

كتيب الطالب للوحدة الثانية الفضاء



تم تحميل هذا الملف من موقع المناهج الإماراتية

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المزيد من مادة
لغة انجليزية:

إعداد: مجمع زايد التعليمي - الرفاعة

التواصل الاجتماعي بحسب الصف الثامن



صفحة المناهج
الإماراتية على
فيسبوك

الرياضيات

اللغة الانجليزية

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المواد على تلغرام

المزيد من الملفات بحسب الصف الثامن والمادة لغة انجليزية في الفصل الأول

قائمة مفردات الوحدة الثانية الفضاء

1

كتيب الطالب للوحدة الثانية الفضاء

2

مواصفات اختبار نهاية الفصل وتدريبات المفردات (غير محلول)

3

الختامي الاختبار ميكل G8 Advanced EOT Term1 Assessment Planner

4

اختبار تقييم الوحدة الثانية استكشاف الفضاء

5

تحميل تطبيق المناهج للهواتف الذكية

تطبيق المناهج على Play Google (أندرويد)

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Grade 8 Term 1 Unit 2- Space

Space & Scientific Wonders · Student Book pages 29–56



Student Name :

Section :

Vision: an innovative, sustainable education
for a globally leading nation.

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Grade 8 English · Unit 2 & Unit 3 · Lessons 2A–3A



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How to use this booklet

- Each lesson follows your Student Book. Look for the lesson code (2A, 2B ...) at the top of the page.
- Every lesson has three worksheet levels: **Level 1 Foundation** (●), **Level 2 Core** (●●) and **Level 3 Challenge** (●●●). Your teacher will tell you which level to do.
- Tick the self-check boxes at the bottom of each worksheet: **Got it** · **Nearly** · **Need help**.

Key Words

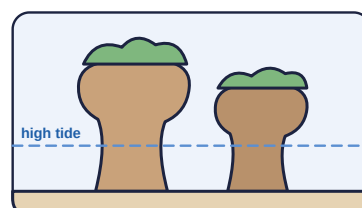
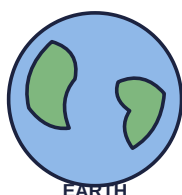
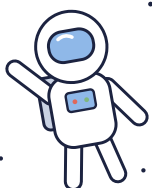
Grade 8 English · Unit 2 (Space) & Unit 3 (Scientific Wonders) · Lessons 2A–3A



Key Word Bank · Lessons 2A–3A

Word	Meaning
Lesson 2A · How did space exploration begin?	
space	Everything above and beyond the Earth.
launch (verb)	To send a rocket or satellite up into the air or space.
land (verb)	To come down to the ground.
lunar	About the Moon.
astronaut	A person who travels into space.
rocket	A long spacecraft that travels very fast.
satellite	An object sent into space to collect information.
capsule	A small container where astronauts live and travel.
exploration	Travelling to places that no one has visited before.
launch pad	A flat surface where rockets are launched.
Lesson 2B · What would you put in a time capsule?	
time capsule	A container of objects saved for people in the future.
research	Careful study to find new information.
scientist	A person who works in science.
disc	A round, flat object, like a CD or a record.
clip	A short audio or video file.
thunderstorm	Bad weather with rain, thunder and lightning.
inch	A measure of length: 2.54 centimetres.
golden	Made of gold, or gold-coloured.
Lesson 2C · What would you take on a space journey?	
imagine	To make a picture of something in your mind.
seeds	Small things that plants grow from.
science fiction	Stories or films about space, science or the future.
proud	Happy because you or someone you know did something good.

Word	Meaning
Lesson 2D · What does an astronaut do?	
space station	A place in space where astronauts live and work.
mission	A special journey with an important goal.
crew	The people who work together on a spaceship.
experiment	A test that scientists do to find out something new.
zero gravity	When nothing pulls you down, so you float.
outer space	The area far away, beyond the Earth's air.
artificial light	Light that does not come from the sun, e.g. from a lamp.
growing conditions	The water, light and air that plants need to grow.
Lesson 2E · What's life like on Mars?	
planet	A large, round object that moves around the sun.
temperature	How hot or cold something is.
weather	The rain, sun, wind or cloud on a particular day.
climate	The usual weather of a place over a long time.
gravity	The force that pulls things towards a planet.
extreme	Very great or very strong.
condition	The state that something or someone is in.
Lesson 3A · Why are some mountains and rocks interesting shapes?	
rock	A hard, solid part of the Earth.
erosion	The slow wearing away of rock by water, wind or gravity.
force	A push or pull that moves or changes something.
tide	The regular rise and fall of the sea.
shape	The form or outline of something.
rise (verb)	To go up.
millions	Very large numbers (1,000,000 and more).
amazing	Very surprising and wonderful.
interesting	Keeping your attention.



Lesson 2A

How did space exploration begin?

Student Book pages 29–32



Key words in this lesson

space

launch

land

lunar

astronaut

rocket

satellite

capsule

exploration

launch pad

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My notes

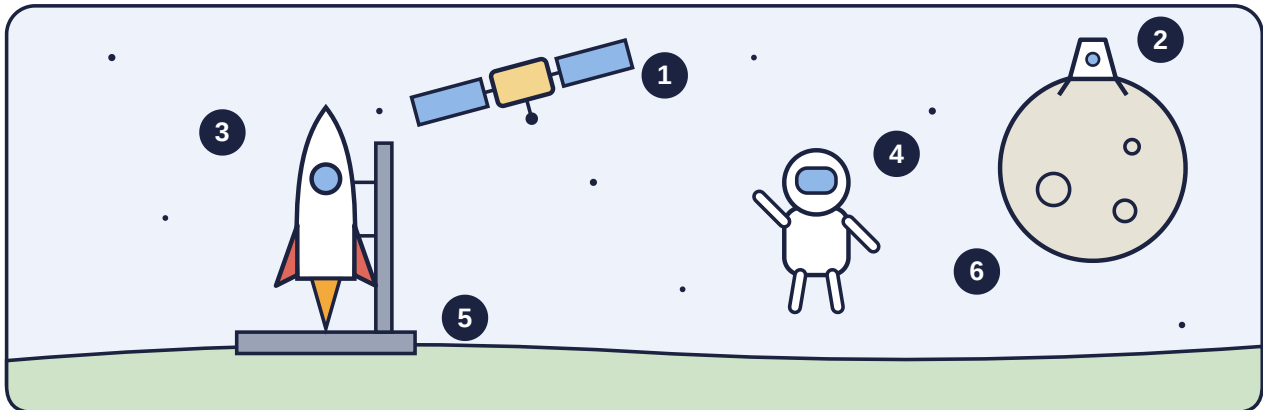
How did space exploration begin?

Focus: space words · compound nouns · the first space events

Name: _____ Class: _____ Date: _____

1 Look at the picture. Write the correct word for each number.

rocket launch pad satellite Moon astronaut capsule



1 _____ 2 _____ 3 _____
4 _____ 5 _____ 6 _____

2 Draw a line to join the two words. Then write the new compound noun.

space	●	● light	_____
launch	●	● supply	_____
lunar	●	● suit	_____
air	●	● ward	_____
sun	●	● landing	_____
up	●	● pad	_____

Two words make one new word!
launch + pad = launch pad



3 Writing: read the timeline. Complete the sentences.

4 Oct 1957

The first satellite goes into space.

3 Nov 1957

Laika the dog travels in a capsule.

12 Apr 1961

Yuri Gagarin is the first man in space.

20 Jul 1969

Neil Armstrong walks on the Moon.

- a) In 1957, the first _____ was launched into space.
- b) In November 1957, _____ was the first animal in a space capsule.
- c) In 1961, _____ became the first man in _____.
- d) In 1969, _____.
- e) Exploring space is difficult because there is no _____ to _____.

How did space exploration begin?

