiliser on farmland.
- 7 **Clean rivers** - reduced pollution from towns, industries and farms means cleaner rivers.
- 8 **Sustainable timber** - plant a rotation of soft and hardwoods to provide local supplies.

Think Global.....Act Local

Tasks

- 1
 - i. What are **natural resources** ?
 - ii. Are the following **renewable** or **non-renewable** ? coal trees gas fish iron ore wind tin wool copper
 - iii. Give the meaning of each of the following in your own words - **fossil fuels** recycling
- 2 Look at fig 200.
 - i. Work out how long each of the natural resources listed in the **bar graph** will last.
 - ii. How long will each of these natural resources last if we try to **conserve** them ?
- 3 Why are the Earth's **reserves** of natural resources in danger of running out ?
What problems does this cause the **environment** ?

- 4 Improving the environment can be done in small ways in local areas. Look at fig.202.
 - i. Make a list of ways in which the local environment can be improved in small ways.
 - ii. Design a wall poster to put this message over to people in your school or settlement.
 - iii. Why is it important to **Act Local** ?

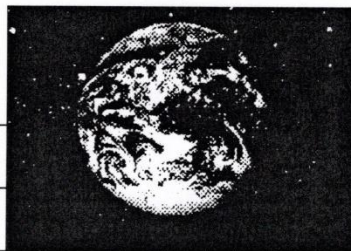
SUMMARY

Some natural resources are renewable and will never run out. Others are non-renewable and are running out as more people use more of them more quickly. The environment is under threat everywhere as its resources are used.

Natural Resources

1. The Earth is rich in **natural resources**.

i. What are **natural resources** ? _____



ii. What type of resources will never run out ? _____

iii. What type of resources will eventually run out ? _____

2. Sort out (or **classify**) the following resources into those which will never run out and those which will eventually run out. Choose from - **tin wind sunshine water iron-ore gas tides oil oranges coal trees fish copper wool**

Renewable Resources

Non-renewable Resources

3. In your own words give the meaning of the following words -

Fossil fuels _____

Recycling _____

Pollution _____

4. Fill in the table below by using the information in figure 200 on page 102.

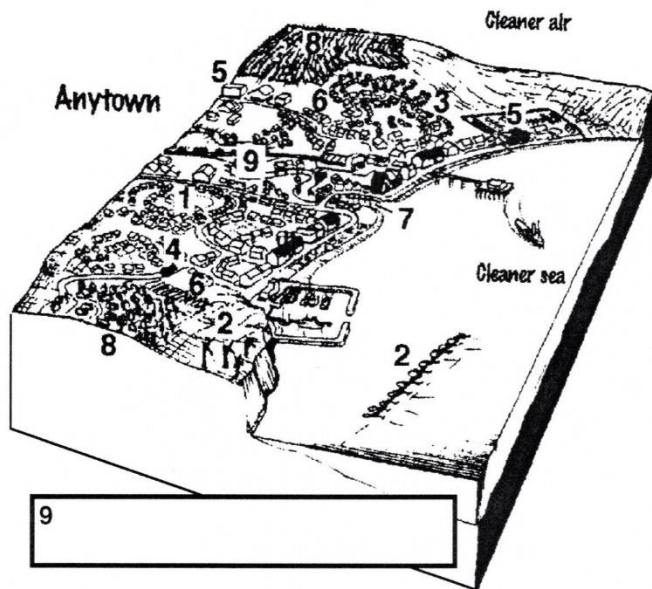
Resource	How long it will last at the present rate of use	How long it will last if we try to conserve it
Tin		
Iron-Ore		
Oil		
Gas		
Coal		
Copper		
Aluminium		
Lead		

5. Why are some of the Earth's natural resources in danger of running out ? _____

Think Global.....Act Local ?

1. Fill in the **key** to the diagram below by using the information on figure 202

Act Local ?



KEY

1	
2	
3	
4	
5	
6	
7	
8	

2. Which of the above ideas on improving the local area could be put to good use in the area in which you live ?

3. Why do you think it is important to **Act Local** ?

4. Design a **wall poster** to put the message about acting locally to improve your environment and saving our natural resources over to the people of your school or settlement.

Plan carefully and then design and draw a colourful, attractive and informative poster. Give it a good title or slogan which will catch the eye and attract people to read its message.

Ask permission from your school or local council to display your poster.