OXFORD Successful

5

Natural Sciences and Technology

ASSESSMENT HANDBOOK

CAPS

Oxford – your choice for success

Oxford Successful Natural Sciences and Technology Grade 5 Assessment Handbook

OXFORD
UNIVERSITY PRESS

OXFORD
UNIVERSITY PRESS

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide. Oxford is a registered trade mark of Oxford University Press in the UK and in certain other countries.

Published in South Africa by
Oxford University Press Southern Africa (Pty) Limited
Vasco Boulevard, Goodwood, N1 City, P O Box 12119, Cape Town,
South Africa

© Oxford University Press Southern Africa 2019

The moral rights of the author have been asserted.

First published 2019

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press Southern Africa (Pty) Ltd, or as expressly permitted by law, by licence, or under terms agreed with the appropriate reprographic rights organisation. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press Southern Africa (Pty) Ltd, at the above address. You must not circulate this work in any other form and you must impose this same condition on any acquirer.

Oxford Successful Natural Sciences and Technology Grade 5 Assessment Handbook
ISBN (print) PROM190756802
First impression 2019

Printed on [insert paper quality e.g. acid-free paper]

Acknowledgements
Author/Compiler: Tania Kliphuis
Publisher: Janine Wilson
Editor: Janine Versfeld
Proofreader: Alison Paulin
Design by: Electric Book Works
Cover designer: Judith Cross
DTP Illustrators: Alex Flemming; Mindi Flemming; Jennifer Jacobs
Produced by: Electric Book Works
Printed and bound by:

The authors and publisher gratefully acknowledge permission to reproduce copyright material in this book. Every effort has been made to trace copyright holders, but if any copyright infringements have been made, the publisher would be grateful for information that would enable any omissions or errors to be corrected in subsequent impressions.
Links to third party websites are provided by Oxford in good faith and for information only. Oxford disclaims any responsibility for the materials contained in any third party website referenced in this work.

Contents

Term 1 Assessment

Plants and animals on Earth

1. Choose the correct definition for 'indigenous'.

   A. Something that is important to a particular culture.
   B. Something that does not belong naturally to a particular place.
   C. Something that grows or lives naturally in a particular place.
   D. Something that has been found in a particular place for hundreds of years.

[2]

2. Choose the correct definition for 'biodiversity'.

   A. Different habitats and biospheres.
   B. Different plants and animals in a habitat.
   C. Different plants in a habitat.
   D. Different animals in a habitat.

[2]

3. Choose the correct definition for 'interdependence'.

   A. The ability of plants and animals to live without needing to depend on one another.
   B. The relationship between plants.
   C. The relationship between all plants and animals in a habitat.
   D. The relationship between the habitat and the weather.

[2]

4. Explain how the plants and animals in this habitat are interdependent. In your answer, mention the resources that each organism needs to survive.

[4]

Total: 10

Animal skeletons

5. Differentiate between a vertebrate and an invertebrate.

[6]

6. One of the reasons that you can move your body is because of your muscles. Explain how muscles work.

[4]

7. Match the part of the human skeleton in the first column with the function in the second column.

7.1 shoulder blade	A. keeps body upright
7.2 backbone	B. protects brain
7.3 ribs	C. movement
7.4 skull	D. protects lungs and heart

[4]

Total: 14

Skeletons as structures

8. What kind of structure is a vertebrate skeleton? Give a reason for your answer.

[2]

Total: 2

Food chains

9. Complete this table.

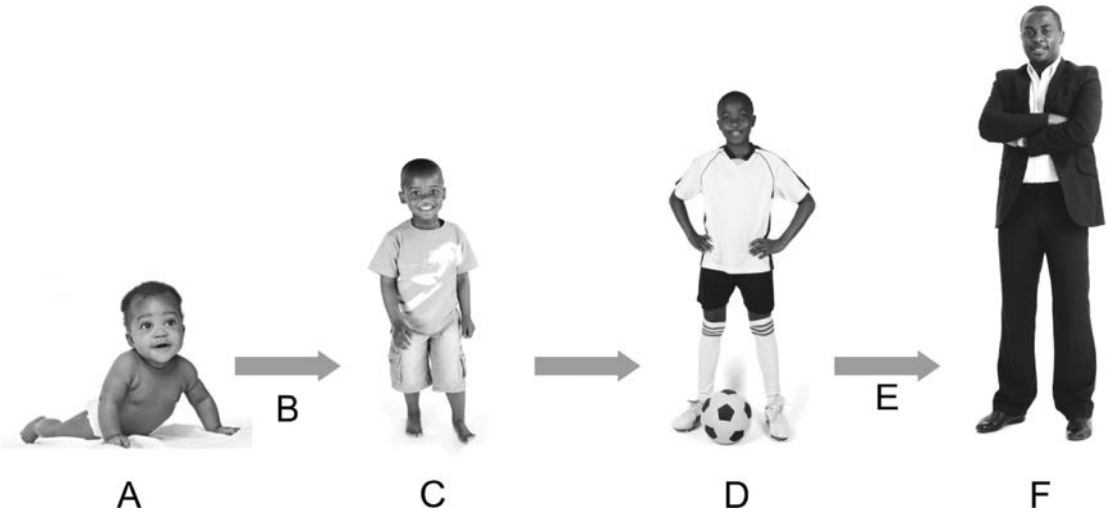
Group of animal	What animal eats	Example
Herbivore		
	Other animals	
		Humans

[6]

Total: 6

Life cycles

10. This picture shows the main life stages in a person's life. Add the labels for each life stage, as well as the processes.



