

Get Close

ENGLISH FOR BACHILLERATO DE LA UAS

ROBIN LONGSHAW • SARAH BROWN • BECKY TARVER CHASE

Get Close, Student Book 4
Becky Tarver Chase

Publisher: Sherrise Roehr

Executive Editor: Sarah Kenney

Senior Development Editor: Margarita Matte

Assitant Editor: Becky Long

Director of Global Field Marketing: Ian Martin

Interior Design and Composition: Miriam Gómez Alvarado
Israel Muñoz Olmos

Illustration: Oscar Hernández

Cover Design: Israel Muñoz Olmos

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Student Edition ISBN: 978-0-3571-1479-7

National Geographic Learning

20 Channel Center Street
Boston, MA 02210
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Acknowledgements 2019

The authors and editors would like to thank the following educators for their invaluable work in reviewing this series:

Martín Benedicto Lizárraga García
Mariela Guerrero Amarillas
Simón Martín Díaz Quiñonez

CORRELACIÓN CON COMPETENCIAS

Unidad 1 Energy and Education	Competencias Genéricas	Competencias Disciplinarias
Tema 1 Energy	Se expresa y se comunica	Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral. Comprende la noción de las propiedades del texto.
	Trabaja en forma colaborativa	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
	Piensa crítica y reflexivamente	Utiliza procedimientos y estrategias de la comunicación escrita y reconoce la importancia de evaluar las producciones, tanto propias como ajenas, con criterios objetivos de corrección, coherencia, propiedad y creatividad.
	Aprende de forma autónoma	Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública. Desarrolla estrategias para hacerse comprender en lengua extranjera, en situaciones comunicativas cotidianas, mediante convenciones lingüísticas y recursos no lingüísticos. Conoce aspectos elementales sobre el origen, desarrollo y riqueza de una lengua extranjera.
Tema 2 Education and Learning	Se expresa y se comunica	Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral. Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública.
	Trabaja en forma colaborativa	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
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Unidad 2 Natural Resources and Explorations	Competencias Genéricas	Competencias Disciplinarias
Tema 3 Natural Resources	Se expresa y se comunica	Conoce aspectos elementales sobre el origen, desarrollo y riqueza de una lengua extranjera. Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral.
	Trabaja en forma colaborativa	Comprende la noción de las propiedades del texto.
	Piensa crítica y reflexivamente	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
	Aprende de forma autónoma	Utiliza procedimientos y estrategias de la comunicación escrita y reconoce la importancia de evaluar las producciones, tanto propias como ajenas, con criterios objetivos de corrección, coherencia, propiedad y creatividad. Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública. Desarrolla estrategias para hacerse comprender en lengua extranjera, en situaciones comunicativas cotidianas, mediante convenciones lingüísticas y recursos no lingüísticos.

	Competencias Genéricas	Competencias Disciplinarias
Tema 4 Exploration	Se expresa y se comunica	Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública. Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral.
	Trabaja en forma colaborativa	Comprende la noción de las propiedades del texto.
	Piensa crítica y reflexivamente	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
	Aprende de forma autónoma	Utiliza procedimientos y estrategias de la comunicación escrita y reconoce la importancia de evaluar las producciones, tanto propias como ajenas, con criterios objetivos de corrección, coherencia, propiedad y creatividad. Desarrolla estrategias para hacerse comprender en lengua extranjera, en situaciones comunicativas cotidianas, mediante convenciones lingüísticas y recursos no lingüísticos. Conoce aspectos elementales sobre el origen, desarrollo y riqueza de una lengua extranjera.

Unidad 3 The Past and Science	Competencias Genéricas	Competencias Disciplinarias
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Tema 5 The Past	Se expresa y se comunica	Desarrolla estrategias para hacerse comprender en lengua extranjera, en situaciones comunicativas cotidianas, mediante convenciones lingüísticas y recursos no lingüísticos. Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral. Comprende la noción de las propiedades del texto.
	Trabaja en forma colaborativa	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
	Piensa crítica y reflexivamente	Utiliza procedimientos y estrategias de la comunicación escrita y reconoce la importancia de evaluar las producciones, tanto propias como ajenas, con criterios objetivos de corrección, coherencia, propiedad y creatividad.
	Aprende de forma autónoma	Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública. Conoce aspectos elementales sobre el origen, desarrollo y riqueza de una lengua extranjera.
Tema 6 Science	Se expresa y se comunica	Se expresa en forma coherente, creativa y adecuada a diversas situaciones y finalidades; acentúa las destrezas comunicativas propias del diálogo, que requieren el trato con otras personas y la práctica expositiva pública. Comprende la noción de las propiedades del texto.
	Trabaja en forma colaborativa	Reconoce que la lectura es el resultado de una interacción entre el texto y el lector y aplica las estrategias necesarias de acuerdo con el propósito del texto y del lector.
	Piensa crítica y reflexivamente	Utiliza procedimientos y estrategias de la comunicación escrita y reconoce la importancia de evaluar las producciones, tanto propias como ajenas, con criterios objetivos de corrección, coherencia, propiedad y creatividad.
	Aprende de forma autónoma	Desarrolla estrategias para hacerse comprender en lengua extranjera, en situaciones comunicativas cotidianas, mediante convenciones lingüísticas y recursos no lingüísticos. Conoce aspectos elementales sobre el origen, desarrollo y riqueza de una lengua extranjera. Comprende la intención y el propósito comunicativo de los diversos tipos de discurso oral.

