

Explanations: Geography by Keith Kelly

AGE: Teenagers
LEVEL: Intermediate
TIME NEEDED: Approx. 90 minutes
OBJECTIVES: to learn about the factors affecting the location of industry; to take part in a whole class discussion and a small group discussion; to complete exercises practising language related to asking questions and giving explanations
KEY SKILLS: reading, speaking, writing, listening
MATERIALS: one copy of the worksheet per student; one set of the *Factors affecting location of industry* (1-9), the *Reasons affecting decisions* (A-I) and the *Possible objections* (grey) cut-out cards per group of three or four students; photograph of a modern factory (optional)

Content focus Factors affecting location of industry

Warm-Up: 2-3 minutes
Activity 1: 15 minutes
Activity 2: 10 minutes
Activity 3: 15 minutes
Activity 4: 20 minutes

WARM-UP

1. Show students a photograph of a modern factory building and ask them if they know of a new factory that may have recently been built in the area.

Tip: You can select several different photographs to show students and display them on the board, but they should all be of modern factories. You may also want to find a photograph of a new factory in your area to display.

2. Discuss any new factory that has recently been built in the area by asking students for information about it, such as the name of the company and where it is located.

Tip: It is a good idea to prepare your own example of a factory in case there isn't an example in your area.

3. Ask students why they think the factory being discussed has been built in the place where it is located

(perhaps show the location on a map). Give students the opportunity to share their thoughts in pairs and then discuss as a class.

When a student uses a phrase for giving an explanation (e.g. *could / may be*), write it up on the board and highlight that they will be learning and using explanation language such as this in the lesson.

ACTIVITY 1

4. Hand out the worksheets and get students to read through the text on *Changes in industrial location patterns* quickly. Ask them to elicit the answer to the question on the most important factor for the location of industry. You can accept 'power' or 'energy sources' as answers.

ACTIVITY 2

5. Get students to match the left- and right-hand columns to make sentences explaining changes in the location of industry. Encourage students not to look back at the text in Activity 1 to help them do this. When they have finished, elicit answers from the whole class first and then let students read the text again to check the answers.

Key _____
 1. e; 2. d; 3. a; 4. b; 5. c

ACTIVITY 3

6. Now get students to read the text in Activity 1 again, this time more slowly, and ask them to match the sentences in Activity 2 with the corresponding paragraphs in the text.

Key _____
 1. D; 2. E; 3. A; 4. C; 5. B

ACTIVITY 4

7. Put students in small groups of three or four and hand out sets of the cut up *Factors affecting location of industry* cards, labelled 1-9, and *Reasons affecting decisions* cards, labelled A-I, to each group.

8. Encourage the groups to talk about the factors on cards 1-9 and to think of explanations for how important or unimportant each factor is in affecting the location of a new industry or factory. In doing this, students should link these cards to cards A-I and explain the connections they make.

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Note: This is not a matching activity and cards 1-9 could link to more than one of cards A-I, and vice versa.

9. Finally, hand out a set of the cut up *Possible objections* cards to each group and ask them to relate these to the factors and reasons they have discussed. These cards are in grey to distinguish them from the other sets of cards.

10. Encourage students to use the language support provided on the worksheet to help them with their explanations. Move around the groups and help facilitate their discussions.

Language focus Questions and explanations

Activity 1: 10 minutes
Activity 2: 10 minutes
Activity 3: 15 minutes

Get students practising language linked to change and interaction by reading the [Your CLIL: Explanations: Geography](#) article

ACTIVITY 1

Get students to complete the questions with the correct *Wh-* question words in the box.

Key _____
1. *Who*; 2. *Why*; 3. *What*; 4. *What happens*; 5. *When*;
6. *Where*; 7. *Which*; 8. *How many*

ACTIVITY 2

Get students to make explanation sentences by choosing the correct phrases in the box to complete the sentence halves.

Key _____
1. *would make*; 2. *could be used to*; 3. *would provide*;
4. *could have been prevented*; 5. *might occur*; 6. *may have been used as*

ACTIVITY 3

Get students to find and circle the given words, which are all common words used in explanations, in the wordsearch.



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Content focus Factors affecting location of industry

WARM-UP

Do you know of a new industry or factory that has been built in a location close to where you live? What kind of industry or factory is it?

Can you think of any reasons why the industry or factory is located where it is? Talk with a partner for a few minutes and then share your ideas with the class.

ACTIVITY 1

Read the text about changes in industrial location patterns quickly. What is the most important factor for the location of industry mentioned in the text?

Changes in industrial location patterns

Factors that influence the location of industry change over time and this may create new location patterns.

A. In the past, industry was greatly tied to waterside locations because water wheels were rotated by fast-flowing streams. Then it changed to coalfield sites as coal was needed for the generation of steam. Nowadays, power may be brought through cables to industry.

