

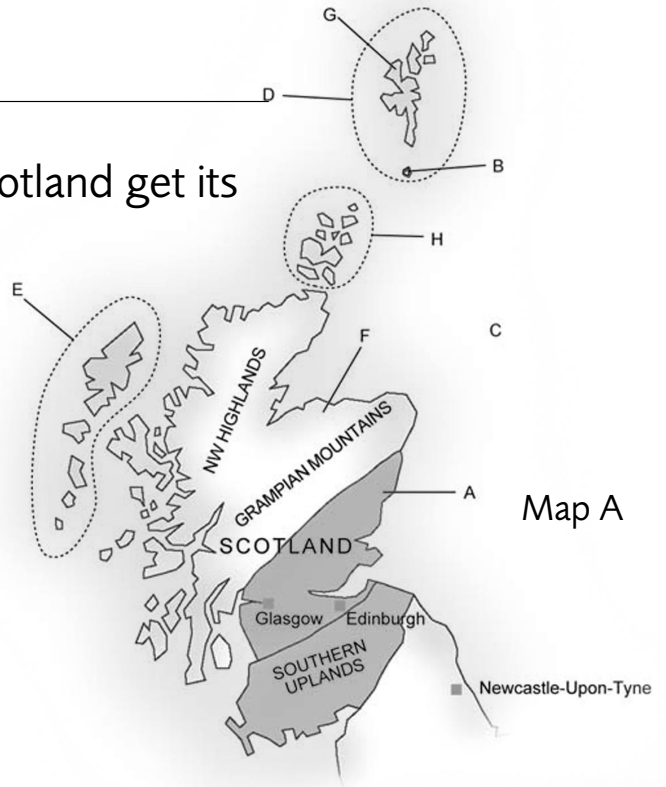


Programme 1: Scotland

Worksheet 1: Where does Scotland get its energy from?

(a) Put these key places on Map A.
Choose from A–H on the map.

- Shetland Isles
- Sullom Voe oil terminal
- Scottish Highlands
- Midland Valley of Scotland
- Fair Isle
- North Sea
- Outer Hebrides
- Orkney Isles

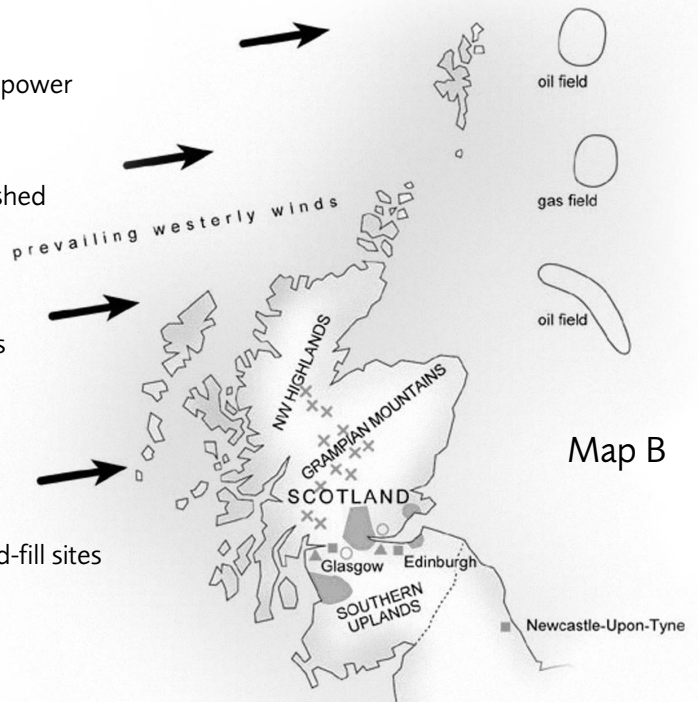


Map A

(b) Scotland has some established sources of power and some alternatives it is trying out.

Which of the sources listed below are established sources and which are new alternatives?

1. electricity from oil-fired power stations
2. electricity from coal-fired power stations
3. wind turbines
4. peat cutting
5. local electricity from diesel generators
6. hydroelectricity
7. methane gas-fired power stations at land-fill sites
8. electricity from gas-fired power stations
9. wave power
10. solar power



Map B

(c) Place 1 to 10 above on the most likely places on Map B.

