

SCIENCE

Ecology and Habitats

It is not necessary to carry out all the activities contained in this unit. Please see *Teachers' Notes* for explanations, additional activities, and tips and suggestions.

Theme	Ecology and Habitats	
All students: Activities that are suitable for Learning Support, Language Support and the Mainstream Subject Class include:	Keywords	3
	Vocabulary File	4-6
	Activating Students' Existing Knowledge	7
	Completing Sentences	13
	Multiple Choice	14
	Planning and Writing Text	15-16
	Wordsearch	19
Learning support and Language support: Activities suitable for students receiving Learning or Language Support include:	Working with words	8
	Picture Sentences	9
	Odd One Out	10
	Science Keywords	11
	Unscramble the letters	12
	Alphaboxes	18
	Play Snap	20-22
Language support: Additional activities for Language Support:	Grammar	17
Levels for Language Support	A1 – B1 The language level of each activity is indicated in an information box.	
Learning focus	Using Science textbooks and accessing curriculum content and learning activities.	
Acknowledgement	The <i>English Language Support Programme</i> acknowledges the permission of Gill and Macmillan to reproduce excerpts from <i>Science Revision for Junior Cert.</i> by Shea Mullally	

Note: The categorisation of activities is indicative only and should not prevent teachers from using any activities that are considered suitable for a particular group of students.

Making the best use of these units

Learning Record

A copy of the Learning Record should be distributed to each learning support and language support student.

Students should:

1. Write the subject and topic on the record.
2. Tick off/date the different statements as they complete activities.
3. Keep the record in their files along with the work produced for this unit.
4. Use this material to support mainstream subject learning.

Introduction of a topic or activity should ensure that students understand **what** they are doing and **why**. Many students will have some difficulty in understanding both the language in the activity and the instructions/purpose for carrying out the activity.

You can create your **personal teaching resource** by printing these units in full and filing them by subject in a large ring binder.

Encourage students to:

- Bring the relevant **subject textbooks** to learning/language support class. It does not matter if they have different textbooks as the activities in these units refer to vocabulary and other items that will be found in all subject textbooks. These units are based on curriculum materials.
- Take some **responsibility for their own learning** programmes by:



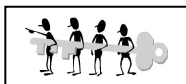
Developing a **personal dictionary** for different subjects, topics, and other categories of language, on an on-going basis. This prompt is a reminder.



Recording what they have learnt on the **Learning Record**, which should be distributed at the start of each unit.



Keeping their own **files** with good examples of the work produced for different subjects and topics. This file will be an invaluable **learning resource** in supporting mainstream learning.



Indicates that answers may be found at the end of the unit.

Don't forget that many of the activities in these units are also suitable as **homework** tasks or for **self-study**.

Keywords

The list of keywords for this unit is as follows:

Nouns

absence
animal
availability
bacteria
balance
bees
chain
combination
community
consumers
decay
decomposers
decomposition
ecology
ecosystem
energy
energy transfer
environment
feeding level
food chain
food source
food supply
food web
fox/foxes
fungus/fungi
habitat
hedgehog
level
living things

matter
mice
nest
number
organism
photosynthesis
plant
presence
producers
rabbits
relationships
species
surroundings
survival
web
woodland

Verbs

to break down
to decompose
to depend
to eat
to feed
to get
to link
to occupy
to produce
to provide
to show

to supply
to surround
to survive
to transfer

Adjectives

affected
dead
environmental
green
interconnected
interdependent
large
linked
particular
plentiful
rare
scarce
wooden

Adverbs

greatly
sexually

Other

different types
living together

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Vocabulary file 1

Word	Meaning	Note or example*
bacteria		
chain		
consumers		
decomposers		
ecology		
environment		
feeding level		

*You may wish to write a sentence or phrase, make a note of the page in your textbook where this word appears or, if English is not your first language, provide a translation into your language.



Get your teacher to check this, then file it in your folder so you can use it in the future.

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Vocabulary file 2

Word	Meaning	Note or example
food chain		
food supply		
habitat		
living things		
photosynthesis		
producers		
surroundings		



Get your teacher to check this, then file it in your folder so you can use it in the future.