SCOPE AND SEQUENCE

	Unit 1: Energy and Education	Unit 2: Natural Resources	
	Theme 1 Energy	Theme 2 Education and Learning	Theme 3 Natural Resources
Focus	energy forms and conservation; daily activities at home; making judgments and decisions	schools and education; feelings about education; possibility	the natural world; natural areas in Mexico; conservation and nature reserves
Functions	talking about energy habits; describing one's energy usage; asking for and giving information about alternative energy sources	talking about attending school; talking about improving one's life; describing learning styles	describing places; describing aspects of development; describing conservation success stories
Grammar	verb tense review: simple present, present progressive, simple past (affirmative, negative, interrogative); <i>used to</i>	zero and first (real) conditional; subordinate clauses of time; second conditional (unreal); modals of possibility;	passive in the present; past participles; passive in the past; tag questions
Vocabulary	energy related words; alternative energy sources; phrasal verbs	words related to education; types of schools; words related to learning; common participial <i>-ing</i> adjectives;	words to describe habitats; nature / geography; words related to development;
Listening	listening for numbers; listening for general understanding; listening for specific details	predicting content; listening for general understanding; listening for specific details	using prior knowledge; listening for general understanding; listening for specific details
Speaking	asking for clarification; compare lifestyles; taking part in a conversation;	talking about future possibilities; describing plans; describing someone who makes a difference; describing learning styles	describing animal species and habitats; asking for reasons; talking about the past and the present; describing the importance of nature reserves;
Pronunciation	syllable number in <i>-ed</i> word endings	-s word endings	linking across word boundaries
Reading	reading descriptions; <i>Powering the Future</i>	reading a news article; getting information from a news article; <i>Survival School</i>	reading a conservation article; understanding paragraphs; <i>Coral Reefs</i>
Writing	writing a description; and, but, or	writing a description of personal learning style	writing about conservation success stories
Project	Past and Present Lifestyles (on website)	Making a Difference in Mexico	Nature Reserves
Video	Alternative Energy		

Theme 4 Exploration

Theme 5 The Past

Theme 6 Science

frontiers; space and technology challenges and accomplishments

past civilizations and archeological sites; sequence of past events

the scientific process benefits of research working in the sciences

identifying aspects of exploration: air and space travel; describing accomplishments and challenges; describing things you have done in the past; making predictions

talking about the order of past events: talking about visiting an archaeological site; talking about dinosaurs and sea monsters

requesting information checking for & showing understanding

simple past vs. past progressive: *when* and *while*; present perfect; simple past vs. present perfect; present perfect: *for* and *since*

past perfect with the simple past; time expressions with past perfect; third conditional (past unreal conditional)

relative clauses: subject and object; relative clauses: identifying and non-identifying; modals of necessity; *will* and *be going to* to talk about the future

frontiers; words related to space and flight; suffix: *-less*; regular and irregular verbs; words related to exploration;

archeology words; describing words; time expressions: *already, yet, never, always*; words related to civilization; transition phrases;

scientific process; heredity; GMOs

using visuals to increase understanding; listening for general understanding; listening for specific details

using context clues listening for general understanding; listening for specific details

taking notes on specific information; listening for general understanding; listening for specific details

describing what you were doing; describing things you have done; describing travel adventure; planning a trip

discussing the past; comparing different archaeological sites; describing what you would have done; describing the problems of indigenous languages; talking about dinosaurs

describing research needed; talking about heredity; describing benefits of a healthy diet; describing health problems

/v/ sound

syllable stress

Reduced vowel /ə/ in unstressed syllables

reading about exploration; using visuals; *Private Space Flight*

reading historical text; understanding main ideas; *Sea Monsters*

reading about hi-tech foods; guessing the meaning of new words from context; *Domesticated Animals*

writing a description of a past experience.

writing an e-mail message with transition words

writing a news article

Adventure Travel (on website)

Indigenous Languages

Solving Health Problems

Spacewalk

ENERGY

An aerial night photograph of a city, showing a dense grid of lights from buildings and streets. A large, brightly lit stadium is visible in the lower-left quadrant. The city is surrounded by dark, unlit areas, possibly parks or undeveloped land.

