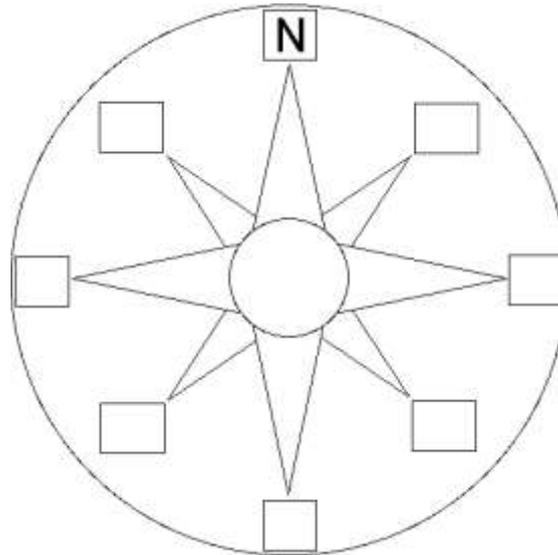




Compass Rose

A compass rose is a design on a map that shows directions. It shows north, south, east, west, northeast, northwest, southeast, and southwest.

When north is at the top of the compass rose (as it often is), south is at the bottom, east is on the right, and west is on the left. Northeast is between north and east, northwest is between north and west, southeast is between south and east, and southwest is between south and west.



1. Fill in the rest of the directions on the compass rose, using the standard abbreviations: N=North, S=South, E=East, W=West, NE=Northeast, NW=Northwest, SE=Southeast, SW=Southwest.

2. What ocean borders Spain and Portugal to the west? _____

3. What sea borders Spain to the east? _____

4. What is the name of the narrow channel of water that separates Spain (in Europe) from Morocco (in Africa)? _____

5. What is the name of the chain of mountains in the northeast of Spain?

6. What is the name of the country that is in the north of Spain across this chain of mountains? _____

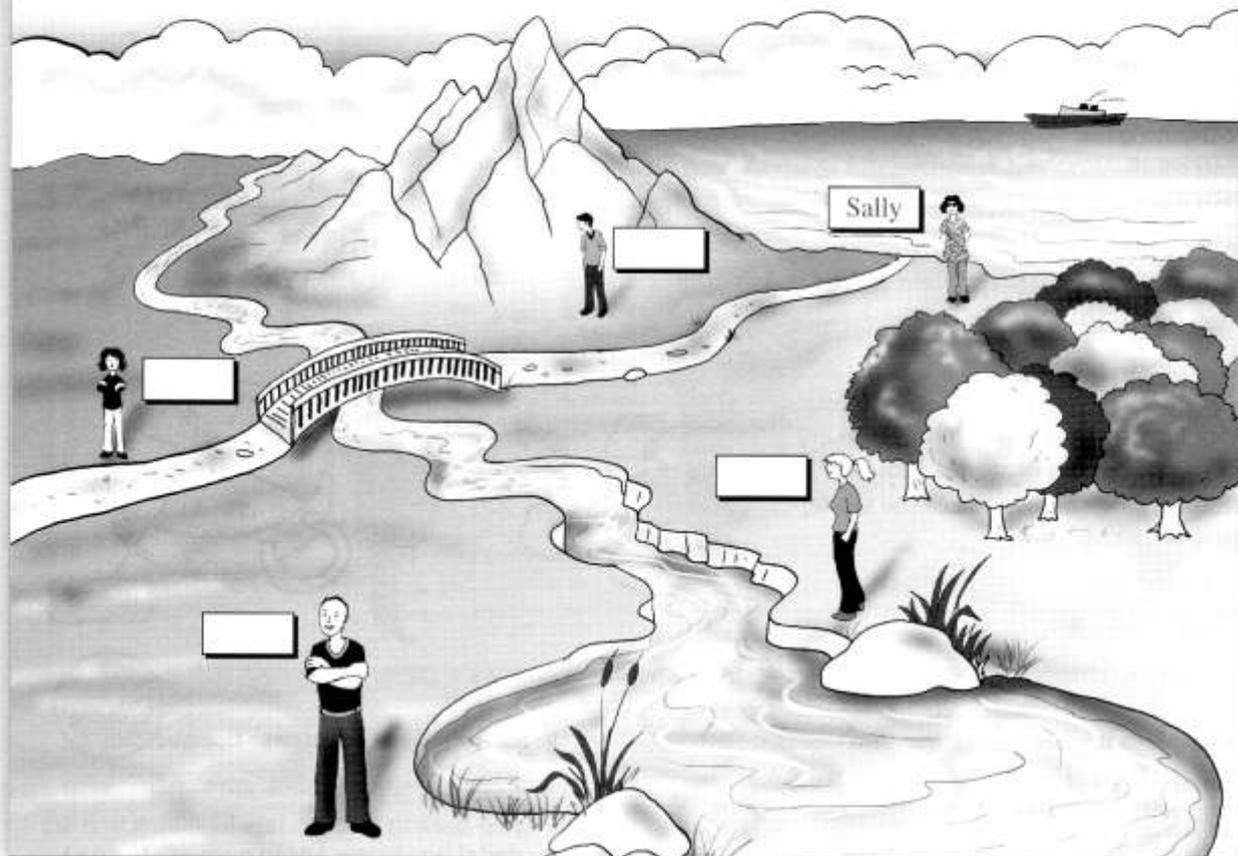
7. What is the name of the tiny country located on the northeastern border of Spain?

