

SCIENCE

Living Things (Animals and Plants)

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	Living Things (Animals and Plants)	
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:



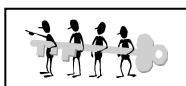
Developing a **personal dictionary** for different subjects, topics, and other categories of language, on an on-going basis. This prompt is a reminder.



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

animals
backbone
biology
cells
cell membrane
characteristics
chlorophyll
chloroplasts
cytoplasm
energy
excretion
features
fluid
food
gravity
groups
growth
humans
invertebrates
key
legs

light
living things
movement
nucleus
organisms
pairs
plants
reproduction
respiration
sensitivity
skin
stimulus/stimuli
things
vertebrates
water

Verbs

to bend
to divide
to enter
to feed
to grow
to identify
to leave
to make
to respond

Adjectives

absent
certain
own
present
simple

Adverbs

slowly

NAME: _____ DATE: _____
SCIENCE: Living Things (Animals and Plants)

Vocabulary file 1

Word	Meaning	Note or example*
biology		
cell		
membrane		
characteristics		
chlorophyll		
energy		
excretion		

*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
growth		
invertebrates		
living things		
nucleus		
reproduction		
respiration		
stimulus		



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 divide		
to identify		
to leave		
to respond		
certain		
present		
slowly		



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

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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:

Differences between humans and plants

- 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.).



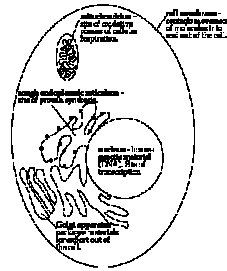
All students should record vocabulary and terms from the spidergram in their personal dictionaries.

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

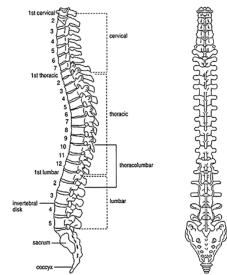


Working with words

1. Tick the correct answer



- a) crayon
- b) lunch box
- c) animal cell
- d) apple



- a) cell fusion
- b) food
- c) backbone
- d) chalk

2. Find these words in your textbook.

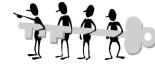
Write your own explanation for these words. Then write a note or example to help you remember the word. Use your dictionary if necessary.

Word	Page in textbook	Explanation	Note or example
biology			
vertebrates			
organisms			
stimulus			



Check that these key words are in your personal dictionary.

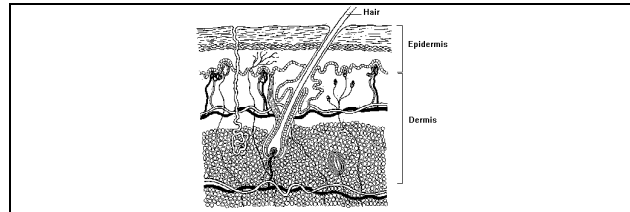
Language Level: A1
Type of activity: pairs or individual
Suggested time: 30 minutes



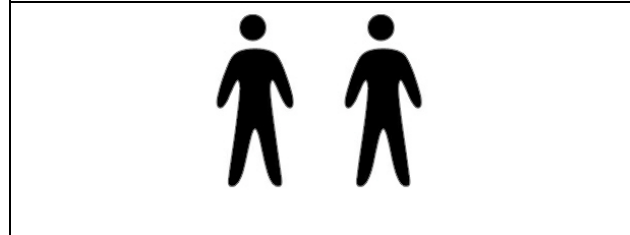
Picture Sentences

1. Tick the correct answer

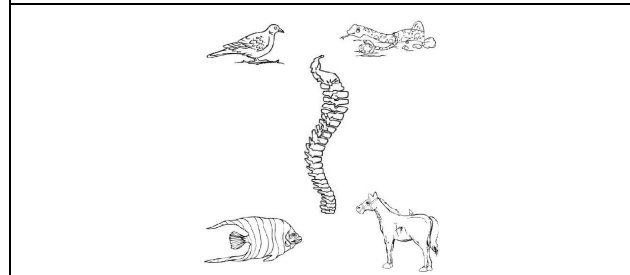
- a) This is a skin.
- b) This is a web.
- c) This is the bicycle.



- a) This is a pair.
- b) This is a book.
- c) This is a blackboard.



- a) This is a brush.
- b) These are vertebrates.
- c) These are insects.



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

things living food need

animals plants release energy and food from

move can place place to animals from

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**

window	door	animal	house
plants	car	wood	metal
organism	animal	invertebrate	shop
vertebrate	cold	warm	hot

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

to bend _____

to divide _____

to feed _____

to identify _____

to respond _____



Check that these key words are in your personal dictionary.

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



Hidden 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.

bi_l_gy _____

pl_n_ _____

hu_a_ _____

f_o_ _____

2. Write as many words as possible related to **Living Things**. You have 3 minutes!



Check that these keywords are in your personal dictionary.

Have you ticked this activity on your Learning Record?

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



Unscramble the letters

- This is not a human but an ANMILA
Answer _____
- The study of living organisms is called BILOGOY
Answer _____
- In order to survive a living organism needs FDOO
Answer _____
- The word vertebrates means BAKCBOEN
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=	M	R	D	E	A	I	N	G	O	S	T	U
Code=	B	X	Y	F	G	Q	R	O	L	E	A	W

example: (code) EAWYFRA = STUDENT (English)

LXOGRQEB =

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.