Theme

1

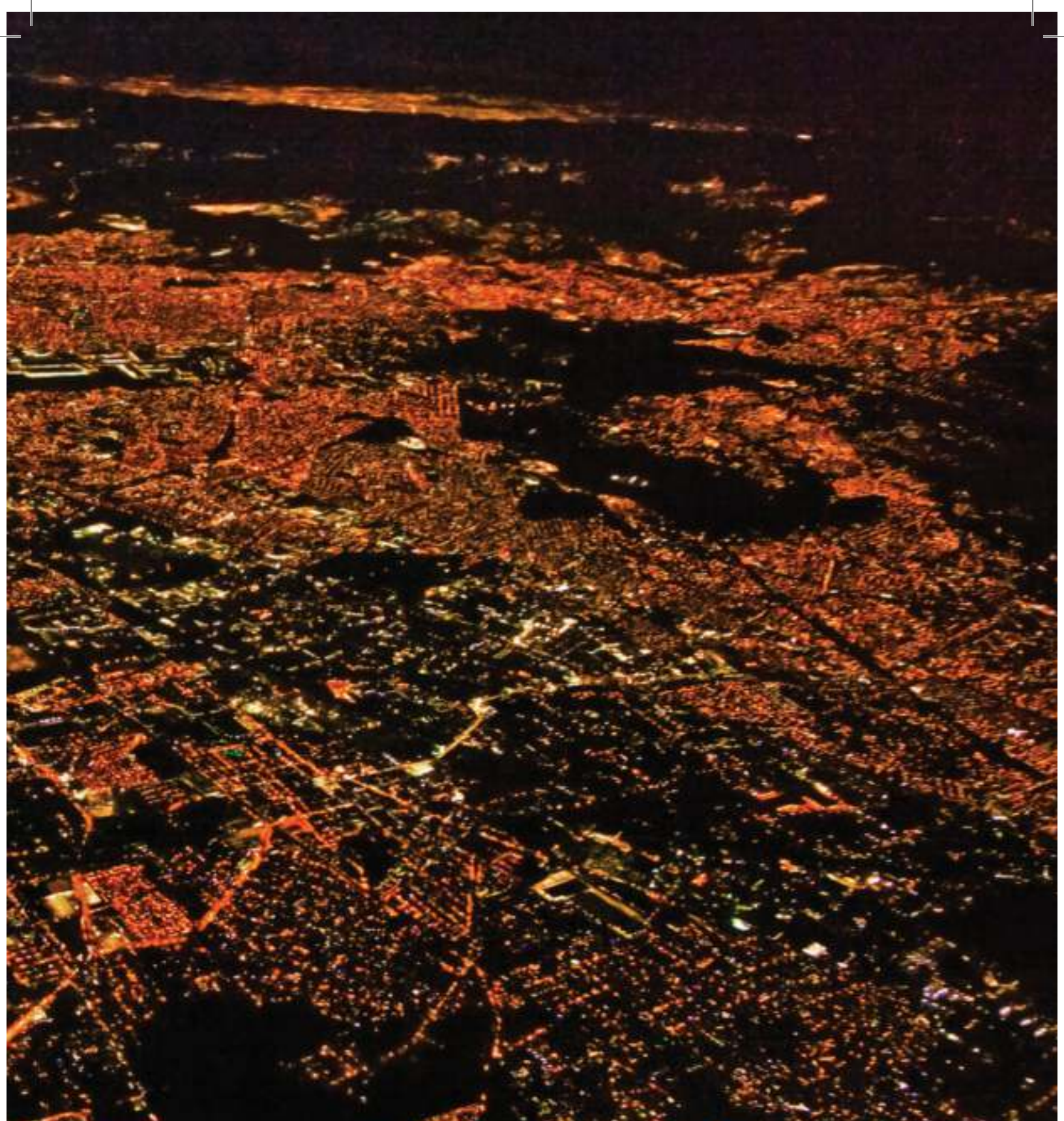
Unit 1

2

Opening Activity

Look at the picture and answer the questions.

1. What city do you think this is?
2. In what ways are people using energy here?
3. Do you think your city or town uses more or less energy than the city in this picture?



Theme Goals

In this theme you will learn to:

- talk about your energy habits.
- describe ways to conserve energy.
- use the simple present, present progressive, and simple past tenses.
- compare lifestyles of the past and the present.
- use *and*, *but*, and *or* to show relationships between ideas.
- talk about alternative energy sources.

LESSON A How Do You Use ENERGY?

Vocabulary

A Vocabulary in Context Complete each sentence with a word or phrase from the box.

- The television and refrigerator need _____ in order to work.
- We don't have an electric stove. Our stove uses _____ for cooking food.
- If we _____ energy at home, we can save money and help the environment, too.
- The lights in the house are very _____. They don't use much energy.
- Every cell phone has a small _____ inside it.
- We don't want to _____ energy because it's very expensive.
- Oil is one kind of _____. It was formed millions of years ago.
- My family used a lot of energy in the past, but now we're trying to _____ the amount of energy we use at home.

battery
natural gas
efficient
conserve
electricity
fossil fuel
waste
reduce

B Vocabulary in Action Match each word to its definition.

- | | |
|--------------------|-----------------------------------------------------------------|
| 1. ___ battery | a. to use something carefully to make it last longer |
| 2. ___ conserve | b. coal, oil, and natural gas that formed millions of years ago |
| 3. ___ efficient | c. to make something smaller |
| 4. ___ electricity | d. device that stores and provides energy for electronic items |
| 5. ___ fossil fuel | e. to use something carelessly or to use too much of something |
| 6. ___ natural gas | f. describes something that doesn't use too much time or energy |
| 7. ___ reduce | g. gas from under the earth's surface that is burned for energy |
| 8. ___ waste | h. form of energy that can be carried by wires |

C Read the conversation and circle the correct words. Then practice with a partner.

- Luis:** The newspaper says the cost of energy is rising. I guess we're all going to have to pay more.
- Nayeli:** I guess so, but we should also (1) conserve / battery) energy. That way we can (2) (reduce / conserve) the amount of money we spend on it.
- Luis:** Well, I don't drive a car, so I don't buy gasoline. That comes from oil, and I know it's good to conserve (3) (batteries / fossil fuels).
- Nayeli:** That's great! But do you use a lot of (4) (electricity / waste) at home?
- Luis:** Probably. I don't use a lot of lights, but the TV and computer are always on.
- Nayeli:** And how about your refrigerator? Is it new and (5) (efficient / conserve)?
- Luis:** No, it's really old. It probably (6) (wastes / reduces) a lot of energy.
- Nayeli:** Maybe you should get a newer one.

Word partnerships:

reduce the amount of
reduce the number of
reduce the size of

D Grammar in Context Study the chart.

Review of present tenses

Examples	Explanations
I use a hair dryer every day. Gasoline costs a lot of money.	Use the simple present tense to talk about repeated actions, habits, or things that are always true.
She is watching television right now. They are looking for a new apartment.	Use the present progressive tense to talk about things that are happening at this moment or things that are happening around this time.

The spelling of some words changes when we add *-ing*. For example:
move – *moving*
run – *running*
lie – *lying*

E Grammar in Action Fill in each blank with the simple present or present progressive form of the verb in parentheses.

- This is an electric car, so it *runs* (run) on electricity.
- I saw Danny in the street today. He _____ (walk) a lot this week because his brother has his car.
- This is an efficient water heater. It _____ (use) natural gas to heat the water.
- The battery in my laptop computer _____ (get) old. I should probably buy a new one.
- Fossil fuels will not last forever, so scientists _____ (try) to find other energy sources.
- Conserving energy _____ (reduce) your energy bills, so you can spend your money on other things.



F Check the items that are true for you and add more items.