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Vocabulary file 3

Word	Meaning	Note or example
to decompose		
to feed		
to produce		
to supply		
to survive		
environmental		
interconnected		



Get your teacher to check this, then file it in your folder so you can use it in the future.

Language Level: All
Type of activity: Whole class
Suggested time: 10 minutes

Activating students' existing knowledge

Use a spidergram to activate students' ideas and knowledge on the key points in this chapter. See **Teachers' Notes** for suggestions.

Possible key term for the spidergram:

Habitat **Environment**

- Invite newcomer students to provide key words in their own languages.
- Encourage dictionary use.
- Encourage all students to organise their vocabulary into relevant categories (e.g. meaning, nouns, keywords, verbs etc.).



All students should record vocabulary and terms from the spidergram in their personal dictionaries.

Language Level: A1
 Type of activity: pairs or individual
 Suggested time: 30 minutes

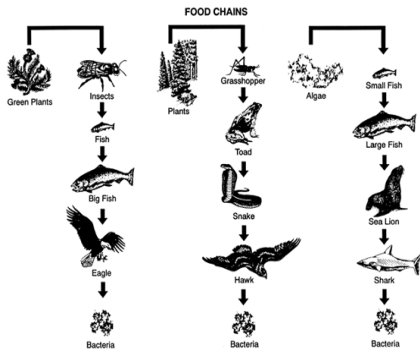


Working with words

1. Tick the correct answer



- a) balance
- b) cuttings
- c) car
- d) plate



- a) ladder
- b) flowers
- c) food chain
- d) bones

2. Find these words in your textbook.

Write your own explanation for these words. Then write a note or example to help you remember the word. Use your dictionary if necessary.

Word	Page in textbook	Explanation	Note or example
decay			
food chain			
habitat			
species			



Check that these key words are in your personal dictionary.

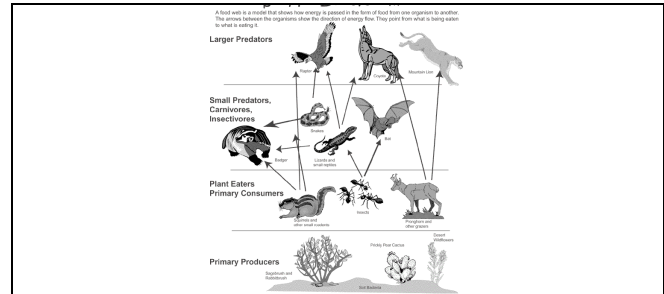
Language Level: A1
 Type of activity: pairs or individual
 Suggested time: 30 minutes



Picture Sentences

1. Tick the correct answer

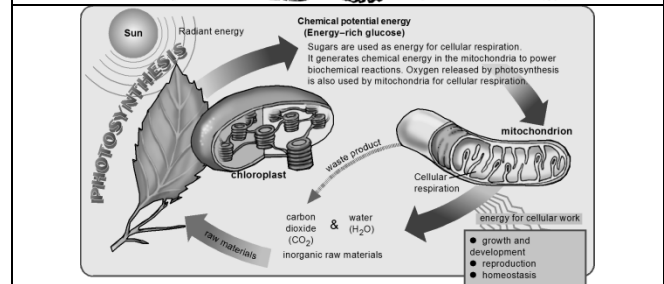
- a) This is a tree.
- b) This is a food web
- c) This is a rain storm.



- a) This is a bus.
- b) These are fungi.
- c) This is a fireman.



- a) This is a newspaper.
- b) This is rain.
- c) This is photosynthesis.