[6]

11. Choose the correct answer from the options provided. The processes in the life cycle of a flowering plant are (in order):

    A. Germinating, maturing, growing, being pollinated, flowering, and dispersing seeds
    B. Germinating, growing, being pollinated, flowering, and dispersing seeds
    C. Germinating, growing, maturing, flowering, being pollinated, and dispersing seeds
    D. Germinating, growing, being pollinated, maturing, dispersing seeds, flowering

[2]

Total: 8

TOTAL: 40 MARKS

Glossary

choose: decide between different choices
complete (verb): finish something
definition: a short sentence that explains what something is, or what something means
differentiate: say what are the differences between things
disperse: spread out over a large area
explain: make something clear by describing it in detail and giving some facts
function (noun): what something is used for; purpose
germinate: begin to grow
in order: the correct way for related things to follow each other
mature (verb): grow older
muscle: tissue in the body that is able to contract, which helps the animal to move
organism: an animal or plant
process (noun): a series of steps in order to achieve something specific
process (verb): manufacture or make something from a material
resource: something that is useful and used for a specific purpose
stage: a part in someone's life where a person is a specific age
structure: something that is constructed from several parts

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
choose	khetha	khetha	kies	tlhopha	kgetha
complete	qedela	gqibezela	voltooi	feleletsa	qetella
definition	incazelo	inkcazelo/ ingcaciso	definisie	tlhaloso	tlhaloso
differentiate	hlukanisa	yahlula	onderskei	farologanya	khetholla
disperse	hlakaza/ sakaza	chitha	versprei	phatlhalatsa	hasa
explain	chaza	cacisa	verduidelik	tlhalosa	hlalosa
function	umsebenzi	umsebenzi	funksie	tiro	kabelo
germinate	ukuhluma	ntshulisa	ontkiem	go tlhoga	ho mela

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
in order	ngokuhleleka	ngendlela	in volgorde	ka tatelano	ka tlhahlamano/ tatellano
mature	khulile	khulisa/ vuthisa	ontwikkel	gola	hodile/hodileng
muscle	umsipha	isihlunu	spier	mosifa	mosifa
organism	okuphilayo	isixokelelwano	organisme	sebopiwa se sennye	ntho e phelang
process	indlela	inkqubo	proses	kgato	tsamaiso
process	hlanganisa	yenza	verwerk	ntshokuno	mokgwatsamaiso
resource	izinsiza	ubutyebi	hulpbron	sediriswa	mohlodi
stage	isigaba	ukufikisa	fase	dikgato botshelo	dikgato
structure	isakhiwo	isakhiwo	struktuur	sebopego	sebopeho

Skills covered

Question number	Level of difficulty	Skill	More exercises in *Oxford Successful Natural Sciences and Technology Grade 5 Learner's Book* for further practice
Plants and animals on Earth			
1	low order	define	Strand 1 Unit 1 Activity 3 (p. 15)
2	low order	define	Strand 1 Unit 1 Activity 1 (p. 11)
3	low order	define	Strand 1 Unit 2 Activity 1 (p. 17)
4	middle order	explain	Strand 1 Unit 2 Activity 1 (p. 17)
Animal skeletons			
5	high order	differentiate	Strand 1 Unit 3 Activity 1 (p. 19)
6	middle order	explain	Strand 1 Unit 5 Activity 2 (p. 25) Strand 1 Unit 5 Activity 3 (p. 25)
7	low order	match	Strand 1 Unit 4 Activity 1 (p. 22)
Skeletons as structures			
8	middle order	name; explain	Strand 1 Unit 6 Activity 1 (p. 27)
Food chains			
9	middle order	define	Strand 1 Unit 7 Activity 1 (p. 33)
Life cycles			
10	middle order	label	Strand 1 Unit 9 Activity 1 (p. 37)
11	high order	organise	Strand 1 Unit 9 Activity 2 (p. 40)

Term 2 Mid-year Exam

Section A

Plants and animals on Earth

1. What is interdependence in a habitat?

[2]

Total: 2

Animal skeletons

2. Complete the table.

Part of the skeleton	Function
1. Shoulder blade	
2. Backbone	
3. Ribs	
4. Skull	
5. Hip bone	

[5]