Focus: key events and dates • compound nouns • writing in time order

Name: _____ Class: _____ Date: _____

1 Timeline builder: write the letter of each event under the correct date.

4 Oct 1957	3 Nov 1957	12 Apr 1961	20 Jul 1969	2021

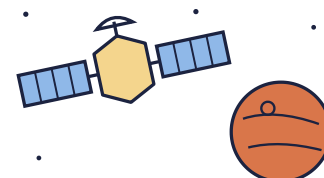
A Neil Armstrong is the first man on the Moon.

B The first satellite is launched into space.

C The UAE's Hope Probe reaches Mars.

D Yuri Gagarin is the first man in space.

E Laika the dog travels in a space capsule.



2 Use the meaning of each word to explain the compound noun.

spacesuit

Astronauts wear this suit to protect them in space.

space capsule

lunar landing

launch pad

lunar exploration

3 Think like a scientist.

Did you know? A space rocket needs a speed of at least **28,440 km/h** to reach space. The fastest car only goes **435 km/h**.

a) About how many times faster is the rocket?

b) Humans can't breathe in space. What did we invent to solve this?



4 Writing: a short history of space exploration (50–60 words).

Use the timeline in Activity 1. Put the events in order and use the time words below.

First, Then, After that, Next, Finally, In (year),

How did space exploration begin?

Challenge



Focus: reading for detail • inference • a spoken-style answer in writing

Name: _____ Class: _____ Date: _____

1 Read the fact file.

Fact file: The UAE in space

The UAE Space Agency was set up in 2014. In September 2019, Hazza Al Mansoori became the first Emirati astronaut. He travelled to the International Space Station (ISS) and stayed there for eight days. In February 2021, the Hope Probe reached Mars after a journey of about seven months. It was the first Arab mission to another planet. In 2023, Sultan Al Neyadi spent about six months on the ISS. During his mission, he became the first Arab astronaut to do a spacewalk.

2 Complete the table. Then answer the questions.

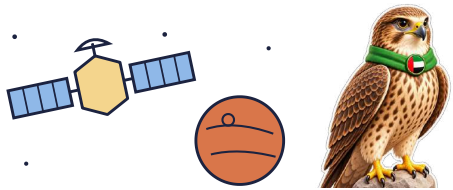
Year	Who or what?	What happened?
2019		
2021		
2023		

- a) How many years after the Moon landing (1969) did Hope reach Mars? _____
- b) Find a compound noun in the text that means "a walk outside a spacecraft". _____
- c) Why do you think scientists sent a probe to Mars before sending people? _____

3 Invent two new compound nouns with *space*, *lunar* or *rocket*. Define them.

_____ = _____

_____ = _____



4 Writing: you are the UAE Space Agency presenter at a press conference.

Tick ONE question. Answer it in 70–90 words: **point** → **reason** → **example** (a date or fact) → **closing**.

- ☐ Why did it take humans so long to explore space? ☐ Can humans live in space? ☐ What is the next step?



Lesson 2A · Grammar: Compound Nouns

The rule

A **compound noun** is two words put together to make one new noun. The **first word usually describes the second word**.

Some are one word: **space + suit = spacesuit**, **sun + light = sunlight**. Some stay as two words: **launch + pad = launch pad**, **space + station = space station**.

A launch pad is a flat surface (pad) where rockets are launched.

Exercise A · Draw a line to join the words. Then write the compound noun.

1 space	●	● a storm	
2 launch	●	● b space	
3 zero	●	● c gravity	
4 time	●	● d capsule	
5 thunder	●	● e station	
6 sun	●	● f light	
7 air	●	● g pad	
8 outer	●	● h supply	

Exercise B · Write the compound noun from the box next to its meaning.

spacesuit launch pad lunar landing space mission growing conditions
artificial light

- a) A flat place where rockets start their journey.
- b) Special clothes that protect astronauts.
- c) When a spaceship comes down on the Moon.
- d) A journey into space with an important goal.
- e) The water, light and air that plants need.
- f) Light from lamps, not from the sun.

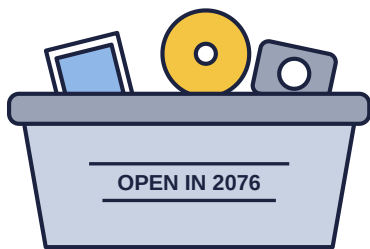
Exercise C · Underline the seven compound nouns in the text.

Today the space station is very busy. The crew put on their spacesuits and check the plant seeds. In zero gravity, even water floats! The astronauts use artificial light because there is no sunlight at night. Later, they talk about their next space mission.

Lesson 2B

What would you put in a time capsule?

Student Book pages 33–36



Key words in this lesson

time capsule

research

scientist

disc

clip

thunderstorm

inch

golden

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My notes

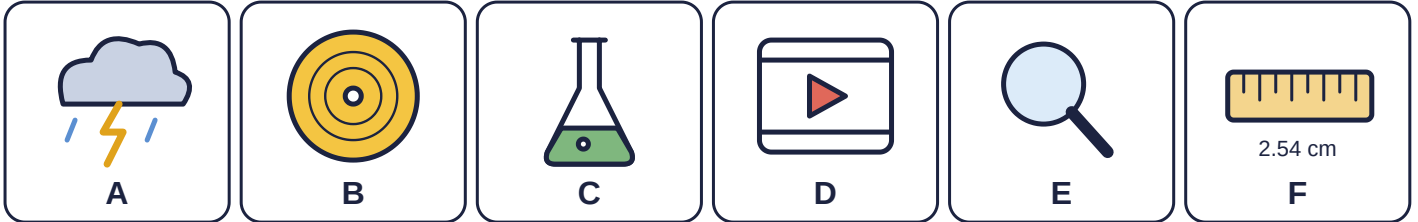
What would you put in a time capsule?

Focus: Golden Record words · agreeing and disagreeing · would / 'd

Name: _____ Class: _____ Date: _____

1 Match each picture to a word from the box. Write the word.

thunderstorm disc scientist clip research inch



A _____ B _____ C _____ D _____ E _____ F _____

2 Sort the phrases. Write them in the correct box.

You're right. I'm not so sure. Me too. I agree. I don't think so. That's a good idea.

Agreeing

.....

.....

.....

.....

Disagreeing

.....

.....

.....

.....



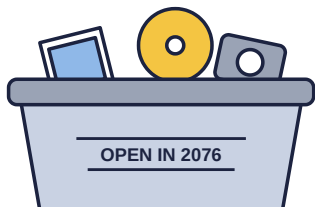
3 Make it short! Change *would* to '*d*.

I would take photos of the sea. →

She would include a video. →

We would choose the Burj Khalifa. →

4 Writing: my time capsule. Complete the sentences.



If I made a time capsule, I would include

because

I would also put in it because

I wouldn't include because

What would you put in a time capsule?

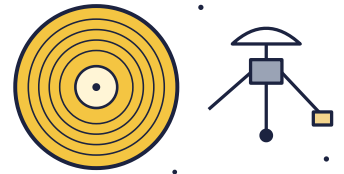
Focus: reading vocabulary in context • a group dialogue • the second conditional

Name: _____ Class: _____ Date: _____

1 Complete the article with words from the box. Use each word once.

research scientists Golden disc astronauts inch clips thunderstorms

In 1977, after years of (1) _____, (2) _____ from NASA sent the (3) _____ Record into space on Voyager 1. This twelve-(4) _____ is a kind of time capsule. It travelled with no (5) _____ on board. The (6) _____ has greetings in 55 languages and sound (7) _____ from Earth, like wind, rain and (8) _____.



2 Complete the dialogue. Use *would* or *'d* and a phrase for agreeing or disagreeing.

Jamila: What _____ you put in our time capsule?
Wadeema: _____ It's a difficult decision.
Noura: _____ There are so many things to choose from!
Wadeema: I _____ include the Emirates Palace, because it's an amazing building.
Noura: _____ And I _____ add photos of the desert.
Jamila: _____ We need more than buildings!