2. Put these words in the correct order to form sentences.

energy from sun the comes

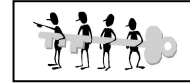
light water heat space compete plants for and

food, shelter, territory, mates animals compete for and

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Language Level: A1 / A2
Type of activity: pairs or individual
Suggested time: 20 minutes



Odd One Out

1. Circle the word which does not fit with the other words in each line.

Example: chair desk book **train**

- | | | | |
|----------|----------|--------|-------------|
| fox | bees | cat | clock |
| habitat | shelter | watch | environment |
| organism | chain | animal | television |
| fox | hedgehog | mice | tiger |

2. Find these words in your textbook. Then put them in short sentences in your own words. Use a dictionary if necessary.

- to decompose _____
- to produce _____
- to survive _____
- to supply _____
- to feed _____

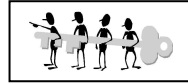


Check that these key words are in your personal dictionary.

NAME: _____ DATE: _____

SCIENCE: Ecology and Habitats

Language Level: A2 / B1
Type of activity: individual
Suggested time: 20 minutes



Science Keywords

1. Fill in the missing letters of the keywords listed below.

On the line beside each word, write whether the word is a noun, an adjective or a verb.

e_olo_y _____

o_gan_sm _____

a_im_l _____

c_ai_ _____

2. Write as many words as possible related to **ecology and habitats**. You have 3 minutes!



Check that these keywords are in your personal dictionary.

NAME: _____ DATE: _____

SCIENCE: Ecology and Habitats

Language Level: A1 / A2
Type of activity: pairs or individual
Suggested time: 20 minutes



Unscramble the letters

1. This is where an animal or plant lives HBAITAT

Answer _____

2. This is the study of the relationship of living things ECLOOY

Answer _____

3. Everything that surrounds an animal or plant EVNIRONENTM

Answer _____

4. A type of animal RBABIT

Answer _____

Look at each word as you write the answer.

Is your spelling correct?

Can you pronounce the word?

Do you know what the word means?

Have you got this word in your personal dictionary?



Solve the secret code

English=	A	C	D	E	L	I	N	M	O	S	T	U
Code=	B	X	Y	F	G	Q	R	O	L	E	A	W

example: (code) EAWYFRA = STUDENT (English)

BRQOBG =

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Language Level: A2 / B1
Type of activity: pairs or individual
Suggested time: 40 minutes



Completing text

1. Fill in the blanks in these sentences. Use words from the Word Box below.

Ecology is the study of the relationships between plants and _____ and their environment. The environment is everything that _____ an animal or plant. It includes the air, _____, rocks, stones, soil and other animals and _____. All living things are affected by their environment. Their numbers depend on the availability of food and on the presence or absence of other living things.

There are many different types of habitat, e.g. woodland, pond, _____, river or meadow. Each habitat has its own _____ which suits the animals and plants that live there. For example, a woodland habitat or a seashore habitat.

Word Box

plants	water	seashore	animals
	environment	surrounds	

2. Below is a list of animals and insects referred to in your textbooks. Look at each word and decide if it is an **animal** or an **insect**. You can help one another and check your dictionary.

bee	hedgehog	fox	rabbit	flea
field mouse	cat	woodlouse	spider	

Animals

Insects

NAME: _____ DATE: _____

SCIENCE: Ecology and Habitats

Language Level: A2 / B1
Type of activity: individual
Suggested time: 30 minutes



Multiple choice

Read the text below and choose the best answers.

Transfer of energy: Energy is transferred from the sun to plants. Photosynthesis is the process by which green plants make their own food. Plants need the green chemical called chlorophyll to make food. Plants transfer this food energy to animals.

Food chains

A food chain shows how organisms are linked by what they eat, each organism provides food for the next organism. Food chains must start with green plants, because only they can make food. Green plants are called producers. All other organisms in a food chain are called consumers because they consume food. For example, grass is eaten by rabbits, rabbits are eaten by foxes.