Total: 5

Food chains

3. Construct a food web using this word bank:

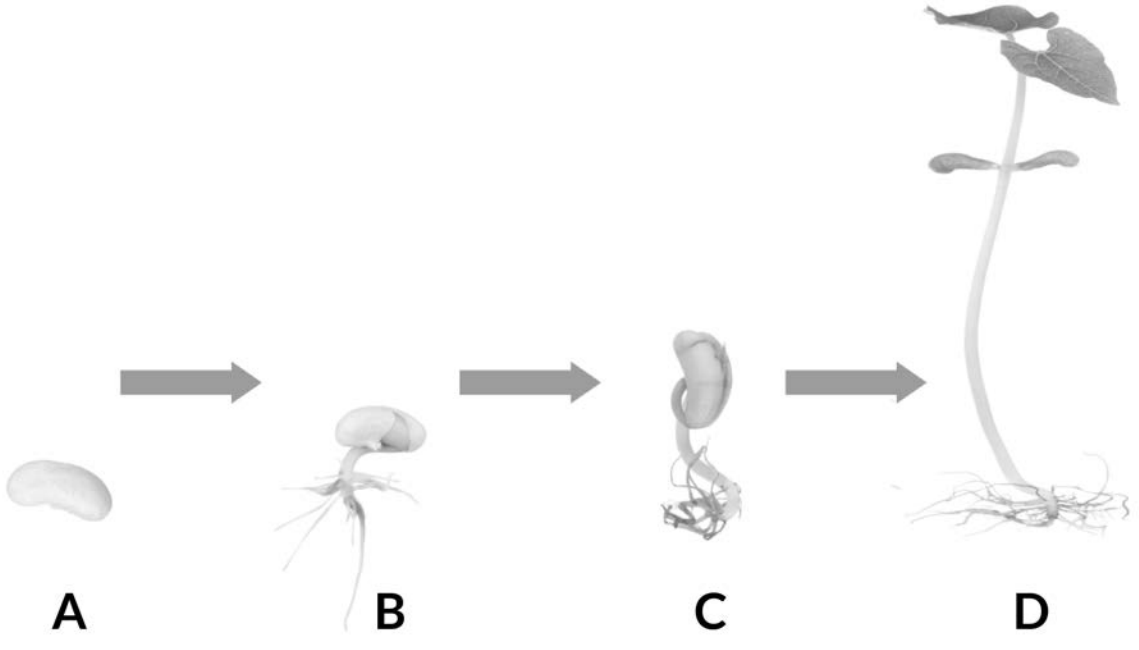
sunlight; lion; springbok; zebra; grass; grasshopper; field mouse; eagle; snake

[9]

Total: 9

Life cycles

4. This picture shows the main life stages in the life cycle of a bean plant. Add the labels for each life stage.



[4]

Total: 4

SECTION A TOTAL: 20 MARKS

Section B

Metals and non-metals

5. Compare a stainless steel spoon and a plastic bowl by mentioning two properties of metals and two properties of non-metals.

[4]

Total: 4

Uses of metals

6. Not all metals are _____.

[2]

7. Name one use of metals. Explain why it is used for this purpose.

[3]

Total: 5

Processing materials

8. Match the materials in the first column with the finished product in the second column.

8.1 gravel and water	A. bricks
8.2 flour and water	B. jelly
8.3 wet clay and straw	C. dough
8.4 flour and eggs	D. concrete
8.5 gelatine and water	E. glue

[5]

9. Why are materials processed to make new products?

[2]

Total: 7

Processed materials

10. Why is it a good idea to make socks and jerseys from wool?

[4]

Total: 4

SECTION B TOTAL: 20 MARKS

Glossary

compare: discuss how two or more things are similar or not similar
construct: build or develop
food web: visual representation of how living things are interdependent on each other for food
habitat: area or place where animals and plants live
life cycle: the stages in a living organism's life from birth to death
material: what a thing is or can be made from
mention: refer to something without going into detail
process (noun): a series of steps in order to achieve something specific
process (verb): manufacture or make something from a material
product: a thing or substance
property: special characteristic
use (noun): how something is useful

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
compare	qhathanisa	thelekisa	vergelyk	tshwantshanya	bapisa
construct	akha	yakha	konstrueer	tlhama	etsa/aha
food web	ubudlelwano bokudla nokuphilayo	inwebu yokutya	voedselweb	dikgato tsa botshelo	kopanelo ya mekgwa ya tlhahiso le tsamaiso ya dijo
habitat	indawo yokuhlala	indawo yokuhlala	habitat	bonno	tikoloho/bophelo ba dimela le diphoofolo
life cycle	izigaba zempilo	umqokozo wobomi	lewensiklus	dikgato tsa botshelo	potoloho ya bophelo
material	izinto noma izinsiza kukhiqiza	izixhobo	stof	didiriswa	sesebediswa
mention	shono	xela	benoem	neela	bolela
process	indlela	inkqubo	proses	kgato	tsamaiso
process	hlanganisa	yenza	verwerk	ntshokuno	mokgwatsamaiso