3 Writing: a letter to the future (50–60 words).

Imagine someone will open your time capsule in 50 years. Tell them what you would put inside and why.

Remember: ☐ If I made ..., I would ... ☐ 3 items + reasons ☐ because / so ☐ a friendly ending

Dear friend in the future,

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

What would you put in a time capsule?

Focus: evaluating choices • accuracy with the second conditional • persuasive writing

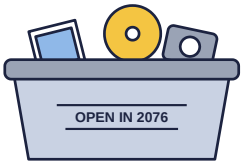
Challenge



Name: _____ Class: _____ Date: _____

1 Decision table: score each item from 1 (low) to 3 (high). Add the totals.

Item for a UAE space time capsule	Shows UAE life	Easy to understand without words	Total
a video going up Burj Khalifa			
a recording of Emirati folk music			
a recipe for luqaimat			
photos of Sheikh Zayed Grand Mosque			
a sound clip of the sea at Fujairah			
a map of the seven emirates			



My top choice is _____ because _____

2 Error hunt: each sentence has ONE mistake. Rewrite it correctly.

- If I make a time capsule, I would include photos. _____
- If NASA would send another Voyager, it would take years. _____
- What you would include in a time capsule? _____
- I'd included a video of the desert. _____
- If aliens found the disc, they will hear our music. _____

3 Writing: a proposal to the next Golden Record team (90–110 words).

Persuade the team to add **ONE** item that represents the UAE. Use **two** second conditional sentences. Include one opposite view and answer it: *Some people might say ... I'm not so sure, because ...*

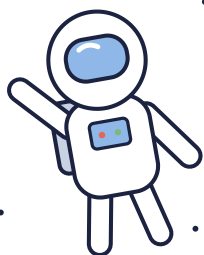




Lesson 2C

What would you take on a space journey?

Student Book pages 37–40



Key words in this lesson

imagine

seeds

science fiction

proud

In this section

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My notes

What would you take on a space journey?

Focus: the second conditional (If + past, would + verb) • imagining

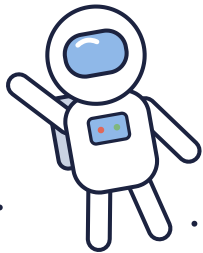
Name: _____ Class: _____ Date: _____



Remember the pattern. It is imaginary, not real.

If + past simple , **would + verb** → If I went to space, I would take a camera.

1 Read the speech bubbles. Circle the correct word.



If I **go** / **went** to space, I would take my camera.

The photos **will** / **would** be amazing!

Sports would be difficult, so I **would** / **wouldn't** take my tennis racket.

If I went to Mars, I **would** / **did** take food and seeds.

2 Draw lines to match the sentence halves.

- | | | |
|--------------------------------------|---|---------------------------------|
| 1 If I had a rocket, | ● | ● a I would grow vegetables. |
| 2 If I lived on Mars, | ● | ● b my family would be proud. |
| 3 If I met an astronaut, | ● | ● c I would fly to the Moon. |
| 4 If I wrote a science fiction book, | ● | ● d I would ask many questions. |

3 Put the words in order to make a sentence.

camera / take / would / I / my

.....

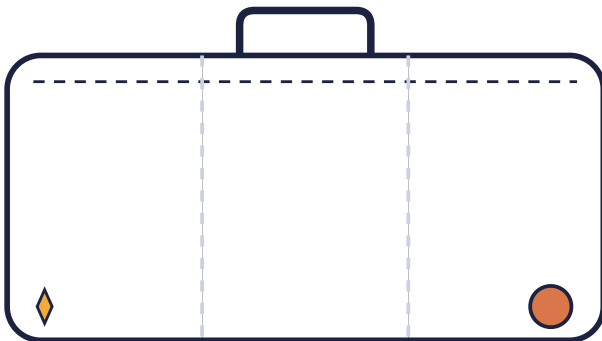
to Mars / you / go / would / ?

.....

happy / if / went / I / to space, / be / I / would

.....

4 Writing: pack your space bag! Draw 3 things. Then complete the sentences.



If I went to space, I would take

because

I would also take and

I wouldn't take because

What would you take on a space journey?

Focus: first vs second conditional • verb forms • asking imaginary questions

Name: _____ Class: _____ Date: _____

1 Real (possible) or imaginary? Tick one box for each sentence.

Sentence	Real	Imaginary
If it rains tomorrow, we will stay inside.		
If I lived on the Moon, I would jump very high.		
If you study hard, you will pass the test.		
If humans had wings, they would fly to school.		
If the bus is late, I will walk to school.		

2 Write the correct form of the verbs in brackets.

- a) If Omar _____ (have) a plane, he _____ (travel) to many countries.
- b) If we _____ (live) on Mars, we _____ (need) oxygen tanks.
- c) I _____ (not / eat) space food every day if I _____ (be) an astronaut.
- d) What _____ you _____ (do) if you _____ (meet) an alien?

3 What if ...? Make a chain. Each result starts the next idea.

If I won a trip to space,
I would

→

If I _____ ,
I would

→

If I _____ ,
I would

4 Writing: an interview script. Who would you interview?

I would interview _____

Write 3 questions with **What would you do if ...?** or **Would you ...?** Then write their answers.

Q1 _____

A _____

Q2 _____

A _____

Q3 _____

A _____



What would you take on a space journey?

Challenge



Focus: reading an interview • positive, negative and question forms • creative writing

Name: _____ Class: _____ Date: _____

1 Read the magazine interview. Answer the questions.

Young Inventor of the Month

Maryam, 14, your robot won the school Space Robot Challenge. What does it do? "It collects rock samples. If it went to Mars, it would look for water under the ground."

Would you like to travel to Mars one day? "Maybe! If I became an astronaut, I would visit Olympus Mons, the biggest volcano in the solar system. But I wouldn't stay for years. I would miss my family too much."

What would you take with you? "If I could take only one thing, I'd take a notebook. I'd write down everything I saw."



- a) What would the robot do on Mars?

- b) Why wouldn't Maryam stay for years?

- c) Find a sentence with 'd'. Write it in full.

2 Transform each sentence.

Positive	Negative	Question
If I went to space, I would take a camera.		
She would grow vegetables if she lived on Mars.		
If they had a rocket, they would fly to the Moon.		

3 Writing: "If I lived on Mars for a year ..." (100–120 words)

Success criteria:
 ☐ 4+ second conditional sentences
 ☐ 1 negative (wouldn't)
 ☐ 1 question to the reader
 ☐ use: imagine, seeds, proud, science fiction



Lesson 2C · Grammar: The Second Conditional

The rule

We use the **second conditional** to talk about **imaginary** situations in the present or future. They are not real.

Form	Example
Positive If + past simple, would + verb	If I <u>went</u> to space, I <u>would take</u> a camera.
Negative wouldn't + verb	If I went to space, I <u>wouldn't take</u> my tennis racket.
Question (Wh-) would + subject + verb	<u>What would</u> you take if you went to space? · <u>Would</u> you go to Mars?
Short forms	I would → I'd · she would → she'd · would not → wouldn't

* Use a **comma** when the *If* part comes first. * With *be* we often use **were**: *If I were an astronaut, I would ...*

* Compare the **first conditional** (real and possible): *If it rains tomorrow, I **will** stay home.*

Exercise A · Write the correct form of the verbs in brackets.

1. If I _____ (have) a rocket, I _____ (fly) to the Moon.
2. If we _____ (live) on Mars, we _____ (need) spacesuits.
3. She _____ (take) her camera if she _____ (go) to space.
4. If they _____ (find) water on Mars, people _____ (build) houses there.
5. If I _____ (be) an astronaut, I _____ (not / eat) space food every day.
6. What _____ you _____ (do) if you _____ (meet) an alien?
7. If Mona _____ (give) the corn more water, it _____ (grow) faster.
8. We _____ (not / feel) heavy if we _____ (be) on Mars.