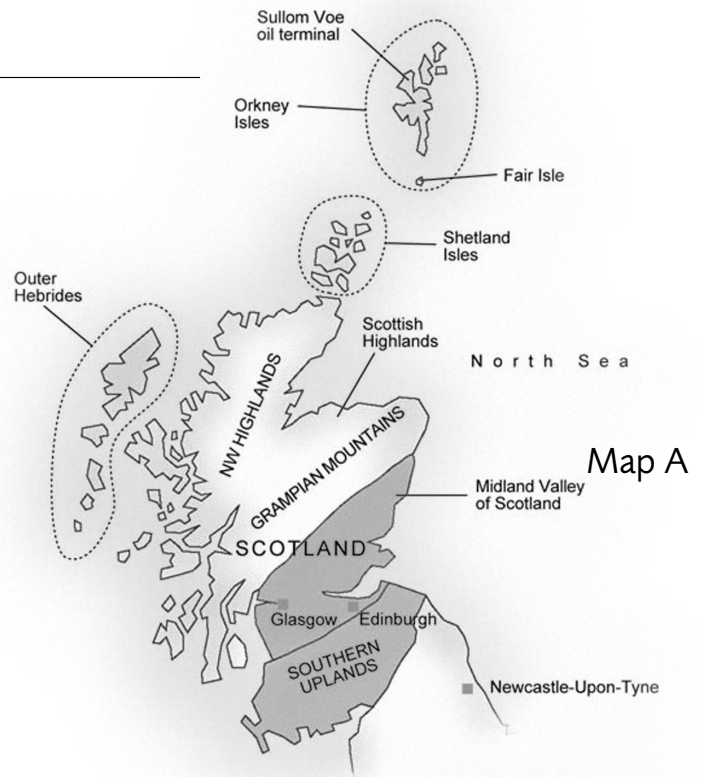
- ▲ main oil refineries
- main coal fields
- × power stations in the Scottish Highlands
- major cities (Glasgow is near to Europe's biggest landfill site)
- main gas pipeline terminals



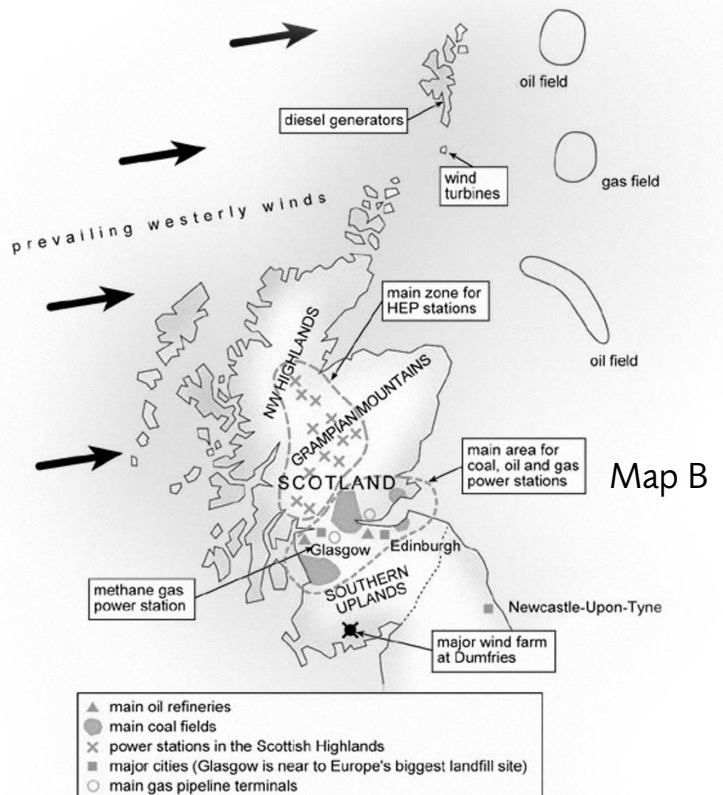
Programme 1: Scotland

Answersheet 1

(a)



(c)





Programme 1: **Scotland**

Worksheet 2: Letter to a penfriend

Imagine you live near Sullom Voe in Shetland and have a penfriend in Naples, Italy. They are coming to visit you at Easter, and you write to tell them a bit about life in Shetland.