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
product	umkhiqizo	imveliso	produk	kuno	tlhahiso
property	impahla	iimpawu	eienskap	boleng	sebopeho
use	sebenzisa	sebenzisa	gebruik	dirisa	sebedisa

Skills covered

Question number	Level of difficulty	Skill	More exercises in *Oxford Successful Natural Sciences and Technology Grade 5 Learner's Book* for further practice
Section A			
Plants and animals on Earth			
1	low order	define	Strand 1 Unit 2 Activity 1 (p. 17)
Animal skeletons			
2	low order	define	Strand 1 Unit 4 Activity 1 (p. 22)
Food chains			
3	high order	organise	Strand 1 Unit 8 Activity 2 (p. 35)
Life cycles			
4	middle order	label	Strand 1 Unit 9 Activity 1 (p. 37)
Section B			
Metals and non-metals			
5	middle order	compare	Strand 2 Unit 1 Activity 2 (p. 52)
Uses of metals			
6	low order	remember	Strand 2 Unit 1 Activity 2 (p. 52)
7	middle order	explain	Strand 2 Unit 4 Activity 1 (p. 61)
Processing materials			
8	low order	match	Strand 2 Unit 5 Activity 3 (p. 66)
9	middle order	explain	Strand 2 Unit 5 Activity 2 (p. 65)
10	high order	justify	Strand 2 Unit 6 Activity 1 (p. 71)

Term 3 Assessment

Stored energy in fuels

1. List the three things that a fire needs to burn.

[3]

2. 2.1 Give one example of a fuel. (1)
   2.2 Give one example of something that can be used to start a fire. (1)

[2]

3. Read the news stories below. Using the information given in the articles, complete this table.

	What started the fire
Fire 1	
Fire 2	
Fire 3	

Tragedy in informal settlement
One person has died in a fire that spread through Khayelitsha in the early hours of Saturday morning. More than 1 000 people have been left homeless. The fire is believed to have been started by a paraffin lamp that was knocked over.

Electrical fires: More common than you think!
Homeowners are urged to check that their electricity connections are up-to-date following a recent home fire in a Pietermaritzburg suburb. "Homeowners need to be aware of the risks and dangers of electricity," says the City Manager. "House fires caused by faulty wiring are more common than people think."

Arson in Pretoria
A veld fire raged out of control in northern Pretoria on Wednesday and Thursday. The fire was believed to have been started intentionally. "We think that a person lit the dry grass with a match to start the fire," says the fire chief. "Perhaps he or she thought it would be funny."

The rain on Thursday afternoon helped to put out the fires.

[6]

4. Name two ways that fires can start, and explain how these fires can be prevented.

[4]

Total: 15

Energy and electricity

5. These steps explain how electricity comes into our homes from power stations. Organise the steps into the correct order.

   A. The electricity reaches a substation, where it is stepped down.
   B. The electricity flows through the wires in our homes, to plug points in the walls, where we use it as needed.
   C. The electricity is transferred to transformers.
   D. The electricity travels to the electricity box at our homes.
   E. Coal is burned to make steam. This steam powers turbines, which generate electricity.
   F. The electricity travels along pylons.

[12]

Total: 12

Energy and movement

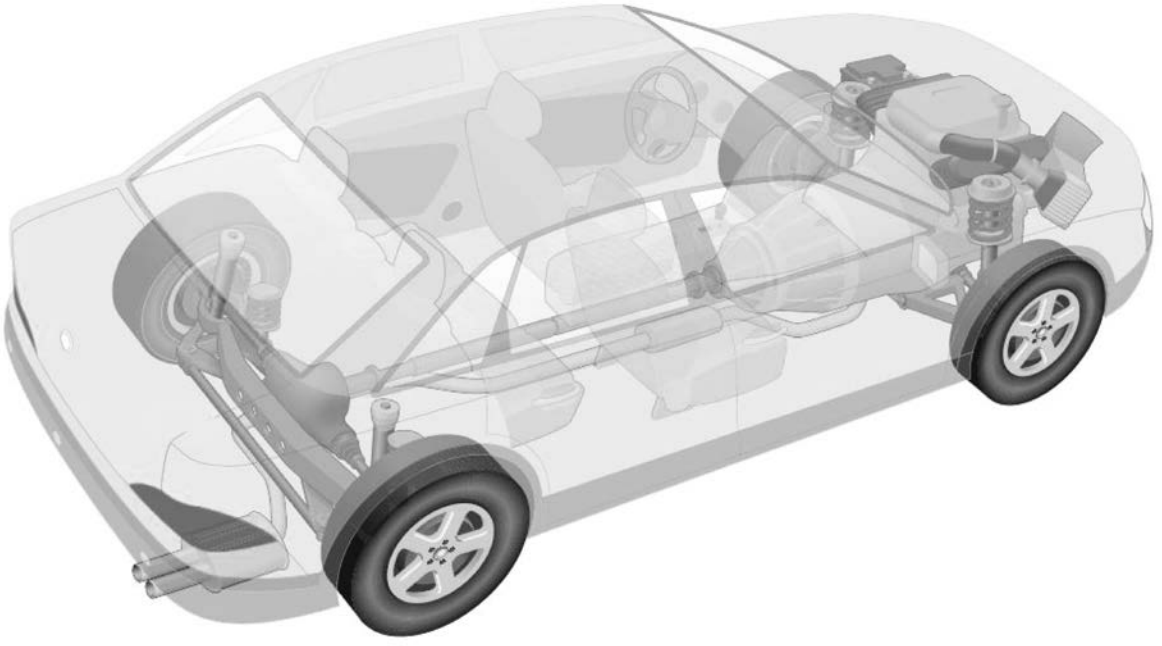
6. Thando and Lunga are playing around with an elastic band. Thando pulls his elastic band back by 10 cm. Lunga pulls her elastic band back by 20 cm. Whose elastic band will travel further once they let it go? Explain why.