Exercise B · Circle the correct word.

1. If I (**go / went**) to Mars, I would miss my family.
2. If NASA sent another Voyager, it (**will / would**) take many years to leave the solar system.
3. I (**wouldn't / won't**) take my tennis racket if I went to space.
4. If you (**could / can**) take only one thing, what would you take?
5. If she (**were / is**) rich, she would buy a big telescope.

Lesson 2C · The Second Conditional (continued)

Exercise C · Real or imaginary? Write 1st (first conditional, real) or 2nd (second conditional, imaginary).

1. If it rains tomorrow, we will stay inside. _____
2. If I lived on the Moon, I would jump very high. _____
3. If you study hard, you will pass the test. _____
4. If humans had wings, they would fly to school. _____
5. If I finish my homework, I will play football. _____

Exercise D · Rewrite each sentence as a negative and as a question.

Positive	Negative	Question
If we had more time, we would visit the space centre.		
He would write a book if he became an astronaut.		
If you won a trip to Mars, you would go.		

Exercise E · Error hunt: each sentence has ONE mistake. Write it correctly.

1. If I would have a rocket, I would fly to Mars. _____
2. If she lived on Mars, she will grow potatoes. _____
3. What you would take to space? _____
4. We would visited the Moon if we could. _____
5. If I was rich, I'd to buy a telescope. _____

Exercise F · Your turn! Finish the sentences about yourself.

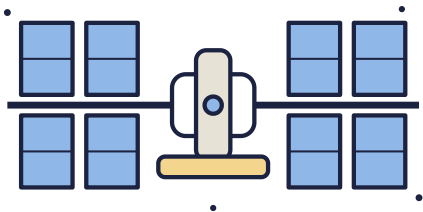
1. If I could go anywhere in space, _____
2. If I met an astronaut, _____
3. I wouldn't _____ if _____
4. What would you do if _____?



Lesson 2D

What does an astronaut do?

Student Book pages 41–44



Key words in this lesson

space station

mission

crew

experiment

zero gravity

outer space

artificial light

growing conditions

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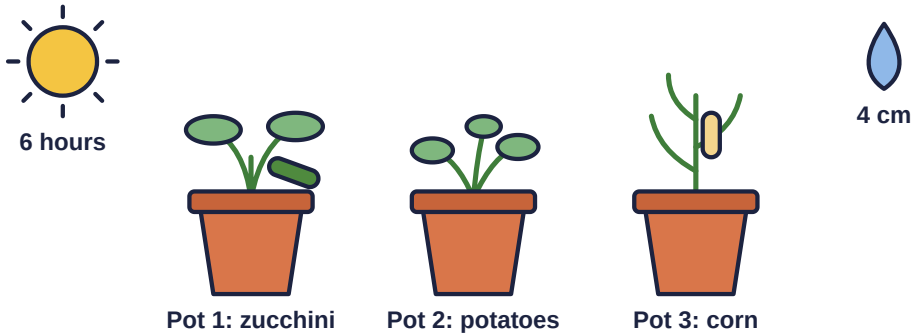
My notes

What does an astronaut do?

Focus: reading a table · compound nouns · writing a diary

Name: _____ Class: _____ Date: _____

1 Mona gives every plant 6 hours of sunlight and 4 cm of water. Is it enough? Circle Yes or No.



Plant	Needs water (weekly)	Enough water?	Needs sunlight (daily)	Enough sunlight?
Zucchini	3 cm	Yes / No	8–10 hours	Yes / No
Potatoes	2.5–5 cm	Yes / No	6 hours	Yes / No
Corn	5–6 cm	Yes / No	7.5 hours	Yes / No

So, the plant that will grow best is the _____.

2 Write the compound noun next to its meaning.

space station zero gravity plant seeds outer space science experiments

- a) A place where astronauts live and work in space. _____
- b) When nothing pulls you down, so you float. _____
- c) Small things that plants grow from. _____
- d) The area far away, beyond the Earth's air. _____
- e) Tests that scientists do to learn new things. _____

3 Writing: complete Mona's diary. Then add one sentence of your own.

station seeds experiments floating rocket

Day 8. We flew to the space _____ in a big _____. The crew were _____
 _____ in the air! I brought many plant _____ with me. Today I
 started my _____.



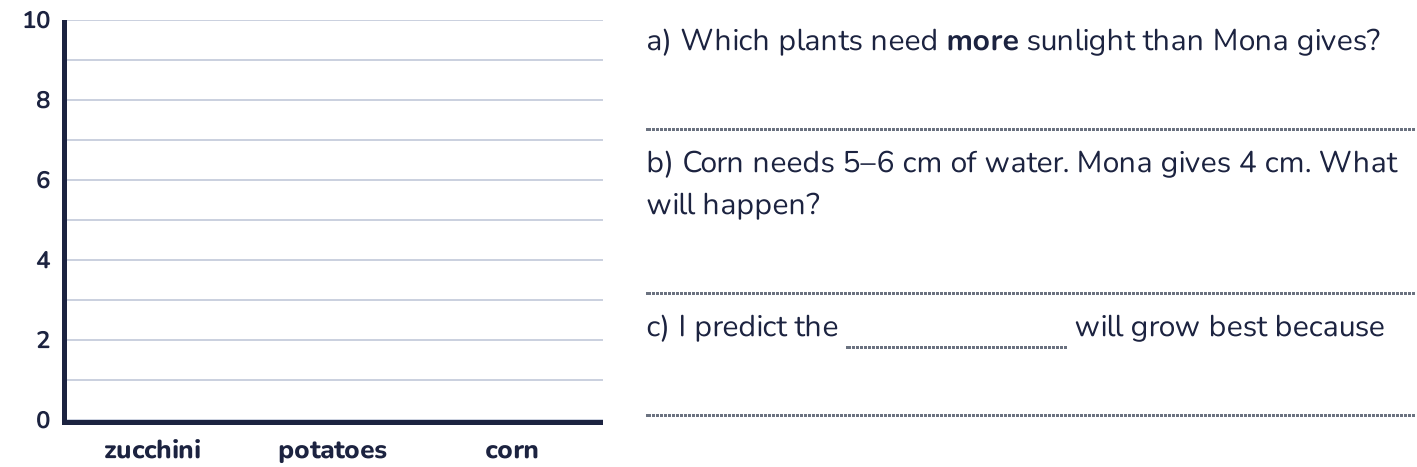
What does an astronaut do?

Focus: using data to predict · reading for detail · writing about a daily routine

Name: _____ Class: _____ Date: _____

1 Make a bar chart. Then use it to predict.

Sunlight each plant needs every day: **zucchini 8 hours** (at least) · **potatoes 6 hours** · **corn 7.5 hours**. Colour one bar for each plant. Then draw a line across the chart at **6 hours**: this is what Mona gives them.



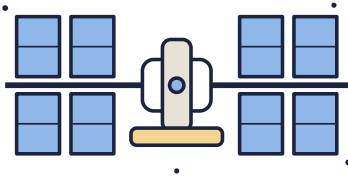
2 Read Mona's update. Write T (true) or F (false).

"The corn is growing slowly. It is not getting enough water. The zucchini plants are very small because they don't get enough sunlight. I'm happy to see the potatoes are growing the best. They grow at the same speed as they would on Earth!"

- 1 All plants grow at the same speed. _____
- 2 The corn needs more water. _____
- 3 The zucchini gets enough sunlight. _____
- 4 Potatoes grow as fast as on Earth. _____

3 Writing: a day on the space station (60–70 words).

06:00	wake up, exercise for two hours
08:00	science experiments
13:00	lunch in zero gravity
16:00	check the plants and give them water
19:00	video call with family
21:30	sleep in a sleeping bag on the wall



Use the schedule. Write as Mona: **First, ... Then, ... After that, ... In the evening, ...** Use 3 compound nouns.