Work the phrases 1–18 into your letter on the following page.

1. because we're so far north.
2. because we're just islands and it's very exposed.
3. We're too far from the mainland power supplies.
4. Well, not a lot of big names are going to put us on their tours.
5. This is odd, seeing how much crude oil is sitting in the huge tanks near us.
6. She's put up a turbine. The wind turns it and it generates electricity. You get enough to run the telly and boil the kettle.
7. Some families go peat cutting. Peat is vegetation that's rotted and been compacted. You dig it out just like big lumps of soil, but it burns well, once it's dried out a bit.
8. The trouble is, once you've dug it all up you can't get any more.
9. You'll probably think we spend all our time worrying about how to keep warm!
10. Well, you'd be right in a way. The temperatures don't get very high during winter, spring and autumn, and the days are very short in winter
11. Then in June and July the sun hardly sets – you can see easily right up to 11pm.
12. The other thing that's really annoying is the wind. It's always howling round the house and makes it draughty. I can't see the point of gales but my neighbour says: 'If you can't beat it, join it.'
13. Lots of children and adults play instruments and do gigs. Some of them are OK. You enjoy what you can get.
14. We have this noisy diesel generator out the back. Mum and Dad go mad if you leave the heating or the lights on, because the diesel all gets shipped in and costs a packet.
15. The winds are really, really strong lots of the time. Our teacher says it's
16. It's a bit out of the way here. We're part of Scotland, but the mainland is a long way off.
17. This means we have to make things happen for ourselves, and not rely on the rest of Scotland for everything.
18. Everyone's very careful about not wasting electricity and that sort of thing.



Programme 1: **Scotland**

Worksheet 2: Letter to a penfriend

Dear

I'm really looking forward to your visit. You'll like this place, but don't expect it to be like Naples or even most cities in Britain. For a start

*See you in April,
Yours,*



Programme 1: **Scotland**

Answersheet 2

You could combine the sentences like this:

It's a bit out of the way here. We're part of Scotland, but the mainland is a long way off. This means we have to make things happen for ourselves, and not rely on the rest of Scotland for everything. Everyone's very careful about not wasting electricity and that sort of thing. You'll probably think we spend all our time worrying about how to keep warm! Well, you'd be right in a way. The temperatures don't get very high during winter, spring and autumn, and the days are very short in winter because we're so far north. Then in June and July the sun hardly sets – you can see easily right up to 11pm.

The other thing that's really annoying is the wind. It's always howling round the house and makes it draughty. I can't see the point of gales but my neighbour says: 'If you can't beat it, join it.' She's put up a turbine. The wind turns it and it generates electricity. You get enough to run the telly and boil the kettle. The winds are really, really strong lots of the time. Our teacher says it's because we're just islands and it's very exposed.

We have this noisy diesel generator out the back. Mum and Dad go mad if you leave the heating or the lights on, because the diesel all gets shipped in and costs a packet. We're too far from the mainland power supplies. This is odd, seeing how much crude oil is sitting in the huge tanks near us.

Some families go peat cutting. Peat is vegetation that's rotted and been compacted. You dig it out just like big lumps of soil, but it burns well, once it's dried out a bit. The trouble is, once you've dug it all up you can't get any more.

Lots of children and adults play instruments and do gigs. Some of them are OK. You enjoy what you can get. Well, not a lot of big names are going to put us on their tours.



Programme 1: **Scotland**

Worksheet 3: Wind, sun and conservation

Use your textbook and the websites:

<http://www.cat.org.uk/>

<http://www.elec.gla.ac.uk/groups/cerpd/home.htm>

(a) List two or more sites of wind farms in the UK. For each one give some basic information.