[3]

Total: 3

Systems for moving things

7. Look at this picture of a car. It shows the wheels and axles.



Answer these questions about the picture, and about wheels and axles:

7.1 How many sets of wheels and axles does this car have? (1)
7.2 Explain how the wheels and axles work. (2)
7.3 What would happen if the wheels were not attached to an axle? (2)

[5]

8. Give five examples of machines that use wheels and axles to move more easily.

[5]

Total: 10
TOTAL: 40 MARKS

Glossary

faulty wiring: electricity that is not connected correctly and could, therefore, be dangerous
fuel: something that is used to create energy
intentional: on purpose
list (verb): write down things that are connected in some way
machine: a tool made up of different parts; makes it easier to do things
power station: place where electricity is created or generated
prevent: avoid
tragedy: a terrible or sad situation or event
veld fire: a fire that burns empty plots of land

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
faulty wiring	izintambo ezihambisa amandla ezingasebenzi	iingcingo zombane ezineziphene	foutiewe bedrading	phoso dithapong tsa motlakase	phoso dithapong tsa motlakase
fuel	uphethiloli	amafutha	brandstof	lookwane	mafura
intentional	ngenhloso	ngenjongo	opsetlik	ka boomo	ka boomo
list	bhala ngokubala	dwelisa	lys	neela	etsa letoto/ lenane
machine	umshini	umatshini	masjien	motšhini	motjhine
power station	isikhumulo sesiphehlimandla	iziko lombane	kragstasie	seteišene sa motlakase	seteishene sa motlakase
prevent	ukuvimbela	khusela	voorkom	thibela	thibela
tragedy	inhlekelele	umdlalo olisizi	tragedie	masetlapelo	koduwa
veld fire	umlilo wamadlelo	umlilo wedlelo	veldbrand	mollo wa dikgwa	hlaha

Skills covered

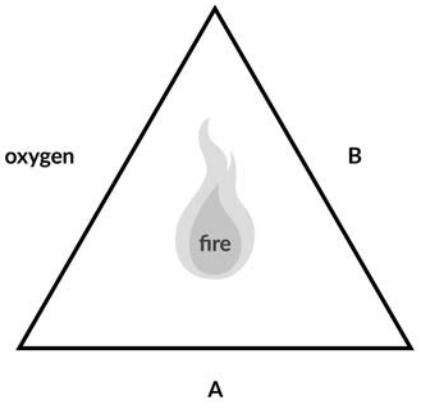
Question number	Level of difficulty	Skill	More exercises in *Oxford Successful Natural Sciences and Technology Grade 5 Learner's Book* for further practice
Stored energy in fuels			
1	low order	list	Strand 3 Unit 1 Activity 2 (p. 82)
2	middle order	give examples	Strand 3 Unit 1 Activity 2 (p. 82)
3	middle order	comprehension	Strand 3 Unit 3 Activity 1 (p. 88)
4	middle order	explain	Strand 3 Unit 3 Activity 2 (p. 90)
Energy and electricity			
5	high order	organise	Strand 3 Unit 5 Activity 1 (p. 98)
Energy and movement			
6	middle order	explain	Strand 3 Unit 7 Activity 1 (p. 103) Strand 3 Unit 7 Activity 3 (p. 106)
Systems for moving things			
7	high order	explain; predict	Strand 3 Unit 8 Activity 1 (p. 109) Strand 3 Unit 8 Activity 2 (p. 110)
8	middle order	give examples	Strand 3 Unit 8 Activity 1 (p. 109)

Term 4 End-of-year Exam

Section A

Stored energy in fuels

1. A fire triangle shows the three things that a fire needs to start and continue burning. Fill in the missing labels, A and B.



[2]

2. Write down four things that you should do (or not do) if there is a fire at home.

[4]

Total: 6

Energy and electricity

3. Draw a simple electrical circuit with the following components: a cell, a light bulb, wire and a switch. Make sure that you label your drawing properly.