What does an astronaut do?

Focus: explaining results with evidence · planning an experiment · a newsletter article

Name: _____ Class: _____ Date: _____

1 Explain Mona's results. Use numbers from the table on page 41 as evidence.

Every plant got 6 hours of sunlight and 4 cm of water.

Plant	Result	Why? (evidence from the data)
Potatoes	grew the best	
Zucchini	very small plants	
Corn	grew slowly	

2 Plan the next experiment on the space station.

Question
What do I want to find out?

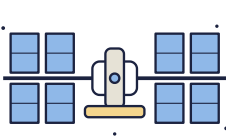
Hypothesis
If we gave the corn ..., it would ...

Variables
I will change: _____
I will keep the same: _____
I will measure: _____

Method
1 _____
2 _____
3 _____

3 Writing: a UAE Space Newsletter article, "Three weeks on the ISS" (90–110 words).

Include: ☐ a headline ☐ the results and reasons
☐ a quote from Mona ☐ 4 compound nouns ☐ 1 second conditional

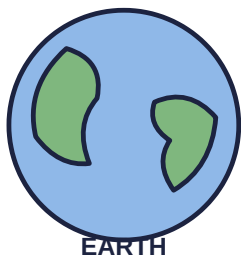


Headline: _____

Lesson 2E

What's life like on Mars?

Student Book pages 45–48



Key words in this lesson

planet

temperature

weather

climate

gravity

extreme

condition

In this section

Page	No.
Worksheet · Level 1 Foundation	25
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Worksheet · Level 3 Challenge	27
Grammar: Expanded Noun Phrases & Agreeing / Disagreeing	28

My notes

What's life like on Mars?

Focus: Mars words · weather and planet vocabulary · expanded noun phrases

Name: _____ Class: _____ Date: _____

1 Label the picture of Mars.

dust storm mountain crater moon rover rocks

1 2 3 4 5 6

2 Complete the sentences with words from the box.

planets temperature gravity weather extreme condition

a) Mars and Earth are both _____.
 b) The _____ on Mars is very cold.
 c) Mars has _____ dust storms.
 d) There is less _____ on Mars.
 e) Check the _____ before you go out.
 f) The doctor checked the _____ of the crew.

3 Noun phrase builder: choose one from each column. Build 2 phrases.

A / THE	ADJECTIVE	NOUN	EXTRA DETAIL
a	tiny, rocky	planet	with red dust
the	huge, strange	dust storm	in the distance
	cold, red	mountain	covered in rocks

Example: the tiny, rocky planet with red dust

1 _____ 2 _____

4 Writing: look at the picture in Activity 1. Describe what you can see.

On Mars, I can see _____.

There is _____.

In the sky, there is _____.

Life on Mars would be hard because _____.



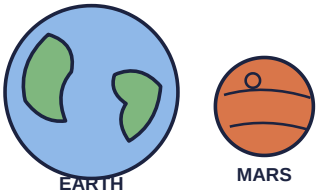
What's life like on Mars?

Focus: reading for facts · comparing two planets · expanded noun phrases in writing

Name: _____ Class: _____ Date: _____

1 Read the fact file. Complete the Mars column of the table.

Mars is about **half the size** of Earth. It looks red because its ground is covered with rusty dust. The air is very thin, so we couldn't breathe it. The average temperature is about **−60 °C**. Gravity is weaker: if you weighed 100 kg on Earth, you would weigh about **38 kg** on Mars. There are no oceans, but there is ice at the poles. Huge dust storms can cover the whole planet for months.



Feature	Earth	Mars
Size	about twice as big as Mars	
Colour	blue and green	
Air	we can breathe it	
Temperature	average about 15 °C	
Gravity	a person weighs 100 kg	
Water	oceans, rivers and lakes	

2 Expand each noun phrase. Add adjectives and extra detail.

the spaceship the damaged silver spaceship from Dubai

a lake _____

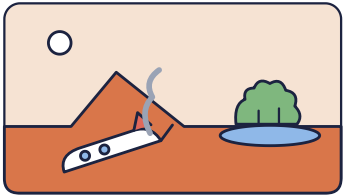
the crew _____

a storm _____

the mountains _____

3 Writing: survivor's log, Day 1 (60–70 words).

It is 2055. The spaceship **Explorer One Dubai** had an engine failure and landed on Mars. You are in the crew. Write what you saw and did today. Use at least **4 expanded noun phrases** and underline them.



Day 1. Our spaceship landed on _____

What's life like on Mars?

Challenge



Focus: upgrading sentences · planning a story · narrative writing with rich noun phrases

Name: _____ Class: _____ Date: _____

1 Upgrade each sentence. Expand the noun phrase in bold.

Dull: We saw a **lake**. Better: We saw a small, sparkling lake next to a green jungle.
 The **ship** stopped. _____
 A **storm** came. _____
 We found **some plants**. _____
 The **planet** was cold. _____

2 Plan your story on the story mountain.

The story so far: "Today, we have decided to do all we can to survive on this strange red planet. We will build a community while we wait for Mission Control to send help. We were exploring when suddenly we saw, in the distance, a small jungle and a lake ..."

1 Opening
Who? Where?

2 Build-up
What happens next?

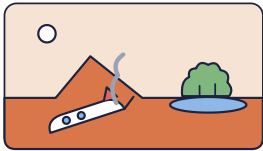
3 Problem
What goes wrong?

4 Solution
How do they fix it?

5 Ending
Is help coming?

3 Writing: continue the story (110–130 words).

☐ follow your story mountain ☐ 5+ expanded noun phrases
☐ 2 words: extreme, temperature, gravity, climate
☐ a strong final sentence





Lesson 2E · Grammar: Expanded Noun Phrases

The rule

A **noun phrase** is a noun plus words that give more information. We can add a **determiner** (a, the, our), **adjectives** before the noun, and **extra detail** after the noun (with ..., in ..., on ..., next to ...).

planet → a planet → a **tiny, rocky** planet → a tiny, rocky planet **with red dust**

Exercise A · Underline the main noun. Circle the extra details.

1. the strange red planet
2. a huge dust storm over the mountains
3. our damaged silver spaceship
4. a small lake next to the jungle
5. the tall, grey rock in the desert
6. the brave crew of Explorer One

Exercise B · Expand each noun phrase. Add adjectives and extra detail.

the rocket

the huge white rocket on the launch pad

a crater

the astronauts

a storm

the rocks

Exercise C · Put the words in the correct order to make a noun phrase.

1. red / the / dusty / planet
2. sand / a / with / desert / hot / golden
3. cold / Mars / the / wind / on
4. small / capsule / the / white

Lesson 2B · Useful Language: Agreeing and Disagreeing

Exercise · Write A (agreeing) or D (disagreeing) next to each phrase.

You're right. _____ I'm not so sure. _____ Me too. _____
I don't think so. _____ I agree. _____ That's a good idea. _____

Friend: "I think we should put a video of Burj Khalifa in the time capsule."

You (agree): _____

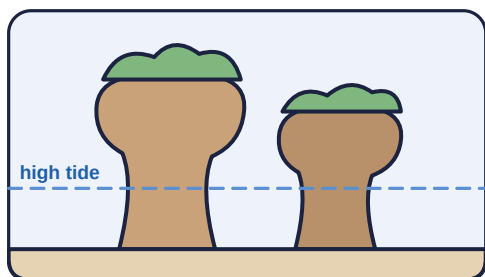
You (disagree): _____



Lesson 3A

Why are some mountains and rocks interesting shapes?