1. Things I use every day:

- computer
- air conditioner
- electric fan
- television
- water heater
- stove
- hair dryer

2. Things I am using right now:

- air conditioner
- lights
- cell phone battery
- computer
- _____
- _____
- _____

G Communicate With a partner, discuss your answers in F. Then make a list of ways you could conserve energy every day.

I could use cool water in the shower.

Good idea!

ALTERNATIVE ENERGY

A Vocabulary in Context Look at the pictures and listen to information about alternative energy sources.

4



wind power



geothermal power



biofuels



solar power



nuclear power



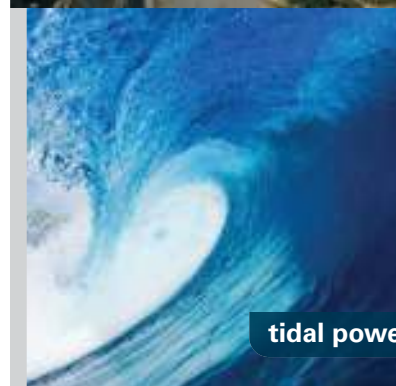
hydroelectric power

B Vocabulary in Action Fill in each blank with the correct type of alternative energy.

1. Nuclear power uses nuclear reactions to produce electricity.
2. _____ uses the movement of the ocean to produce electricity.
3. _____ uses dams and the movement of water in rivers to produce electricity.
4. _____ are plants such as corn that people burn for fuel or use to produce ethanol.
5. _____ is a gas that people can use as fuel in their cars.
6. _____ uses energy from the sun to heat water or produce electricity.
7. _____ uses heat from inside the earth to produce electricity or heat homes.
8. _____ uses the movement of the wind to produce electricity.

C Match each situation to the best alternative energy source in A.

1. ___ We live near a large river.
2. ___ Farmers grow a lot of sugar here.
3. ___ We live in the desert and it's always sunny.
4. ___ The technology here is now very safe and efficient.
5. ___ We live near a volcano. There's a lot of heat from the earth here.
6. ___ We live near the ocean.
7. ___ We live on high land and it's always windy.
8. ___ We do not need gasoline to run our cars here.



tidal power



hydrogen

D Grammar in Context Study the chart.

Simple present and present progressive: Negatives and questions

Examples	Explanations
Laura is not / isn't at school today. Are these lights energy efficient? Where is / Where's the science classroom?	With the verb <i>to be</i> , form negative statements and questions in the simple present tense .
We do not / don't have a computer. Does the air conditioner use a lot of energy? When does the semester begin ?	With verbs other than <i>to be</i> , use the simple present and <i>do</i> or <i>does</i> in negative statements and questions.
Juan and Lisa are not / aren't paying attention. Am I wasting electricity? Why is Pancho taking the bus to work?	In the present progressive tense , negative statements and questions are always formed with the verb <i>to be</i> .

E Grammar in Action Change each sentence to the negative form.

- I like these new lights. They are energy efficient.
I don't like these new lights. They are not energy efficient.
- Tom and Lee are talking about a movie.

- This telephone is working very well.

- Tina gets the best grades in the class.

- Luis knows the correct answer.



F Complete the questions in the conversations.

Then practice them with a partner.

- Marta:** What *are you writing*, Rogelio? (you / write)
Rogelio: It's an e-mail to my brother.
Marta: Oh, _____ to your brother very often? (you / write)
Rogelio: Yes, I do—four or five times a week.
- Tony:** Why _____ video games right now? You have homework to do. (you / play)
Pepe: I know, but I do my homework at night. When _____ your homework? (you / do)
Tony: I usually do my homework in the afternoon—right after school.

←
"To each his own" is an expression that means each person has his or her own way of doing and thinking about things.

G Communicate Talk to a partner about the second conversation in **F**. When do you do your homework, and why? Where do you like to study?

I study early in the morning.

Me too!

LESSON B ENERGY CONSERVATION

A Vocabulary in Context Read the information and look at the phrasal verbs in bold.

Easy Ways to Conserve Energy

Energy conservation doesn't have to be difficult. You don't need to buy a hydrogen-powered car, for example, or sit in a dark house every night. Instead, try to do several small things each day to reduce the amount of energy you use. These small things can add up to big savings on your energy bill, and they can be a big help to the planet as well. Here are a few things you can do:



1. Always **TURN OFF** the lights when you leave a room.
2. **CUT BACK ON** the amount of time you spend watching television.
3. Only **TURN ON** electric fans or other electrical devices when you really need them.

4. **TURN DOWN** the thermostat on the water heater and use cooler water.
5. **PLUG IN** electronic equipment such as a DVD player only when you use it.
6. Remember, after we **USE UP** all of the fossil fuels, they are gone forever.

Like many devices in the home, this fan runs on electricity.

B Vocabulary in Action Write a phrasal verb from **A** next to the correct definition.

1. cut back on to reduce the amount of something
2. _____ to connect an electrical device with a source of electricity
3. _____ to stop an electrical device using the on/off control
4. _____ to use all of something
5. _____ to reduce the temperature setting on a stove, etc
6. _____ to start an electrical device using the on/off control

C Fill in each blank with a phrasal verb from **A**.

1. Did you turn down the thermostat on the heater? It's very cold in here.
2. You need to _____ the stereo if you want to use it. I always unplug it if I'm not using it.
3. Maybe you should _____ the number of video games you buy. They're expensive and you already have a lot of them.
4. The water in the bathroom is cold. Could you please _____ the water heater?
5. You can _____ the TV. Nobody is really watching it.

Phrasal verbs consist of a main verb plus one or two particles.

Phrasal verb: Jason **looked up** a word in the dictionary.

D Grammar in Context Study the chart.