[6]

Total: 6

Energy and movement

4. Explain what happens when a spring is released after it has been compressed.

[2]

Total: 2

Systems for moving things

5. Why do some vehicles use axles?

[2]

6. Give four examples of machines that use wheels and axles to move more easily.

[4]

Total: 6

SECTION A TOTAL: 20 MARKS

Section B

Planet Earth

7. Draw a simple diagram to explain why the Earth experiences day and night.

[5]

Total: 5

Surface of the Earth

8. Name the four elements that support life on Earth.

[4]

9. Is this sentence true or false?

   Sunlight is the least important element, because it is only needed for warmth.

[1]

Total: 5

Sedimentary rocks

10. Draw up a table to compare the three main types of soil.

[6]

Total: 6

Fossils

11. Distinguish between body and trace fossils.

[4]

Total: 4

SECTION B TOTAL: 20 MARKS

Glossary

compress: squash to make smaller
continue: carry on
element: a characteristic part of something
experience (verb): go through an event
release: let go
simple circuit: an electric circuit with current flowing from one energy source to one output source
support (verb): hold up; assist
vehicle: a thing that moves from one place to another and transports people or goods

English	isiZulu	isiXhosa	Afrikaans	Setswana	Sesotho
compress	cindezela	cinezela	saamdruk	gatelela	patisa/ tlenyeletsa
continue	qhubeka	qhubekeka	voortgaan	tswelela	tswella
element	isithako	isiqalo	element	karolo	elemente
experience	funda ngokwenza	yiva/vavanya	ervaar	maitemogelo	fihlella
release	dedela	khulula	vrystel	golola	tlohela
simple circuit	isekhethi ecacile	iingcingo zombane ezilula	eenvoudige stroombaan	sekete e e bonolo	potoloho e bobebe
support	lekelela	xhasa	ondersteun	tshegetsa	tshehetsa
vehicle	okokuthwala okunenjini	inqwelo	voertuig	koloi	koloi

Skills covered

Question number	Level of difficulty	Skill	More exercises in *Oxford Successful Natural Sciences and Technology Grade 5 Learner's Book* for further practice
Section A			
Stored energy in fuels			
1	low order	label	Strand 3 Unit 1 Activity 2 (p. 82)
2	middle order	outline	Strand 3 Unit 3 Activity 1 (p. 88) Strand 3 Unit 3 Activity 2 (p. 90)
Energy and electricity			
3	high order	illustrate	Strand 3 Unit 4 Activity 2 (p. 95)
Energy and movement			
4	middle order	explain	Strand 3 Unit 7 Activity 2 (p. 105)
Systems for moving things			
5	middle order	explain	Strand 3 Unit 8 Activity 2 (p. 110)
6	middle order	give examples	Strand 3 Unit 8 Activity 1 (p. 109)
Section B			
Planet Earth			
7	high order	illustrate	Strand 4 Unit 1 Activity 3 (p. 123)
Surface of the Earth			
8	middle order	name	Strand 4 Unit 2 Activity 1 (p. 124)
9	low order	remember	Strand 4 Unit 2 Activity 1 (p. 124)

Question number	Level of difficulty	Skill	More exercises in *Oxford Successful Natural Sciences and Technology Grade 5 Learner's Book* for further practice
Section B			
Sedimentary rocks			
10	middle order	compare	Strand 4 Unit 4 Activity 1 (p. 132) Strand 4 Unit 4 Activity 3 (p. 135)
Fossils			
11	high order	distinguish	Strand 4 Unit 8 Activity 2 (p. 148)

Term 1 Assessment Answers

Plants and animals on Earth

1. C

[2]

2. B

[2]

3. C

[2]

4. Learners should mention the ways that all the organisms (the plants, frog, insect, etc.) rely on each other for resources (such as shelter, a place to rest, and food). The living organisms also rely on the water, as well as the sunlight and air.

[4]

Total: 10

Animal skeletons

5. The vertebrate skeleton is made up of bones and joints. It is inside the body. Vertebrates have a backbone. Invertebrates can either have soft bodies, hard bodies or a shell. Invertebrate animals do not have a backbone. If the invertebrate has a hard body or shell, this is on the outside of the body.

[6]

6. Muscles work in pairs. Muscles are attached to bones. As one part contracts, the other part relaxes. This action pulls the bones so that your arm or leg (or any other body part that has a muscle attached to it) moves.

[4]

7. 1. C
   2. A
   3. D
   4. B

[4]

Total: 14

Skeletons as structures

8. It is a frame structure. It is made of bones that are joined together to make it strong.

[2]

Total: 2

Food chains

9.

Group of animal	What animal eats	Example
Herbivore	**Plants**	**Buck, zebra, giraffe**
Carnivore	Other animals	**Lion, cheetah, leopard**
Omnivore	**Plants and other animals**	Humans

[6]

Total: 6

Life cycles

10. A. baby
    B. growing
    C. child
    D. teenager
    E. maturing
    F. adult

[6]

11. C

[2]

Total: 8

TOTAL: 40 MARKS

Term 2 Mid-year Exam Answers

Section A

Plants and animals on Earth

1. Interdependence in a habitat is how the animals and plants in that habitat depend on one another for resources.

[2]

Total: 2

Animal skeletons

2.