Student Book pages 53–56



Key words in this lesson

rock

erosion

force

tide

shape

rise

millions

amazing

interesting

In this section

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Worksheet · Level 1 Foundation	30
Worksheet · Level 2 Core	31
Worksheet · Level 3 Challenge	32

My notes

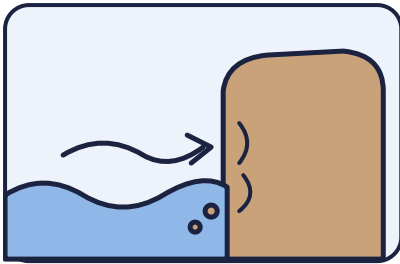
Why are some mountains and rocks interesting shapes?

Focus: erosion words • the three forces • describing a place

Name: _____ Class: _____ Date: _____

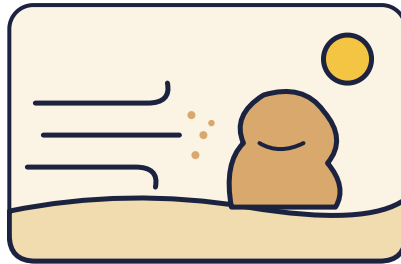
1 Cause and effect. Name the force in each picture. Then write the letter of the matching sentence.

water force wind force gravity force



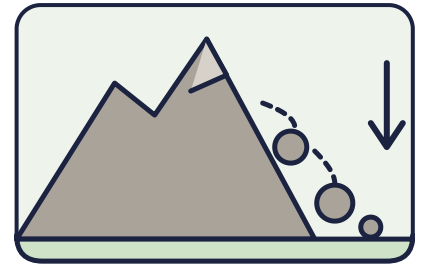
Force: _____

Sentence: _____



Force: _____

Sentence: _____



Force: _____

Sentence: _____

- a Loose rocks fall down from the top of the mountain.
- b Waves and tides slowly rub away the rock.
- c Sand hits the rock and slowly changes its shape.

2 Word jumble! Put the letters in order.

k c o r d e s t i p a h e s
 r o s e n o i z a m i g a n l i m o l n i

3 Writing: send a postcard from an amazing place in the UAE.

Dear _____,

I am visiting _____.

It is amazing because _____

I can see _____.

The rocks were shaped by _____.

From, _____

stamp



Why are some mountains and rocks interesting shapes?

Focus: reading for gist • explaining a process • planning a short presentation

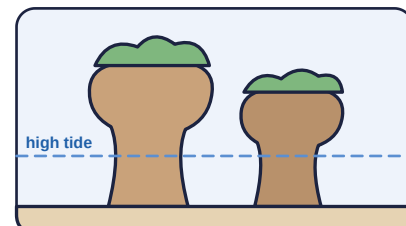
Core



Name: _____ Class: _____ Date: _____

1 Read quickly for the gist. Tick the best title.

The Bay of Fundy in Canada has some of the highest tides in the world. Twice a day, the ocean water rises and falls by up to 16 metres. At high tide, strong waves hit the bottom of the cliffs. Over millions of years, the water has worn away the rock at the bottom, but the top has stayed wide. Today, visitors walk around the famous "flowerpot rocks" at low tide.



- ☐ a) Canada's Best Beaches
- ☐ b) How the Tides Shaped the Flowerpot Rocks
- ☐ c) Walking in Canada

2 Process flowchart: the boxes are mixed up. Number them 1–5 in the correct order.



In one sentence, what is erosion? _____

3 Writing: prepare a presentation about an amazing place in the UAE.

Where is it?

What can people see there?

What can people do there?

Why is it amazing?

Now write your presentation (60–70 words). Start with one sentence that gives the gist.

Listeners say:
Yeah! • Oh really? •
Interesting.



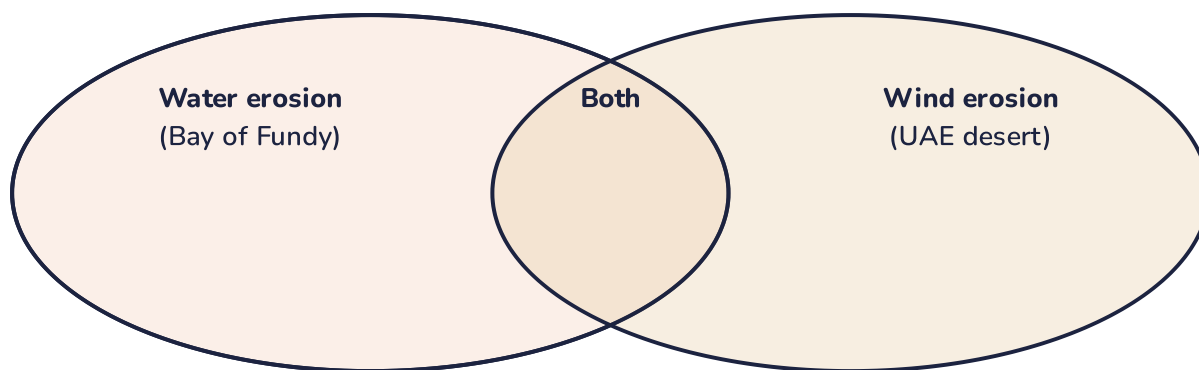
Why are some mountains and rocks interesting shapes?

Focus: comparing processes • word families • writing an explanatory blog post

Name: _____ Class: _____ Date: _____

1 Venn diagram: write the numbers of the statements in the correct place.

- 1 happens very slowly 2 needs tides or rivers 3 happens in dry places 4 changes rock shapes
5 sand hits the rock 6 takes millions of years 7 happens at high tide 8 makes interesting shapes

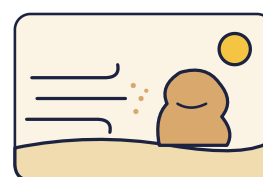


2 Word families: write the correct form of the word in brackets.

- a) The wind slowly _____ (erode) the rocks.
b) _____ (erode) can take millions of years.
c) The flowerpot rocks are an _____ (amaze) sight.
d) I am very _____ (interest) in rocks.
e) Gravity pulls _____ (loosen / loose) rocks down.
f) The tides _____ (rise) twice a day.

3 Writing: a travel blog post (110–130 words).

Write about an amazing natural place in the UAE or the GCC (for example Fossil Rock in Sharjah, Jebel Jais or the Hatta mountains). Explain which force shaped it and how.



- ☐ a catchy title ☐ a first sentence that gives the gist ☐ explain the force step by step
☐ 3 words from this lesson ☐ advice for visitors

Title: _____

Vocabulary Review: Fill in the Blanks

Part A · Space words

Complete each sentence with a word from the box. Use each word once.

astronaut launched satellite lunar capsule research disc imagine seeds
proud

1. The first _____ was sent into space in 1957 to collect information.
2. Yuri Gagarin was the first _____ to travel into space.
3. The rocket was _____ from the launch pad at six o'clock.
4. The first _____ landing happened in 1969.
5. The astronauts lived in a small _____ during the journey.
6. The Golden Record is a twelve-inch _____ with sounds and pictures.
7. Scientists did years of _____ before they sent Voyager 1 into space.
8. Can you _____ living on Mars for a whole year?
9. Mona planted _____ to grow vegetables on the space station.
10. His family was very _____ when he became an astronaut.

Part B · Mars and rock words

Complete each sentence with a word from the box. Use each word once.

planet gravity temperature extreme crew mission climate Erosion tides
shape

1. Mars is often called the Red _____.
2. Because of weak _____, you would weigh less on Mars.
3. The _____ on Mars is often below -60°C .
4. Huge dust storms are an example of _____ weather.
5. The whole _____ worked together to fix the spaceship.
6. The UAE's _____ to Mars was a great success.
7. The UAE has a hot, dry _____.
8. _____ slowly wears away rocks and mountains.
9. The _____ in the Bay of Fundy rise and fall twice a day.
10. The desert wind gave the rock an interesting _____.

Vocabulary Review: Multiple Choice



Read each sentence. Circle the correct answer: **a, b, c** or **d**.