Review of simple past tense

Examples	Explanations
They watched a movie last night. Daniel plugged in the television. Those wind turbines were extremely large.	Use the simple past tense to talk about completed actions or situations in the past.
We did not buy an electric car. Katrina didn't do the homework assignment.	Use did not or didn't plus the simple form of a verb to make negative statements in the simple past.
Did you watch a movie last night? Was the power plant near the ocean? Where was the power plant? When did you go to Cancún?	Form Yes/No and Wh- questions in the simple past.
Regular verbs	
<i>walk – walked</i>	<i>produce – produced</i>
<i>learn – learned</i>	<i>waste – wasted</i>
<i>open – opened</i>	<i>conserve – conserved</i>
Irregular verbs	
<i>leave – left</i>	<i>find – found</i>
<i>eat – ate</i>	<i>give – gave</i>
<i>go – went</i>	<i>have – had</i>
	<i>read – read</i>
	<i>say – said</i>
	<i>make – made</i>

The spelling of some words changes when we add *-ed*.
For example:
try – tried
worry – worried
stop – stopped

E Grammar in Action Fill in each blank with the simple past.

- In the 20th century, Mexico produced a lot of hydroelectric power. (produce)
- Spain _____ La Florida solar power plant in 2010. (open)
- Who _____ the lights? I can't see anything! (turn off)
- I _____ an interesting article about wind power yesterday. (read)
- The article _____ that wind power doesn't cause air pollution. (say)

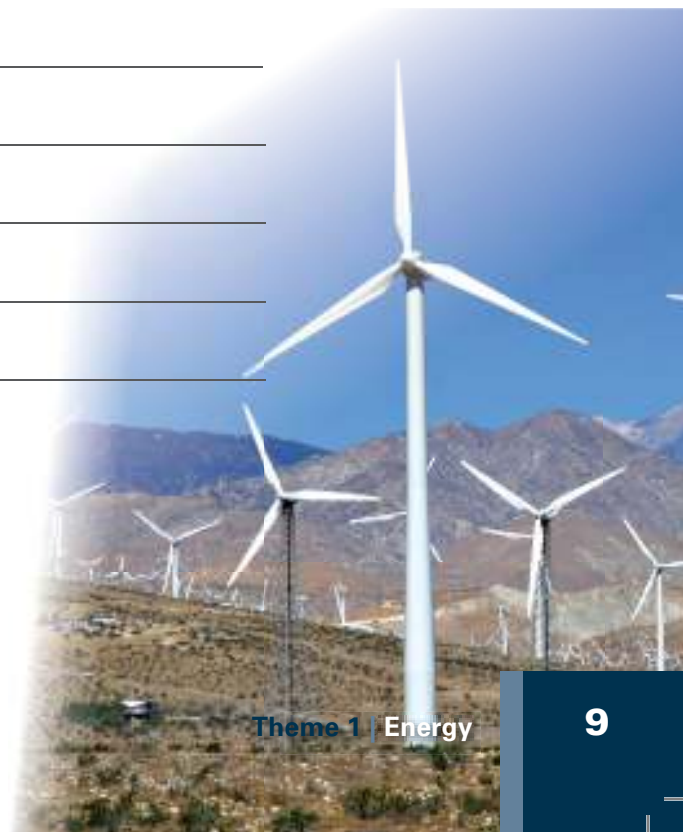
F Write the *Yes/No* or *Wh-* question for each answer.

- _____ Yes, it was hot in Mérida last month.
- _____ Yes, I was sick yesterday.
- _____ David went to Texas two years ago.
- _____ He went to Texas because he loves to travel.
- _____ The school was in Leon.

G Communicate Tell your partner about three things you did before class today.

I checked my e-mail messages.

I took the bus.



WHAT DID PEOPLE USE TO DO?



A Language Builder Study the chart.

Used to

Examples

This **used to be** a good place to work, but nobody is happy here now.

I **used to drive** my car every day. Now I only drive it a few days each week.

Did you **use to** study at that school?
No, I **didn't use to** study there. I used to teach classes there.

Explanations

Use **used to** plus the simple form of a verb to talk about (a) situations in the past that are no longer true, or (b) things we often did in the past that we don't do anymore.

Use **did** or **didn't use to** for questions and negative statements.

B Listening Listen to the conversation.



5

1. Who are the speakers?

2. What are they talking about?

C Read each sentence and circle the correct word or phrase. Then listen again and check your answers.



5

1. The man says he (used to / didn't use to) have a cell phone when he was young.
2. The girl wants to know how the man used to call his (friends / parents).
3. The man says he (used to / didn't use to) use public phones.
4. The man's parents (had / didn't have) electricity in their houses when they were children.
5. The man's parents (had / didn't have) a telephone in their house.
6. The man says people used to (walk / take the bus) everywhere.

Alternative Energy

- A Before You Watch** Read the information and study the underlined words. Then match the sentence parts below.

At the National Renewable Energy Laboratory in Golden, Colorado, discovering alternative power sources that are competitive with fossil fuels has been a mission of scientists since the U.S. energy crisis of the 1970s. Scientists here also create solar cells that are far more efficient than those currently available to the public. They believe that the market for this technology is about to increase significantly.



1. ___ If something is competitive with other things,
 - a. you can find it and buy it now.
 - b. there is a serious or dangerous situation.
 - c. people have money and want to buy it.
 - d. it will happen very soon.
 - e. it has many advantages and people might choose it.
2. ___ If there is a crisis,
3. ___ If something is currently available,
4. ___ If there is a market for something,
5. ___ If something is about to happen

- B Predicting** Read the title of the video and the information in **A**. Then answer the questions.

1. What part of the world is the video probably about?

2. Besides solar power, what other energy sources might be mentioned in the video?

3. What is the video probably going to say about alternative energy sources?

- C While You Watch** Watch the video and check your predictions from **B**.

- D After You Watch** Watch the video again and write in your notebook answers to the questions.