	Site A	Site B	Site C
name of site			
location			
number of turbines			
amount of electricity			
visual impact			
any other features			

(b) Use the programme and the website:

<http://www.elec.gla.ac.uk/groups/cerpd/home.htm>

Find two or more examples of solar power being used in Britain. Show why it's still worth developing, even though we have a cloudy climate.

Example	Special Features and Benefits



Programme 2: Snowdonia

Worksheet 1: Snowdonia farming quiz

Watch the television programme.

Choose from the answers A to D below.

1. Where is Snowdonia on the map? Circle the correct letter.



2. Snowdonia is an area of...
- A. mountains and high rainfall
 - B. fertile plains and high rainfall
 - C. mountains and low rainfall
 - D. dry infertile plains
3. The farm in the television programme has...
- A. 400 hectares
 - B. 8,000 hectares
 - C. 800 hectares
 - D. 40,000 hectares
4. The farm is essentially...
- A. a market garden
 - B. a livestock farm
 - C. an arable farm
 - D. a mixed farm
5. There are large numbers of animals, particularly...
- A. dairy cattle
 - B. llamas
 - C. pigs
 - D. sheep and beef cattle
6. Tir Cymen is a scheme to...
- A. improve the environment
 - B. increase the number of sheep in the region
 - C. provide equal opportunities for male and female farm workers
 - D. get more tax from farmers
7. Financially, the farm is...
- A. doing well because wool prices are high
 - B. suffering because beef, lamb and wool prices are low
 - C. doing well because tourism is bringing in extra money
 - D. suffering because visitors' dogs are killing new-born lambs



Programme 2: **Snowdonia**

Worksheet 1: Snowdonia farming quiz

8. The farmer has his farmhouse...
- A. near the mountain top, to get a good view
 - B. halfway up the valley side so he can live in the middle of his land
 - C. on the edge of the valley floor to be near the road
 - D. near a small waterfall so he can generate his own electricity
9. Farming subsidies are...
- A. grants given by the government to help farmers
 - B. areas where farmland on steep slopes collapses downhill
 - C. basements under farmhouses for storing cheese and animal food
 - D. taxes farmers pay for sheep that get foot rot
10. Snowdonia is in...
- A. Scotland
 - B. Northern Ireland
 - C. the Pennines
 - D. North Wales