8. If you wanted to travel from Lisbon to Madrid, in which direction would you head?
(a) northeast (b) northwest (c) southeast (d) southwest



FINDING YOUR WAY (2)

1 Look at the picture, and read the descriptions. Write each person's name in the correct place.



- | | |
|--|--|
| 1. Joe is: south of the mountain, north of the road and east of the river. | 3. Dennis is: south of the road and west of the lake. |
| 2. Megan is: south of the road, north of the lake and east of the bridge. | 4. Rachel is: south of the mountain, west of the bridge and north of the road. |

2 Where is Sally? Use the directions and the places to describe where she is.

Sally is north of

1 Complete the sentences with the words below.

points • rises • compass • moss • sets

- We can use the sun or a to find our way.
- The sun in the east.
- The sun in the west.
- A compass needle north and south.
- We can find north by looking for on rocks and stones.

2 Read the clues and answer the questions.

- It is early morning. You are standing with your back to the sun. In which direction are you facing?
.....
- It is evening. You are standing with your back to the sun. In which direction are you facing?
.....

Label the Volcano Diagram

Read the definitions and then label the diagram below.

Definitions

Ash cloud - an ash cloud is the cloud of ash that forms in the air after some volcanic eruptions.

Conduit or pipe - a conduit is a passage through which magma (molten rock) flows in a volcano.

Crater - a crater is a mouth of a volcano in a volcanic vent that ejects lava and volcanic ash

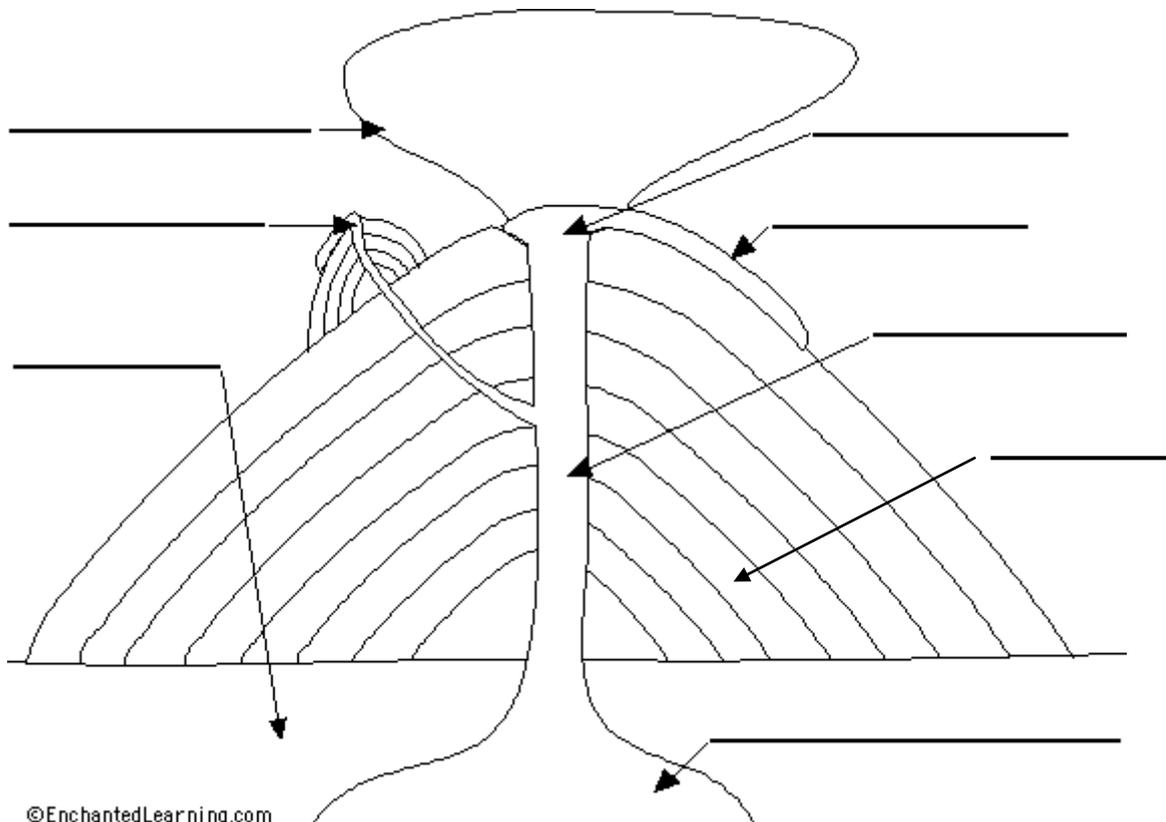
Lava - lava is molten rock; it usually comes out of erupting volcanoes.