1. What is one interesting thing you saw or heard in the video?
2. What is one surprising thing you saw or heard in the video?
3. What question or questions do you have about the video?

A VISITOR FROM ICELAND



A Look at the picture and discuss the questions with a partner.

1. What do you know about Iceland? For example, where is it? How many people live there?
2. Why do you think the water in the picture is warm?
3. What kind of power plant do you see in the picture?

B **Listening in Context** Listen to the conversation.

- 6**
1. How many people are talking? two
 2. Where are the speakers? _____
 3. What did the woman see near the airport? _____

C Listen to the conversation again and choose the correct answer.

- 6**
1. Mexico gets about ____ of its electricity from geothermal power plants.
a. 20% b. 40% c. 60%
 2. Iceland developed geothermal heating systems in the ____.
a. 1960s b. 1970s c. 1980s
 3. Nowadays, ____ of the houses in Iceland use geothermal heating.
a. 50% b. 70% c. 90%

D **Pronunciation** Listen and repeat the words you hear.

- 7**
- | | | |
|-----------------------|------------------------|----------------------|
| 1. use – used | 3. develop – developed | 5. waste – wasted |
| 2. produce – produced | 4. heat – heated | 6. intend – intended |

Adding *-ed* to a word only adds an extra syllable if the word ends with a /t/ or /d/ sound. For example, *reduce* has two syllables, and *reduced* also has two syllables. On the other hand, *create* has two syllables, but it ends with a /t/ sound; so, *created* has three syllables.

E Imagine a vacation trip to Reykjavik, Iceland. Read the information. Discuss the questions with a partner.

- Short 45-minute van ride from Reykjavik
- Hiking 3 miles in beautiful Icelandic countryside
- Relaxing bath in natural hot springs
- Includes a picnic lunch



- Exciting boat trip on the Atlantic Ocean leaves from Reykjavik harbor
- Modern, well-equipped boat carries up to 40 passengers
- Whale watching in the whales' natural environment. Be sure to bring your camera!



- Comfortable 7-hour bus ride from Reykjavik
- Deluxe spa and geothermal hot springs
- Excellent opportunities to see the aurora borealis
- Food for sale

1. Which trip looks the most interesting?
2. Which trip might you take?

F Fill in the blank with the correct conjunction *and*, *but*, *or*, *so*.

Hi Mom,

Right now I'm sitting in an Internet café, (1) _____ I'm doing some "people watching." It's quite cold here, (2) _____ everyone is wearing coats with colorful hats and gloves. I wanted to write to you sooner, (3) _____ I couldn't find a place with an Internet connection. Now I can ask you a question about souvenirs from Iceland. I can bring you something to wear, (4) _____ I can get you a CD of Icelandic music. Which one sounds more interesting to you?

G Imagine you took the trip that you chose in **E**. Write in your notebook an e-mail message about your trip. Try to use the verb tenses from this theme, and use conjunctions to connect short sentences.

Writing

Connect short sentences using conjunctions.

Use **and** to show an addition: *My friend lives in Reykjavik, **and** she has an extra room.*

Use **but** to show a contrast: *The trip sounds interesting, **but** it's expensive.*

Use **or** to show options: *We can leave Akureyri today, **or** we can stay there overnight.*

Use **so** to introduce a result: *The trip includes a long hike, **so** we'll be very tired.*

Powering the Future



A Connect with the Text Look at the pictures and answer the questions.

1. What is happening in the picture? _____
2. Do you think this kind of work is dangerous? _____
3. Do you think it's important? _____

B Understand Main Ideas Read the title and look at the pictures and circle the correct answer or answers. Then read the article to check your answers.

1. What time period does the reading focus on?
a. the past b. the present c. the future
2. Which three kinds of energy does the reading mostly discuss?
a. geothermal c. nuclear e. wind
b. solar d. tidal

1 As fossil fuels such as coal and oil become more difficult to find and more expensive, people are looking for alternative sources of energy—energy that is clean and **renewable**. But which form of alternative energy is the right one?

2 **Solar** panels collect energy directly from the sun and convert it to electrical power. Solar energy can also heat water, and steam from the hot water turns **turbines** to produce electricity. These processes do not produce air pollution, but the cost of solar panels is very high, and at night or on cloudy days, the panels produce less energy.

3 **Wind** is another way to collect energy from the sun. The sun's heat causes air to move and to turn the **blades** of

turbines. Wind turbines produce clean electricity, and unlike solar panels, they work well on cloudy days. Some people, however, say the turbines are noisy and ugly.

4 **Nuclear** power plants produce a lot of electricity, and unlike power plants that burn gas or coal, they don't pollute the air with carbon. But the disadvantages of nuclear power include the high cost of building them and concerns about what to do with radioactive nuclear waste.

5 In the end, no single one of these sources is the answer to our energy problems. But a combination of these—along with other sources such as tidal or geothermal energy—may be the way to meet the world's energy needs without depending on fossil fuels.

C Read in Depth Read the article. Then write the answers to the questions.

1. According to the article, what will be the answer to our future energy problems?

It will be a combination of energy sources such as solar, wind, nuclear, tidal and geothermal energy.