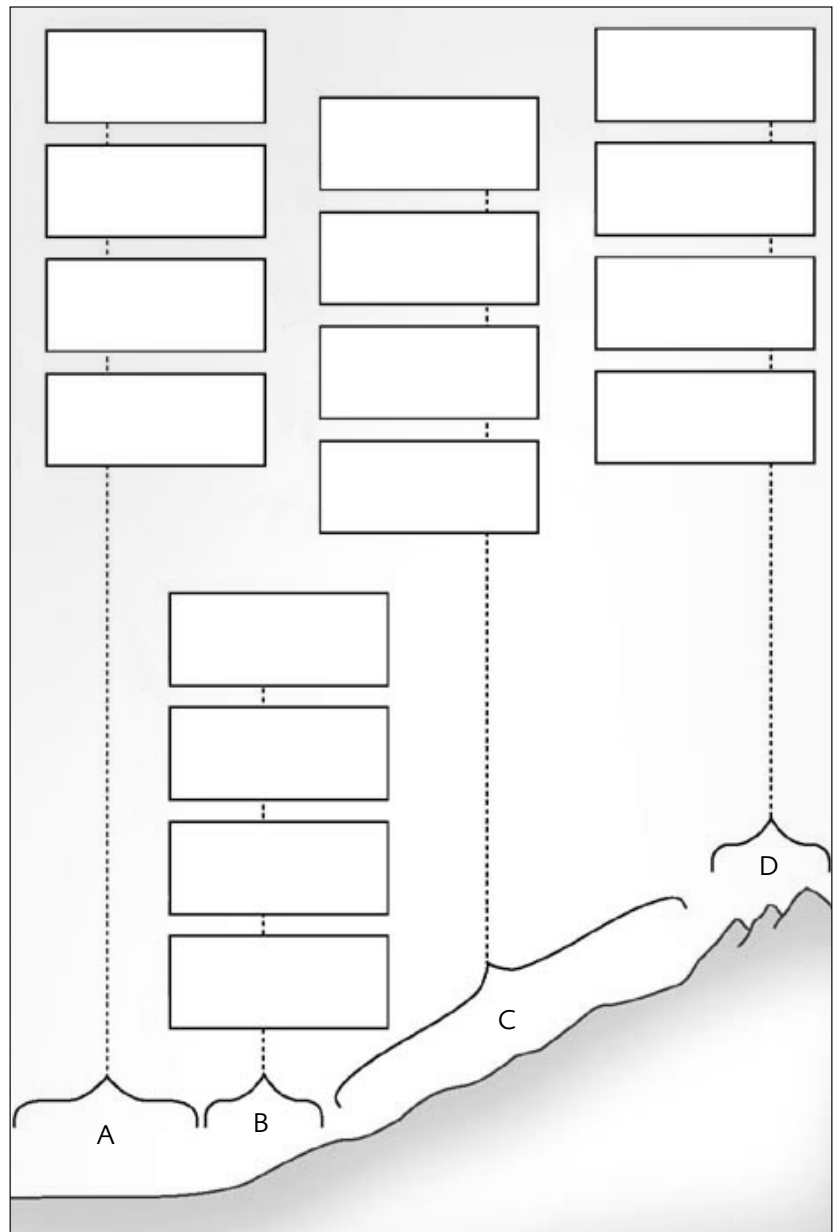
Programme 2: Snowdonia

Worksheet 2: Using all the land

It is possible to make good use of mountainsides, valley bottoms, fertile land and barren land.

Use the the Net Notes and your textbook to match the descriptions below to the diagram.

1. Heavy rain washes out nutrients, so the farmer puts fertilisers on.
2. Mountain tops.
3. Accessible, so best area for a road to the farm buildings.
4. Flat and sheltered.
5. Just off the once marshy, easily flooded land.
6. Too steep for crops but sheep and cattle can graze it.
7. You need a good quad bike here – tractors cannot cope.
8. Too exposed and rocky to waste fertiliser on.
9. Best soil when drained.
10. Cannot get even a quad bike up here.
11. Not too steep but not taking up crop land.
12. The coldest, wettest, least productive zone.
13. Good for hay and silage for winter food.
14. Valley side.
15. Valley bottom.
16. Edge of valley floor.





Programme 2: **Snowdonia**

Answersheet 1

1. B.
2. A.
3. C.
4. B.
5. A.
6. A.
7. B.
8. C.
9. A.
10. D.

Answersheet 2

1. C.
2. D.
3. B.
4. A.
5. B.
6. C.
7. C.
8. D.
9. A.
10. D.
11. B.
12. D.
13. A.
14. C.
15. A.
16. B.



Programme 2: **Snowdonia**

Worksheet 3: Farms need help!

Imagine you are Minister for Agriculture. David Owen of Snowdonia writes to you on behalf of all the farmers in his area, saying that they cannot survive in farming nowadays.

1. Use the website:

<http://www.maff.gov.uk/>

Write a short note to Mr Owen listing all the things the Ministry of Agriculture, Fisheries and Food (MAFF) claims to be doing for hill farmers.

2. He replies, annoyed with your letter, which he says 'talks a lot but says nothing', referring to plenty of schemes but none that help him.

On another sheet of paper, compose another letter to Mr Owen, being more specific about ideas to increase his income. Use these websites:

<http://www.rookinhouse.freeserve.co.uk>

<http://www.ccw.gov.uk/ar97-98/english/over3.htm>



Programme 3: **Yorkshire**

Worksheet 1: Limestone features

Use the website:

<http://www.eagle.co.uk/ydales/malham.html>

Find images and descriptions which fit the sketches below.

Then answer the questions about each one.

1.

What is this called?

What is it?

How was it formed?

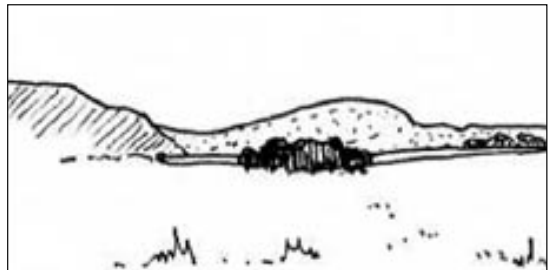


2.