1. A person who travels into space is an _____.

- a) scientist b) astronaut
- c) engineer d) athlete

3. To send a rocket into the air is to _____ it.

- a) land b) launch
- c) explore d) collect

5. A short video file is a _____.

- a) clip b) disc
- c) record d) inch

7. Stories about space and the future are called _____.

- a) history b) poetry
- c) science fiction d) news

9. Light from a lamp, not the sun, is _____ light.

- a) natural b) artificial
- c) golden d) extreme

11. "Mars has extreme weather." *Extreme* means _____.

- a) very small b) very normal
- c) very great or strong d) very slow

13. The regular rise and fall of the sea is the _____.

- a) wave b) tide
- c) river d) shape

15. "The trip was amazing!" *Amazing* means _____.

- a) boring b) very wonderful
- c) dangerous d) short

17. Plants need water, light and air. These are their _____.

- a) growing conditions b) seeds
- c) experiments d) missions

2. "Lunar" describes something about the _____.

- a) Sun b) Mars
- c) Moon d) stars

4. An object sent into space to collect information is a _____.

- a) satellite b) capsule
- c) rocket d) disc

6. Rain, thunder and lightning together make a _____.

- a) sandstorm b) thunderstorm
- c) snowstorm d) tide

8. When astronauts float, they are in _____.

- a) zero gravity b) a capsule
- c) artificial light d) a launch pad

10. The usual weather of a place over many years is its _____.

- a) temperature b) condition
- c) climate d) planet

12. The slow wearing away of rock is called _____.

- a) erosion b) exploration
- c) research d) gravity

14. The force that pulls loose rocks down a mountain is _____.

- a) wind b) water
- c) gravity d) sunlight

16. The people who work together on a spaceship are the _____.

- a) crew b) team sport
- c) family d) guests

18. A place in space where astronauts live and work is a _____.

- a) space station b) launch pad
- c) time capsule d) satellite

Writing Lessons

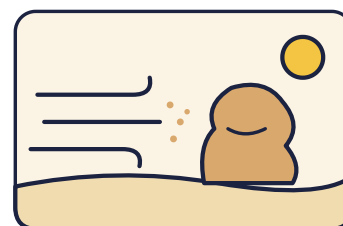
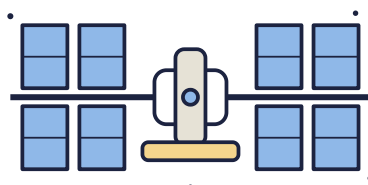
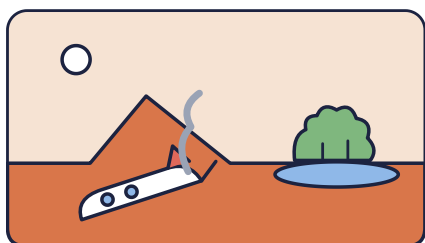
Plan it. Read the model. Write your own.

- 1 Key Word Bank
- 2 Guided Questions
- 3 Build Your Paragraph
- 4 Model Text
- 5 Your Turn to Write + Checklist



In this section

Lesson	Page
Writing Lesson 1 · Stranded on the Red Planet (story)	36
Writing Lesson 2 · What Should the UAE Send into Space Next? (persuasive speech)	39
Writing Lesson 3 · A Visitor's Guide to an Amazing Place in the UAE	42

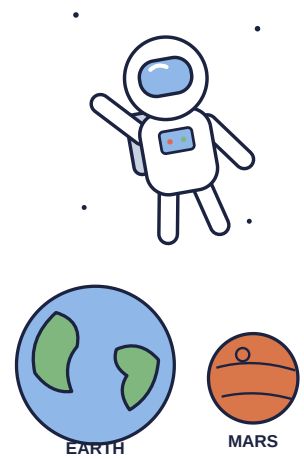


Writing Lesson 1: Stranded on the Red Planet

Writing task: Write a short story of 80–100 words. Your spaceship has crash-landed on Mars in the year 2055. Tell what happens and how your crew survives. Use **expanded noun phrases** and **time words**.

1. Key Word Bank

Word	Meaning
Stranded	Stuck in a place with no way to leave.
Crew	The group of people who work on a spaceship.
Engine failure	When an engine suddenly stops working.
Extreme	Very strong or very great, like extreme cold.
Gravity	The force that pulls things down to the ground.
Expanded noun phrase	A noun with extra words that describe it, e.g. <i>a tiny, rocky planet with red dust</i> .



2. Guided Questions

Think about these questions and write short notes before you plan.

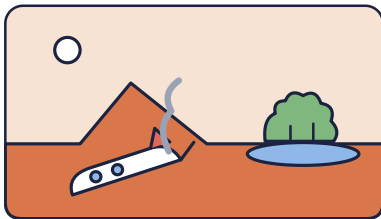
- 1 Who is in your crew, and why were you flying to Mars?
.....
- 2 What went wrong? Where did your spaceship land?
.....
- 3 What does Mars look like around you? (colour, ground, sky, weather)
.....
- 4 What problem do you have: air, food, water, a dust storm or the cold?
.....
- 5 What do you find or do to survive?
.....
- 6 How does your story end? Does help come?
.....

3. Build Your Story

Give your story a **title**. Use three parts: **Introduction**: say who, where and what went wrong. **Body**: tell the events in order and describe what you see. **Conclusion**: say how the story ends.

Starter sentences	Connection words	Conclusion sentences
It was the year 2055 when our engines failed.	First, ...	At last, help was on the way.
Suddenly, our spaceship crashed on Mars.	Then, ...	Finally, we heard Mission Control's voice.
The red planet was silent and strange.	After that, ...	In the end, we were safe.
Our crew looked out at the dusty, rocky land.	Suddenly, ...	That was the day we learned to survive.
Nobody on Earth knew where we were.	Later that night, ...	We will never forget the red planet.

4. Model Story



Stranded on the Red Planet

It was the year 2055 when our spaceship, Explorer One Dubai, had an engine failure. Suddenly, we crashed onto a tiny, rocky planet with red dust everywhere. First, our crew checked the damaged silver spaceship. Luckily, everyone was safe. Then, we put on our heavy white spacesuits and walked outside. The gravity was weak, so we jumped like kangaroos! After that, we saw a small, sparkling lake next to a strange green jungle. We collected water and planted the seeds we had brought from Earth. Later that night, a huge dust storm covered the sky and the temperature became extreme. We waited inside, cold and hungry. Finally, after three long days, we heard Mission Control's voice on the radio. **At last, help was on the way.**

Bold = starter and conclusion sentences Highlighted = time words and expanded noun phrases

5. Your Turn to Write

Write your own story (80–100 words) about being stranded on Mars.

Plan: Crew: _____ Problem: _____

What we saw: _____ Ending: _____

Checklist:

- ☐ I gave my story a clear **title**.
- ☐ My **introduction** says who, where and what went wrong.
- ☐ I told the events **in order** using time words (first, then, after that, finally).
- ☐ I used at least **three expanded noun phrases**.
- ☐ I used two Mars words: **gravity, extreme, temperature, climate**.
- ☐ I wrote a **conclusion** sentence that ends the story.
- ☐ I checked my **past tense** verbs, capital letters and full stops.

Title:

--

Your Story:

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

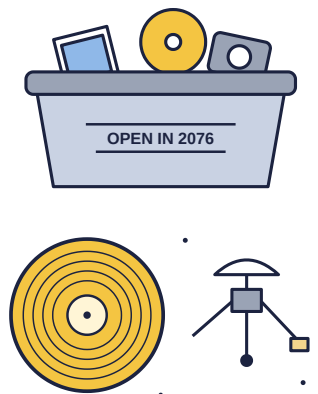
Word count: _____

Writing Lesson 2: What Should the UAE Send into Space Next?

Writing task: Write a persuasive speech of 80–100 words. Choose ONE mission: **a new space time capsule**, **a plant-growing experiment** or **an Emirati astronaut on the Moon**. Use at least two **second conditional** sentences (If + past simple, would + verb).