2. What is one advantage of solar power?

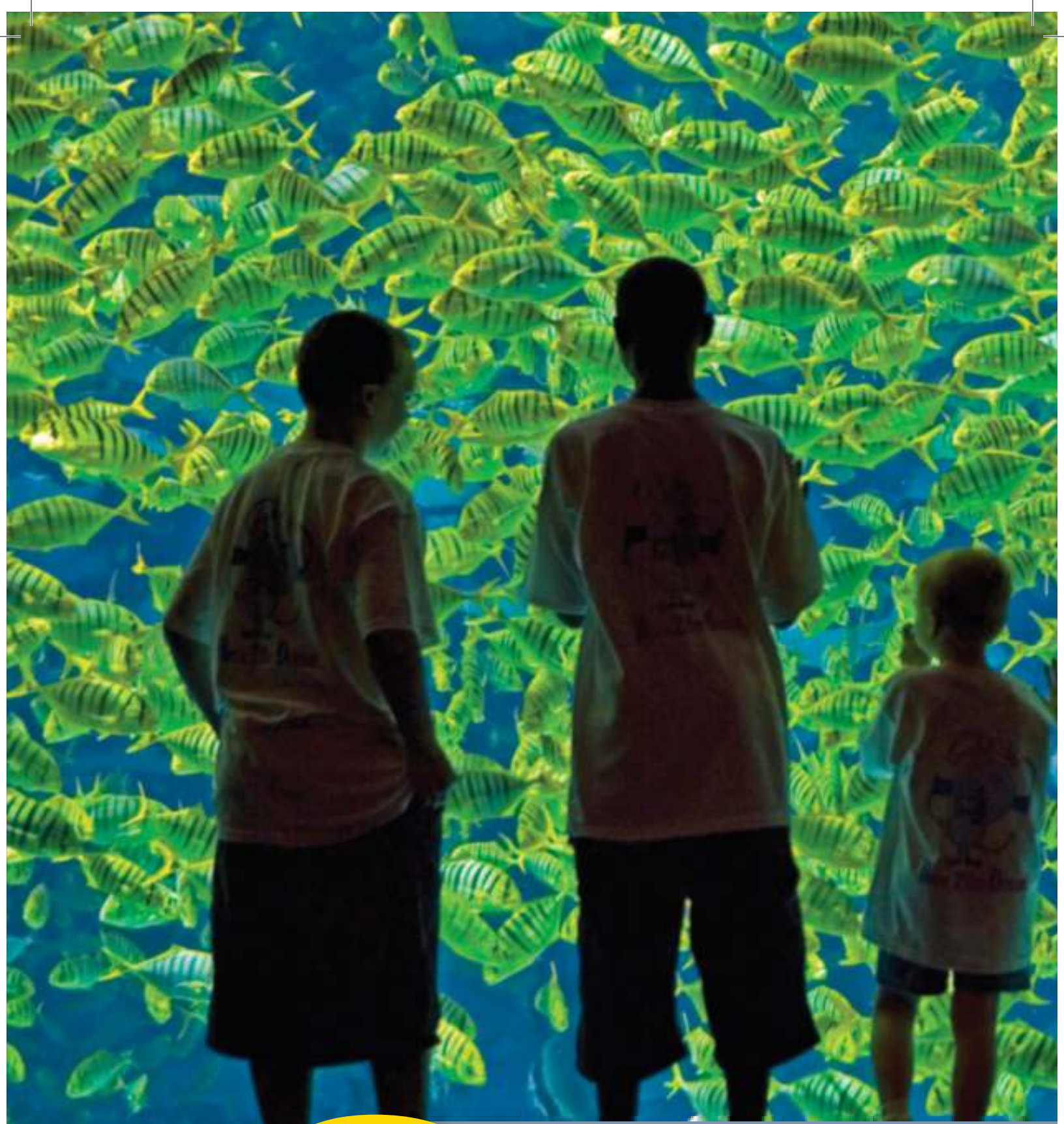
3. What are some disadvantages of wind power?

4. Are all of the important kinds of alternative energy included in this article? Explain your answer.

renewable, adj able to be replaced

turbines, n machines that convert motion (e.g., from falling water, rising steam, or wind) into electricity

blades, n the long, flat parts of an electric fan or a wind turbine that turn



Theme

Unit 1

16

2

Opening Activity

Look at the picture and answer the questions.

1. What can you see in this picture?
2. What do you think is happening?
3. How is this picture related to learning and education?

A group of four children, seen from behind, are looking at a large digital display. The display shows a vibrant school of yellow and blue striped fish swimming in a blue ocean. The children are silhouetted against the bright screen. One child on the left has their hand raised towards the screen.

EDUCATION AND LEARNING

Theme Goals

In this theme, you will learn to:

- talk about attending school.
- talk about different kinds of schools.
- talk about different learning styles.
- use the first and zero conditional.
- use the second conditional.
- understand modals of possibility.

LESSON D GETTING AN EDUCATION

A Vocabulary in Context

Read the captions and study the words in bold.



Laura Smith's **goal** is to be a nurse. After she gets her nursing **degree**, she will work in a large hospital.



Professor de Soto likes to give **lectures**. If you **enroll** in one of his **courses**, you'll hear a lot of lectures.



Carmen Villareal had to pay a lot of **tuition** to attend an expensive college. Now she is **graduating** and getting her **diploma** from the president of the school.

B Vocabulary in Action

Match the beginning of each sentence to the correct ending.

- | | |
|---------------------------------------------|------------------------------------------|
| 1. When you enroll in a course, ___ | a. they speak to their students. |
| 2. A diploma is really ___ | b. you become a student in that course. |
| 3. Tuition is ___ | c. you should be a good teacher. |
| 4. When professors give lectures, ___ | d. you complete all of your courses. |
| 5. Your goal is something ___ | e. the money you pay to attend a school. |
| 6. After you get a degree in education, ___ | f. a piece of paper. |
| 7. You will graduate if ___ | g. you want for your future. |

C Complete Laura Smith's e-mail with the correct words from B.

☐ ☐ ✕

I did it, Osvaldo! I decided to (1) enroll at the university. My (2) _____ is to become a nurse, so I'm taking four science (3) _____. Three of them are in the laboratory, and we do a lot of group work there. But one professor likes to give (4) _____, so we just listen to him most of the time.

I'm attending the state university, so my (5) _____ isn't too expensive. It will take me four years to (6) _____, though, so I'm still living with my parents. It's cheaper than renting an apartment! After I get my (7) _____ in nursing, I'm going to be pretty proud of myself! I'll probably put my (8) _____ on the wall so that everyone can see it.