Magma chamber - a magma chamber contains magma (molten rock) deep within the Earth's crust.

Volcanic cone - a volcanic cone is a cone-shaped volcano formed by an accumulation of volcanic debris (rocks, ashes, lava...)

Secondary cone - a secondary cone is a secondary cone-shape in the side of a volcano.

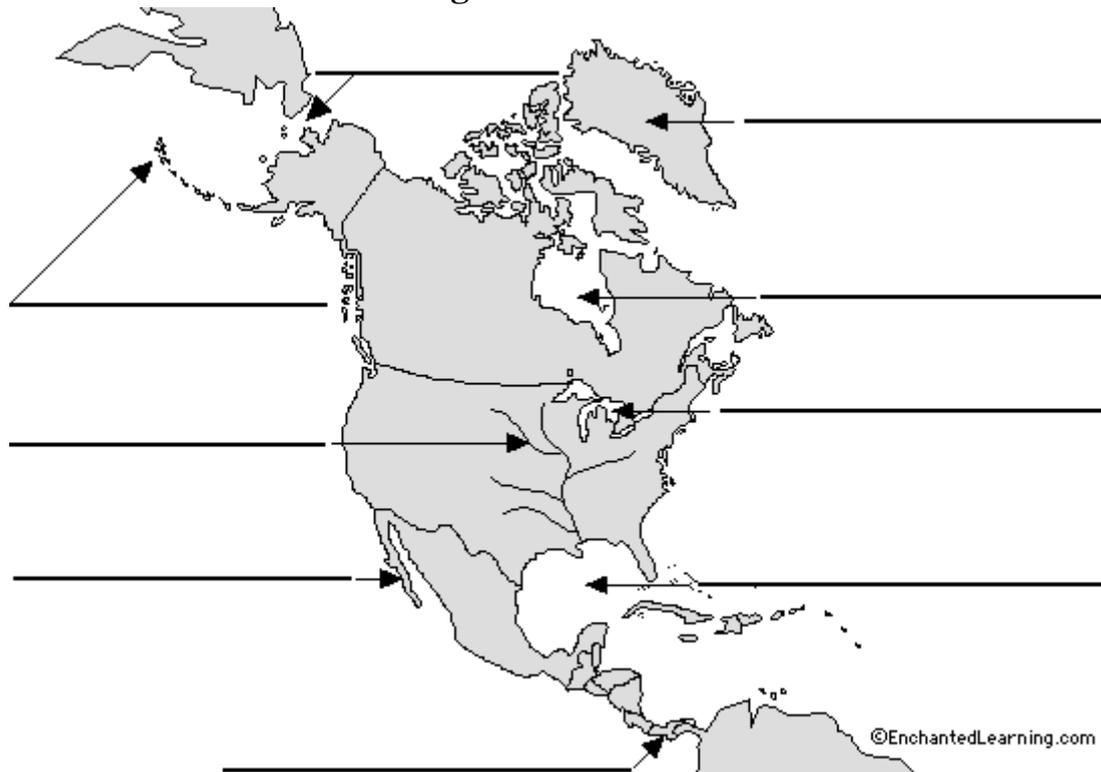
Crust - the crust is Earth's rocky layer.