What is this called?

What is it?

How was it formed?



3.

What is this called?

What is it?

How was it formed?





Programme 3: **Yorkshire**

Worksheet 2: Changing the landscape – walls and quarries

Use the programme and the website:

<http://www.users.globalnet.co.uk/~chrisjs/>

Find out about drystone walling and limestone quarries in the Yorkshire Pennines.

(a) Drystone walls

Which of the following facts about drystone walls are 'good news' for the local population and which are 'bad news'?

1. Keep livestock in place.
2. Break up the landscape and make it more interesting.
3. Walkers climb over them and regularly cause damage.
4. Building and repairing them is a skill that people are learning again.
5. Building them clears the fields of stones.
6. The skill of building and repairing them nearly died out a few years ago.
7. There are lots of solid stone blocks to make the walls.
8. Provide excellent shelter from wind and snow.
9. Have been around for centuries and tell us about the past.
10. Farmland in the limestone Pennines tends to be covered with lots of pieces of rock, which hinder farming.

(b) Limestone quarries (e.g. Horton)

Which of the following facts about limestone quarries are 'good news' for the local population and which are 'bad news'?

1. The quarrying firm can use modern methods because it is a large site away from population centres.
2. Most of the work is now heavily mechanised so there are few jobs left.
3. The explosions and the machinery and traffic create tremendous noise pollution.
4. Disused quarries often provide a haven for wildlife.
5. Limestone dust covers everything in the immediate area, disfiguring the landscape and causing respiratory problems.
6. Limestone can be used for house-building, road-making, in the steel industry and in chemicals.
7. Visually, working quarries are very unattractive.
8. Tourists find quarries and quarry traffic unpleasant.
9. Quarries provide millions of tonnes of good stone for building.
10. Quarries once provided lots of jobs, and still make a profit for the companies involved.



Programme 3: **Yorkshire**

Answersheet 1

1. Malham Cove
2. Malham Tarn
3. Gordale Scar

Answersheet 2

(a) Drystone walls

Good news: 1, 2, 4, 5, 7, 8, 9.

Bad news: 3, 6, 10.

(b) Limestone quarries (e.g. Horton)

Good news: 1, 4, 6, 9, 10.

Bad news: 2, 3, 5, 7, 8.



Programme 3: **Yorkshire**

Worksheet 3: Keeping everyone happy

Use the programme and the websites:

<http://www.yorkshiredales.org.uk/index.html>

<http://www.eagle.co.uk/ydales/malham.html>

Malham is often called a 'honey-pot' site. It attracts lots of people to a small, very busy area, mainly in the summer.

Think about what the different people listed on the right want and don't want and how to keep them happy.

Stage 1

In a group of four, choose four characters from the list so that each of you has a different role. First of all, decide what it is that your character wants when they are in the Malham area, and what they don't want. Put these things onto the grid on the following page. Be very brief.

In the right-hand column, record any conflicts of interest within your group. The park warden has to make the final decisions.

Characters:

1. park warden
2. owner of post office (village shop)
3. landlord of village pub
4. sheep and cattle farmer
5. landowner who has a nearby estate
6. ice-cream seller from Leeds
7. owner of outdoor clothing specialist store
8. keen walker, chairperson of Ramblers' Association
9. cyclist, spokesperson for Dales Off-Road Cycling Club
10. hang-gliding and rock-climbing enthusiast
11. botanist, specialist subject 'mosses and lichens of the Dales'



Programme 3: **Yorkshire**

Worksheet 3: Keeping everyone happy

character	main 'wants'	main 'don't wants'	conflicts with other interests
1			
2			
3			
4			
5			
6			

Stage 2

The park warden is worried by all this conflict and asks what you would do in his place. Set out the four main conflicts which occur and say how you would deal with them.

conflict	solution
E.g. 'Walkers wreck walls.'	Build well-defined gates and stiles. Use park rangers to impose fines on walkers caught climbing walls.