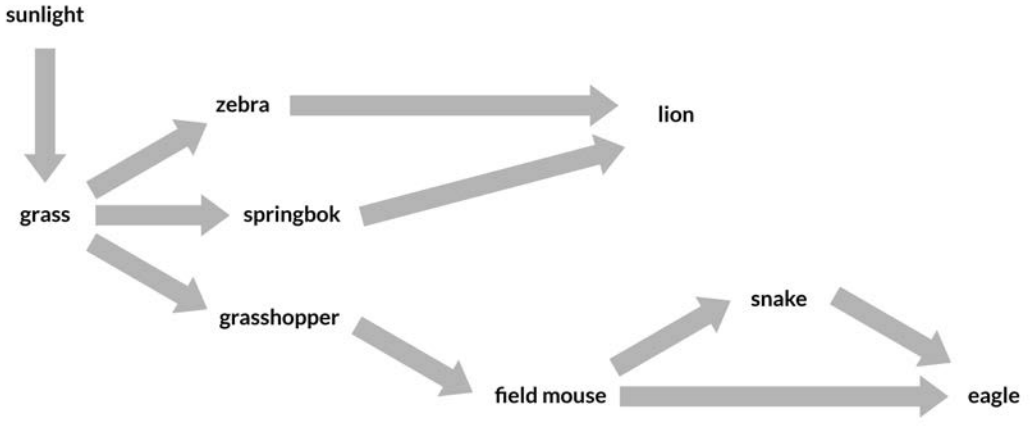
Part of the skeleton	Function
1. Shoulder blade	Movement
2. Backbone	Protects spinal cord; holds body upright
3. Ribs	Protect lungs and heart
4. Skull	Protects brain
5. Hip bone	Movement

[5]

Total: 5

Food chains

3. Example answer:



[9]

Total: 9

Life cycles

4. A. seed
   B. germinating plant
   C. seedling
   D. mature plant

[4]

Total: 4

SECTION A TOTAL: 20 MARKS

Section B

Metals and non-metals

5. Learners should mention at least two differences. Here are properties of metals to assist you in marking their answer:

    - hard
    - shiny
    - malleable
    - ductile
    - strong
    - melt at high temperatures
    - conducts heat and electricity
    - solid at room temperature.

    Example answer: The spoon is strong and conducts heat. The plastic bowl is brittle and does not conduct heat.

    [4]

Total: 4

Uses of metals

6. magnetic

[2]

7. Accept any reasonable answers. The learners' explanations for why the metal has been used for this purpose should be aligned to the properties of metals. Example answer: Bridges. Iron and steel are used to build bridges because they are strong materials.

[3]

Total: 5

Processing materials

8. 1. D
   2. E
   3. A
   4. C
   5. B

[5]

9. To change the materials' properties. The new properties make the new product useful.

[2]

Total: 7

Processed materials

10. Example answer:

- It is soft.
- It is warm.
- It can be made into different colours and patterns.
- It can be washed and reused.

[4]

Total: 4

SECTION B TOTAL: 20 MARKS

Term 3 Assessment Answers

Stored energy in fuels

1. Heat/something to start the fire, fuel, and oxygen.

[3]

2. 1. Accept one: coal, charcoal, wood, grass, petrol, candle wax, etc.
   2. Accept one: match, lighter, lightning, a spark from a fire or a cigarette.

[2]

3.

	What started the fire
Fire 1	Paraffin lamp that was knocked over.
Fire 2	Faulty wiring/Electricity.
Fire 3	A match.

[6]

4. Accept reasonable answers. Example answer:

   Children playing with fire: Matches and lighters should be kept away from children.

   A candle falling over and setting the curtains or the carpet on fire: Never leave burning candles unattended.

[4]

Total: 15

Energy and electricity

5. E, C, F, A, D, B

[12]

Total: 12

Energy and movement

6. Lunga. She has stretched her elastic band the most, which means that her elastic band has the most stored energy. Therefore, it will travel further than Thando's.

[3]

Total: 3

Systems for moving things

7. 1. two (1)
   2. The wheels turn around a central point. The wheels are joined together by a rod, called an axle. (2)
   3. The car would not drive straight, and it would not move as easily. (2)

[5]

8. Accept any five correct answers. Examples: bicycle, motorbike, pram, car, tractor, wagon.

[5]

Total: 10

TOTAL: 40 MARKS

Term 4 End-of-year Exam Answers

Section A

Stored energy in fuels

1. The missing labels are **fuel** and **heat/something to start the fire**. The labels may be given as either A or B.

[2]