B. Britain's first iron mills were located near forests for their source of wood and also because they were close to iron ore deposits. These industries needed charcoal, made from wood, as a source of fuel, and fast-flowing water to rotate water wheels for industrial power.

C. The industrial revolution was based on the steam engine, fuelled by coal. Iron mills no longer used charcoal and changed location to coalfields. Britain had large quantities of coal widely scattered throughout England, Scotland and Wales. These coalmining areas soon became large industrial regions. The coalfields that had local deposits of iron ore became the most important industrial areas, such as in South Wales. Large cities grew up around

these coalfield areas and Britain became the first industrialized nation in the world.

D. By the early 20th century, a number of factors created new location patterns in the iron and steel industries. Most iron deposits in Britain had been used up. This meant that iron ore had to be imported. New and more efficient energy sources were available, such as gas and oil. Better methods of producing iron and steel products could be carried out in modern, planned factories. So new factories were located on the coast at ports where the raw materials and fuel could be unloaded. These new and more efficient factories were called integrated steelworks.

E. Many modern industries may now be located around towns with good transport facilities. These new industries are known as 'footloose industries' because they are not tied to a particular location. This change has made the source of power less important than before. It has also brought industry to rural towns and to areas of high emigration.

Adapted from *The Human Planet - Geography for Junior Certificate* by Patrick E.F. O'Dwyer, pp.270-3 © Gill and Macmillan 2002

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ACTIVITY 2

Without looking at the text in Activity 1, match the sentence beginnings in the left-hand column with the correct sentence endings in the right-hand column to make sentences about changes in the location of industry.

- | | |
|--|---|
| 1. Iron ore was imported and more efficient energy sources were available, ... | a. ... but nowadays power can be transported to factories through cables. |
| 2. Energy sources became less important ... | b. ... it was important that the location of factories was close to coalmining areas. |
| 3. In the past, industry was located near sources of energy for production, such as water or coalfields, ... | c. ... and so they were located near sources of wood. |
| 4. When industry was based on the steam engine, ... | d. ... and footloose industries began to develop around rural towns with good transport facilities. |
| 5. The first iron mills needed charcoal as a source of fuel ... | e. ... and that is why new factories needed to be located by the sea. |

ACTIVITY 3

Now read the text in Activity 1 again, this time more slowly, and match the sentences in Activity 2 with the corresponding paragraphs.

ACTIVITY 4

In small groups, discuss the factors affecting the location of a new industry or factory. Using cards 1-9, talk about the factors in turn, giving explanations for how important or unimportant each factor is in affecting location.

Link cards 1-9 with the reasons affecting decisions on cards A-I, and explain the connections you make.

Talk about the possible objections on the grey cards and relate them to the factors and reasons you have discussed.

Use the phrases in the table below to help you with your explanations.

would could may might	Linking factors and reasons				
	provide / add / make it easier to bring / be useful for / suit			be needed to / for be used for	
	Explaining objections				
	cause	damage	contribute to	leak	pollute

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Language focus Questions and explanations

ACTIVITY 1

Complete the questions with the correct *Wh-* question words and phrases in the box.

When	Who	What happens	Why
What	How many	Where	Which

- _____ or what do the people in this cartoon represent?
- _____ might people thousands of years ago have chosen this island on which to settle?
- _____ percentage of the profits from coffee goes to the Third World?
- _____ in the area where two plates separate from each other?
- _____ does a natural decrease in population take place?
- _____ do green belts such as this generally occur?
- _____ of the following statements best describes the relief of Ethiopia?
- _____ people work in the City of London?

ACTIVITY 2

Complete the sentences with the phrases in the box.

could be used to	could have been prevented	might occur
may have been used as	would make	would provide

- The steep gradients of the hills _____ road-building difficult and expensive.
- The nearby port _____ transport outputs to foreign markets.
- The new shopping centre _____ permanent jobs and summer work for students.
- Millions of deaths _____ with simple medicines and vaccinations.
- Traffic congestion _____ at the junction between the two main roads.
- Large rivers _____ trading routes in the past.

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ACTIVITY 3

Find and circle the words used in explanations in the wordsearch. They can be found horizontally, vertically, diagonally and backwards.

agree	example
choose	explain
decide	identify
define	illustrate
describe	prove
details	reasons
disagree	show
evidence	

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

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FACTORS AFFECTING LOCATION OF INDUSTRY

1 road access nearby	2 rail transport nearby	3 close to local town
4 a large port nearby	5 an airport nearby	6 close to other factories
7 a large site for building development	8 widely-spaced map contours	9 a river nearby

REASONS AFFECTING DECISIONS

A raw materials	B finished products	C workers
D movement of management staff	E movement of light, valuable goods	F markets
G customers	H room to expand	I cheaper to build on

POSSIBLE OBJECTIONS

ugly	air pollution	noise pollution
traffic congestion	accidental spillage	