1. Key Word Bank

Word	Meaning
Mission	A special journey with an important goal.
Space station	A place in space where astronauts live and work.
Time capsule	A box of objects saved for people in the future.
Experiment	A test that scientists do to learn something new.
Persuade	To make someone agree with your idea.
If ... would ...	Second conditional for imaginary results, e.g. <i>If we went, we would ...</i>



2. Guided Questions

Think about these questions and write short notes before you plan.

- Which mission do you choose?

- Why is it the best choice for the UAE? Give two reasons.

- What would happen if the UAE did this mission? (If we ..., we would ...)

- Who would it help: scientists, farmers, students or the whole world?

- What might someone who disagrees say? How would you answer them?

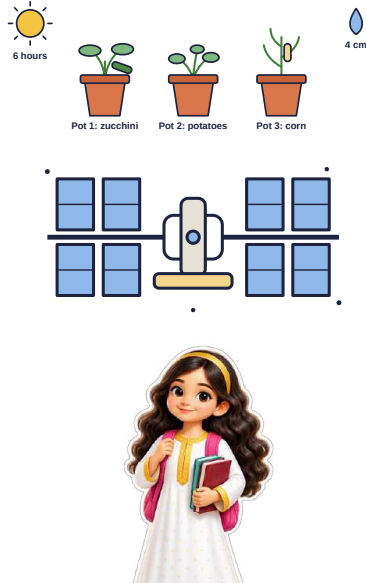
- How will you end your speech in a strong way?

3. Build Your Persuasive Speech

Give your speech a **title**. Use three parts: **Introduction**: give your opinion. **Body**: give reasons, an example and answer the other side. **Conclusion**: repeat your view in a strong way.

Starter sentences	Connection words	Conclusion sentences
In my opinion, the UAE should ...	Firstly, ...	For these reasons, we should choose ...
I strongly believe that ...	Moreover, ...	If we did this, the whole world would ...
Dear audience, today I want to talk about ...	For example, ...	To conclude, this mission would make us proud.
Imagine what would happen if ...	On the other hand, ...	Overall, I am sure this is the right choice.
The best mission for our country is ...	Because of this, ...	Let's reach for the stars together!

4. Model Speech



Grow Food in Space!

Dear audience, in my opinion, the UAE should send a plant-growing experiment to the International Space Station.

Firstly, astronauts on long missions need fresh food. If we grew vegetables in space, astronauts would stay healthy for many months. Moreover, our scientists would learn which plants need the least water and light. For example, Mona's experiment showed that potatoes can grow well with only six hours of light. On the other hand, some people say this mission is too expensive. I'm not so sure, because this research would also help farmers in our hot, dry country. If we did this, the whole world would learn from the UAE. **For these reasons, let's grow the future in space!**

Bold = starter and conclusion sentences Highlighted = connection words and second conditional sentences

5. Your Turn to Write

Write your own persuasive speech (80–100 words) about the UAE's next space mission.

Plan: My choice: _____

Reason 1: _____

Reason 2: _____

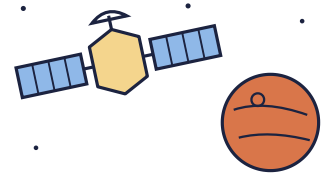
Other side says: _____

Checklist:

- ☐ I gave my speech a clear **title**.
- ☐ My **introduction** gives my opinion.
- ☐ I gave **two reasons** and **one example**.
- ☐ I used **two second conditional** sentences (If + past simple, would + verb).
- ☐ I answered the **other side** (I'm not so sure, because ...).
- ☐ I used **connection words** (firstly, moreover, for example).
- ☐ I wrote a strong **conclusion** sentence.

Title:

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Your Speech:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

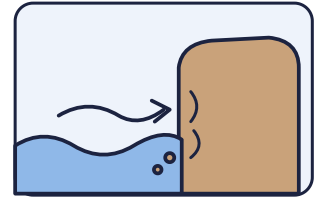
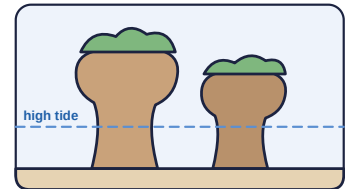
Word count: _____

Writing Lesson 3: A Visitor's Guide to an Amazing Place in the UAE

Writing task: Write a visitor's guide of 80–100 words about an amazing natural place in the UAE. Explain how **erosion** shaped it and what visitors can do. Use **sequence words**.

1. Key Word Bank

Word	Meaning
Erosion	The slow wearing away of rock by water, wind or gravity.
Force	A push or pull that moves or changes something.
Tide	The rise and fall of sea water every day.
Shape	The form or outline of something.
Fossil	The shape of a very old animal or plant kept in rock.
Millions of years	A very, very long time.



2. Guided Questions

Think about these questions and write short notes before you plan.

- 1 Which place will you write about? Where is it? (Fossil Rock, Jebel Jais, Hatta, a wadi ...)

.....

- 2 What does it look like? (shape, colour, size)

.....

- 3 Which force shaped it: water, wind or gravity?

.....

- 4 How did the force change it, step by step?

.....

- 5 What can visitors see and do there?

.....

- 6 What advice would you give visitors?

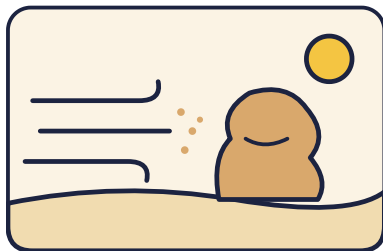
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3. Build Your Visitor's Guide

Give your guide a **title**. Use three parts: **Introduction**: name the place and say where it is. **Body**: describe it, explain how erosion shaped it and what visitors can do. **Conclusion**: say why people should visit.

Starter sentences	Connection words	Conclusion sentences
___ is one of the most amazing places in the UAE.	First, ...	In conclusion, ___ is a place everyone should visit.
Have you ever seen a rock with a strange shape?	Over time, ...	Overall, this place shows the power of erosion.
In the desert of Sharjah, there is a special rock.	As a result, ...	Nature is the best artist of all.
Every year, many visitors come to ____.	Because of this, ...	Visit it once and you will never forget it.
This place was shaped by nature over millions of years.	Today, ...	Don't forget your camera!

4. Model Guide



Fossil Rock: A Wonder in the Desert

Fossil Rock is one of the most amazing places in the UAE. It is a large, grey-brown rock that stands above the red sand dunes of Mleiha in Sharjah. Millions of years ago, this area was under the sea, so today visitors can find fossils of tiny sea creatures in the rock. First, the sea water slowly went away. Over time, strong desert winds blew sand against the rock. As a result, the wind wore away the softer parts and gave the rock its interesting shape. This is called wind erosion. Today, visitors can hike, look for fossils and watch the sunset. Remember to bring water and a hat! **In conclusion, Fossil Rock shows the power of erosion.**

Bold = starter and conclusion sentences Highlighted = sequence words and key vocabulary

5. Your Turn to Write

Write your own visitor's guide (80–100 words) about an amazing natural place in the UAE.

Plan: Place: _____ **Where:** _____

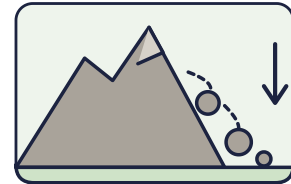
Force (water / wind / gravity): _____ Visitors can: _____

Checklist:

- ☐ I gave my guide a clear **title**.
- ☐ My **introduction** names the place and says where it is.
- ☐ I **described** what the place looks like.
- ☐ I explained the **erosion** step by step with sequence words (first, over time, as a result).
- ☐ I used three lesson words: **erosion, force, shape, tide, millions of years**.
- ☐ I gave **advice** for visitors.
- ☐ I wrote a **conclusion** sentence.

Title:

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Your Guide:

[illegible]

Word count: _____