Label Landforms

Label the landforms using the word bank below.



archipelago bay gulf	isthmus island lake	peninsula river strait
----------------------------	---------------------------	------------------------------

Vocabulary: Landforms and Bodies of Water

- Archipelago:** An archipelago is a group of islands together in a sea or ocean.
- Bay:** A bay is a body of water that is partly surrounded by land (and is usually smaller than a gulf).
- Gulf:** A gulf is a part of the ocean or sea that is partly surrounded by land (it is usually larger than a bay).
- Island:** An island is a piece of land that is surrounded by water.
- Isthmus:** An isthmus is a narrow strip of land connecting two larger landmasses.
- Lake:** A lake is a large body of water surrounded by land on all sides.
- Peninsula:** A peninsula is a body of land that is surrounded by water on three sides
- River:** A river is a large and flowing body of water that usually empties into a sea or ocean.
- Strait:** A strait is a narrow body of water that connects two larger bodies of water

CONTINENTAL LANDFORMS:

- Plains** are flat lands that have only small changes in elevation.
- A **plateau** is larger and it used to be higher than the surrounding land.
- A **mountain** is a very high place on Earth; sometimes there is a peak on the top of the mountain.
- A **hill** is a small elevation in the Earth's surface.
- A **valley** is a low place between mountains, often having a river or stream running along the bottom. Valleys can be wide or narrow like a canyon.



Landforms questions

1. A group of islands is called _____
2. What's a flat land called? _____
3. What's a lake?
4. What's a piece of land surrounded by water?
5. An isthmus connects _____
6. What's an ocean?
7. What's a valley?
8. What's higher a mountain or a hill?
9. What's a peninsula?
10. Where does a river empty?

LANDFORMS WORDSEARCH

Find 10 landforms: River- Isthmus- Mountain- Peninsula- Lake- Hill- Sea- Valley- Ocean- Island

U	V	Z	U	I	S	L	S	A	N	F	V	C	I	W
Y	I	R	I	F	A	E	S	G	P	U	H	L	S	N
E	S	I	J	P	M	E	T	Q	X	B	A	Y	L	S
O	T	I	M	M	Y	W	Y	H	P	C	E	X	A	J
K	H	R	S	G	Y	I	J	M	J	L	M	P	N	Z
J	M	V	G	W	T	E	O	X	L	B	V	G	D	C
R	U	A	S	T	K	Q	Y	A	J	E	Y	C	L	Z
E	S	F	U	A	L	N	V	R	P	R	O	I	C	S
V	N	D	L	C	O	P	C	N	B	E	W	N	D	P
I	R	O	F	C	R	L	N	I	A	T	N	U	O	M
R	C	F	E	N	M	H	I	L	L	O	J	Q	L	K
G	W	A	I	J	H	Y	Z	H	F	Q	N	I	G	Q
X	N	X	P	E	N	I	N	S	U	L	A	P	M	B
F	T	Y	M	X	G	L	C	P	G	Y	T	M	D	S
G	E	W	M	F	F	P	K	J	O	E	C	W	P	Q



THE EARTH

Compass Rose, North, South, East, West, northeast, northwest, southeast and southwest. At the top, at the bottom, on the left, on the right, compass, point, rise, set, moss.

Arctic Circle, Equator, North Pole, South Pole, Tropic of Cancer, Tropic of Capricorn, Antarctic Circle, Prime Meridian

THE RELIEF AND LANDFORMS

Relief, landforms, mountain, plateau, plain, valley, depressions, cape, gulf, strait, bay, island, peninsula, isthmus, archipelago, river, ocean, sea, continent

Volcano, earthquake, ash cloud, conduit or pipe, lava, magma chamber, volcanic cone, crater, secondary cone, crust, mantle, external core and internal core