Basic Life Processes and Characteristics of Living Things

- Feeding: All living things need food for energy. Plants make their own food, while animals eat plants and other _____ for food.
- _____: All animals and _____ release energy from food.
- Movement and sensitivity: Animals respond quickly to stimuli and can move about from place to place. Plants respond to stimuli like light, water and gravity by growing slowly towards the stimulus. For example, plants bend towards the light.
- Growth: All _____ things grow.
- Reproduction: All living reproduce, otherwise life would not exist.
- _____: All living things get rid of poisonous substances. This is called excretion.
- Cells: All living things are made of cells. Some organisms are made up of only one cell.

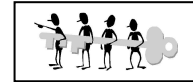
Word Box

excretion	plants
respiration	animals
	living

2. Examine the following list of words. Divide them into two groups - nouns and verbs.

- | | |
|--------------|-------------|
| excrete | respiration |
| reproduction | respire |
| excretion | reproduce |

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



Multiple choice

1. Read the text below and choose the best answers.

Plant and animal cells have certain features in common with each other as well as features that are different. Cell membrane is a thin skin that controls what enters and leaves the cell. Nucleus controls the cell's activities. Cytoplasm is a jelly-like fluid in which food, minerals and salts are dissolved. Chloroplasts contain chlorophyll which plants use to make food

1. What do plant and animals have?

- | | |
|----------|------------|
| a) cells | b) pencils |
| c) books | d) sweets |

2. What is a thin skin that controls what enters and leaves the cell called?

- | | |
|------------|------------------|
| a) Maths | b) cell membrane |
| c) English | d) brain |

3. What does the nucleus control?

- | | |
|----------------------|-------------|
| a) cell's activities | b) talk |
| c) paint | d) movement |

4. Cytoplasm is a jelly like food?

- | | |
|---------|----------|
| a) true | b) false |
|---------|----------|

5. Chloroplasts contain chlorophyll?

- | | |
|---------|----------|
| a) true | b) false |
|---------|----------|

2. Match the following terms to the meanings below:

cell membrane

nucleus

cytoplasm

- The brain of the cell that controls its activities
- A thin skin that holds the cell together
- A watery fluid

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Language Level: B1
Type of activity: pairs / small groups
Suggested time: 40 minutes

Planning and writing text

Use this chart to plan a short text on the topic, 'Differences between humans and plants.'

Introduction
General introduction to topic of humans and plants

First paragraph
Characteristics of humans

Second paragraph
Characteristics of plants

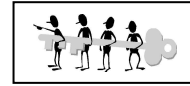
Concluding points
Summary of differences, conclusions

Important words for this topic.



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



Grammar Points

Nouns

1. There are two types of nouns - *abstract nouns* and *concrete nouns*.

Look at the two definitions, and decide which is which.

A noun which refers to a material object.

A noun which refers to a thing that does not exist as a material object.

2. Look at the list of nouns and decide if they are concrete or abstract:

animal food beauty human water happiness skin
explanation organism human comparison difference

3. Many abstract nouns are made from verbs, using the endings -tion, -sion, -ance, -ence, -ure, or -ment. Change the following verbs into abstract nouns. You can use your dictionary to check your answers!

Add, agree, appear, compare, concentrate, conclude, decide, declare, differ, distinguish, divide, enter, excrete, explain, identify, interfere, multiply, observe, proceed, repeat, reproduce, respire, simplify, solve, vary

NAME: _____ DATE: _____
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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.

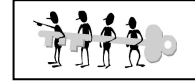
a	b	c
d	e	f
g	h	i
j	k	l
m	n	o
p	q	r
s	t	u
v	w	xyz

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 in the box below.

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

BLOOD	LENS	STAIN
CELL	MICROSCOPE	TOGETHER
CHLOROPLASTS	OBJECT	VACUOLE
COVER	OBJECTIVE	
EYEPIECE	PLANT	
KNOB	SLIDE	

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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.



organism	organism
characteristics	characteristics
respiration	respiration

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excretion	excretion
pairs	pairs
groups	groups

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biology	biology
vertebrate	vertebrate
invertebrate	invertebrate

Answer key

Working with words, page 8

1. c,c

Picture Sentences, page 9

1. a,a,b

2. Living things need food.

Animals and plants release energy from food.

Animals can move from place to place.

Odd one out, page 10

Animal, plants, shop, vertebrate

Key words, page 11

Biology (noun), plant (noun), human (noun) food (noun)

Unscramble the letters, page 12

animal, biology, food, backbone

Secret code: organism

Completing text, page 13

1. Basic Life Processes and Characteristics of Living Things

- Feeding: All living things need food for energy. Plants make their own food, while animals eat plants and other **animals** for food.
- **Respiration**: All animals and plants release energy from food.
- Movement and sensitivity: Animals respond quickly to stimuli and can move about from place to place. Plants respond to stimuli like light, water and gravity by growing slowly towards the stimulus. For example, plants bend towards the light.
- Growth: All **living** things grow.
- Reproduction: All living reproduce, otherwise life would not exist.
- **Excretion**: All living things get rid of poisonous substances. This is called excretion.
- Cells: All living things are made of cells. Some organisms are made up of only one cell.

2. Verbs: excrete, respire, reproduce

Nouns: excretion, respiration, reproduction

NAME: _____ DATE: _____
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Multiple Choice, page 14

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

Nucleus - the brain of the cell that controls its activities

Cell membrane - a thin skin that holds the cell together

Cytoplasm - a watery fluid

Grammar points, page 17

Concrete noun: A noun which refers to a material object.

Animal, food, human, water, skin, organism

Abstract noun: A noun which refers to a thing that does not exist as a material object

Beauty, happiness, comparison, difference

Addition, agreement, appearance, comparison, concentration, conclusion, decision, declaration, difference, division, explanation, identification, interference, multiplication, observation, procedure, repetition, reproduction, respiration, simplification, solution, variation

Word Search, page 19

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