2. Accept any reasonable answers. Examples include:

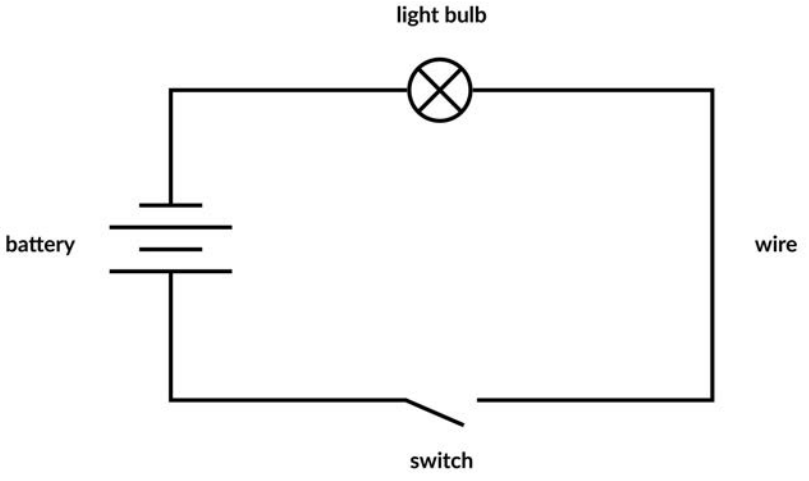
   - Get out of the house as quickly as possible.
   - Call the fire department when it is safe.
   - Crawl low on the ground to get out of the house.
   - Switch off the electricity if it is safe to do so.
   - Don't open any doors or windows.
   - Don't go back into the house for any reason.

[4]

Total: 6

Energy and electricity

3. Award two marks for the correct drawing, and one mark for each label. The drawing should look similar to this one (it does not matter if the switch is open or closed):



[6]

Total: 6

Energy and movement

4. When the spring is compressed, it becomes smaller and has stored energy. When it is released, it goes back to its normal size quickly, releasing energy.

[2]

Total: 2

Systems for moving things

5. The axles help the vehicle to move in a straight line, and to move more easily.

[2]

6. Accept any four correct answers. Examples: bicycle, motorbike, pram, car, tractor, wagon.

[4]

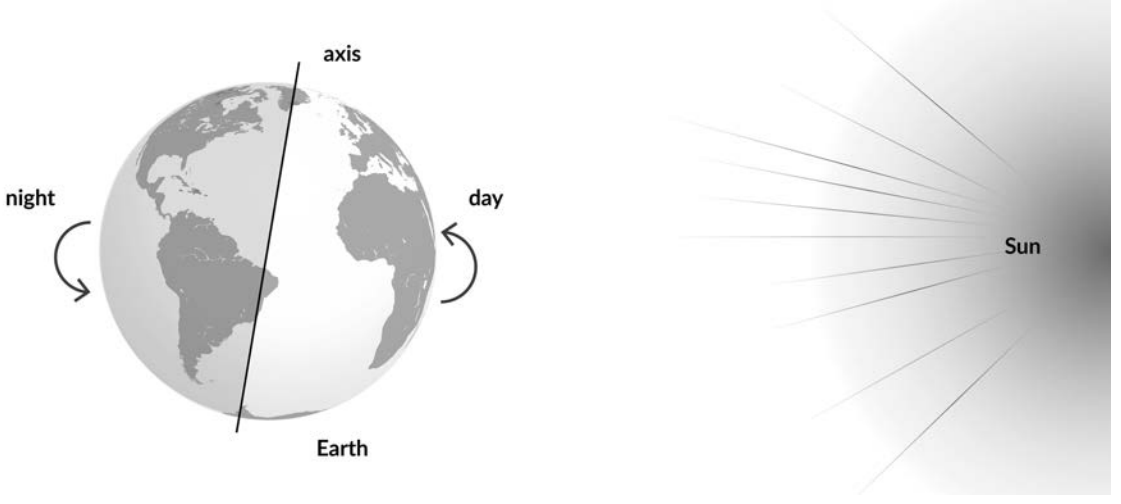
Total: 6

SECTION A TOTAL: 20 MARKS

Section B

Planet Earth

7. The learners' diagrams must show that the Earth rotates on its own axis and that, when a particular part of the world rotates away from the Sun, it is nighttime in that part of the world. For the other side of the world that is facing the Sun, it is daytime. Learners' diagrams could look like the sample below.



[5]

Total: 5

Surface of the Earth

8. Sunlight, water, soil, and air.

[4]

9. False. (It is very important. Sunlight is also needed for plants to be able to make food.)

[1]

Total: 5

Sedimentary rocks

10.

Type of soil	Description
Loamy soil	Mixture of clay and sand. Absorbs less air than sandy soil but absorbs more water.
Clay soil	Smooth texture with small spaces between the particles. Particles stick together. Can hold lots of water.
Sandy soil	Rough texture with large spaces between the sand particles. Can hold lots of air and water.

[6]

Total: 6

Fossils

11. Example answer: Body fossils are the hard parts of the animal or plant. These parts have been preserved in the rock. Trace fossils are simply traces that the animal lived. They include things like footprints, nests, or the imprint left behind by the decayed soft tissue of the animal.

[4]

Total: 4

SECTION B TOTAL: 20 MARKS