1. How do plants produce food?

- | | |
|----------------------|----------------|
| a) by cooking | b) from people |
| c) by photosynthesis | d) by fire |

2. What is chlorophyll?

- | | |
|---------------|--------------|
| a) a chemical | b) an animal |
| c) a plant | d) a person |

3. How are organisms linked in a food chain?

- | | |
|-----------------------|-----------------------|
| a) by where they live | b) by what they drink |
| c) by what they eat | d) by their skin |

4. Are green plants consumers?

- | | |
|--------|-------|
| a) Yes | b) No |
|--------|-------|

5. Are foxes consumers?

- | | |
|--------|-------|
| a) Yes | b) No |
|--------|-------|

NAME: _____ DATE: _____

SCIENCE: Ecology and Habitats

Language Level: B1

Type of activity: pairs / small groups

Suggested time: 40 minutes

Planning and writing text

Use this chart to plan a short talk on 'The joys of the countryside'

Introduction

Tell readers that you will describe both city life and country life. You will explain that the benefits of country life are so much better than city life.

First paragraph

Description of the countryside, the sounds (birds, insects), the sights, the smells, and the peace of mind it brings. Describe natural habitats and food chains.

Second paragraph

Description of city life, pollution, noise, stress, how bad it is for health.

Concluding points

City dwellers don't know what they are missing.

Important words for this topic.

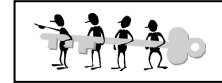


Have you ticked
this activity on your
Learning Record?

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Language Level: A2/B1
Type of activity: individual
Suggested time: 30 minutes



Grammar Points

In this Unit, we came across food chains. To describe food chains, we use the **passive form (be + past participle) + by**.



For example: The bumble bee **is eaten by** the field mouse, the field mouse **is eaten by** the cat.

Write out examples of food chains by using the following insects and animals and birds.

grass → rabbit → fox

dead leaves → wood louse → blackbird

dead leaves → earthworm → hedgehog

primrose → field mouse → badger

Alphaboxes

Using your textbook, find **one** word beginning with each of the letters of the alphabet. Write the word in the relevant box. You could also write the word in your own language.

a	b	c
d	e	f
g	h	i
j	k	l
m	n	o
p	q	r
s	t	u
v	w	xyz

Do you understand all these words?



Get your teacher to check this, then file it in your folder so you can use it in the future.



Word search

Find the words from the list box below.

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

ANIMAL	ECOLOGY	WEB
ANIMALS	ENERGY	FEEDING
CHAIN	ENVIRONMENT	FOOD
CHAINS	ORGANISM	HABITAT
CONSUMERS	ORGANISMS	INTERCONNECTED
DECOMPOSERS	PLANT	OCCUPY
DEPEND	PLANTS	

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Play Snap

Make Snap cards with 2 sets of the same keywords. See *Notes for teachers* for ideas about how to use the cards.



chain	chain
organism	organism
ecology	ecology

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rabbit	rabbit
energy	energy
consumer	consumer

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habitat	habitat
environment	environment
decompose	decompose

Answer key

Working with words, page 8

1. a,c

Picture Sentences, page 9

b,b,c

Energy comes from the sun.

Plants compete for light, water, heat and space. (in any order)

Animals compete for food, shelter, territory and mates. (in any order)

Odd one out, page 10

Clock, watch, television, tiger

Key words, page 11

Ecology (noun), organism (noun), animal (noun), chain (noun)

Unscramble the letters, page 12

Habitat, ecology, environment, rabbit

Secret code: animal

Completing text, page 13

Ecology is the study of the relationships between plants and **animals** and their environment. The environment is everything that **surrounds** an animal or plant. It includes the air, **water**, rocks, stones, soil and other animals and **plants**. All living things are affected by their environment. Their numbers depend on the availability of food and on the presence or absence of other living things.

There are many different types of habitat, e.g. woodland, pond, **seashore**, river or meadow. Each habitat has its own **environment** which suits the animals and plants that live there. For example, a woodland habitat or a seashore habitat.

Animals: hedgehog, fox, rabbit, field mouse, cat

Insects: bee, flea, woodlouse, spider

Multiple Choice, page 14

1c,2a,3c,4b,5a

Grammar points, page 17

The grass is eaten by the rabbit, the rabbit is eaten by the fox.

The dead leaves are eaten by the wood louse, the wood louse is eaten by the blackbird.

The dead leaves are eaten by the earthworm, the earthworm is eaten by the hedgehog.

The primrose is eaten by the field mouse, the field mouse is eaten by the badger.

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Word Search, page 19.

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