D Grammar in Context Study the chart.

Zero conditional and first conditional

Examples	Explanations
If students have definite goals, they do well in school. If professors like to give lectures, they often don't like to have class discussions.	Form the zero conditional with an if clause and a result clause in the simple present tense. Use the zero conditional to talk about facts or things that are generally true.
If you get a degree, you will get a better job. If you graduate , you will receive a diploma.	Form the first conditional with an if clause in the simple present and a result clause in the future (will or be going to + verb). Use the first conditional to talk about future possibilities.

E Grammar in Action Match the beginning of each sentence to the correct ending.

- | | |
|-----------------------------------------------|-----------------------------------------------|
| 1. ___ If the cost of tuition is very high, | a. they remember the lectures better. |
| 2. ___ If students take good notes, | b. you need a degree in medicine. |
| 3. ___ Many people enjoy studying more | c. fewer students can afford to go to school. |
| 4. ___ If children don't go to a good school, | d. if I study a lot. |
| 5. ___ I get good grades | e. they don't get a good education. |
| 6. ___ If you want to be a doctor, | f. if they're in a study group. |

F Complete each sentence in the first conditional with the verb in parentheses.

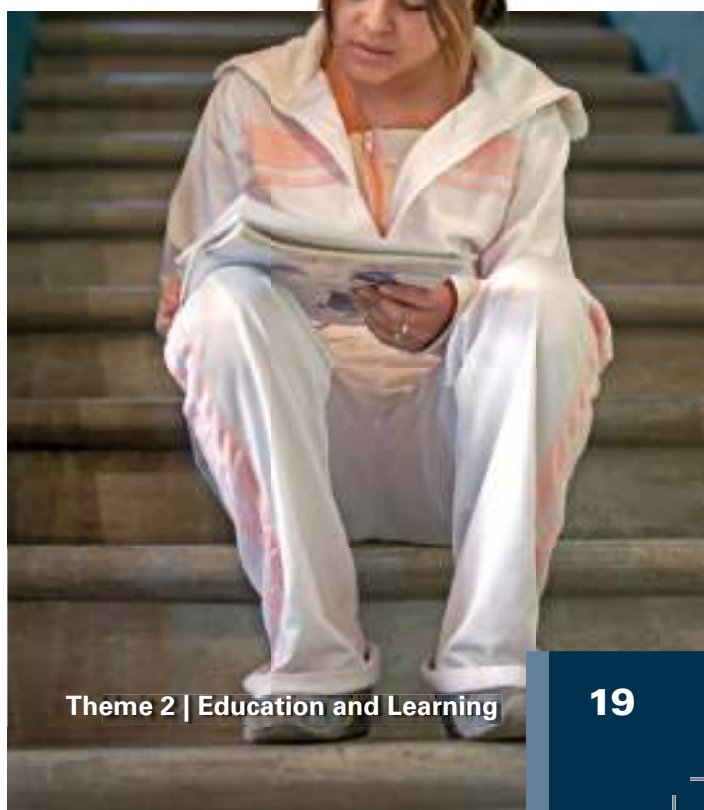
- You will get into the best courses if you enroll on time. (get)
- If the school _____ Brenda, she will start classes there in September. (accept)
- If Louisa and Marc have a baby girl, they _____ her Alejandra. (name)
- If you _____ at Franco's Restaurant tonight, you will really enjoy it. (eat)
- If Ramón _____ his degree, he will look for a job in Buenos Aires. (get)
- You'll make more new friends if you _____ people's names. (remember)

G Communicate Talk to a partner about future possibilities. Finish the sentences below in your notebook and add your own ideas.

- If it rains this weekend _____
- If there is no homework this week _____
- If _____

If I get a good grade in this class, I'll be very happy.

Me too!



GOING TO SCHOOL

A Vocabulary in Context Read the information and study the words in bold.



Where Will She Go To School?

- In the US, children usually attend **elementary school** for grades 1-6. They can attend **public** elementary schools at no cost, or their parents can pay for **private** schools.
- After elementary school, American children spend the next two or three years in **middle school**.
- American teenagers graduate from **high school** when they finish grade 12.
- After high school, many people get a job, or if they want to learn special job skills, they attend a **technical college**.
- Other students continue their education after high school in a four-year **college**, or if they want to choose from more courses, in a **university**.

B Vocabulary in Action Match each word or phrase to the correct sentence.

- | | |
|--------------------------|-----------------------------------------------------------------------|
| 1. ___ elementary school | a. This often means grades 9-12. |
| 2. ___ middle school | b. You can learn job skills at this kind of school. |
| 3. ___ high school | c. You have to pay a lot of tuition for this kind of school. |
| 4. ___ public | d. This is similar to a college, but usually offers more courses. |
| 5. ___ technical college | e. You don't pay tuition for grades 1-12 at this kind of school. |
| 6. ___ private | f. This often means grades 1-6. |
| 7. ___ college | g. This is similar to a university, but usually offers fewer courses. |
| 8. ___ university | h. This often means grades 7-8. |

C Write each vocabulary term from **B** in the correct column.

Schools for children and teenagers	Schools for adults	Adjectives to describe schools
<i>elementary school</i>		

D Grammar in Context Study the chart.

Subordinate clauses of time

Examples	Explanations
After students finish elementary school, they can enroll in middle school.	Use <i>after</i> , <i>when</i> , <i>before</i> , <i>while</i> , and <i>until</i> to show time relationships.
Marcy finished middle school before she went to high school.	These sentences have a main clause and a subordinate clause of time.
When students attend a technical college, they learn practical job skills.	Use a comma when the subordinate clause comes first.
Justin will attend a public school while his sister attends a private school. I'm going to study until my roommate gets home.	In time clauses about the future, use the simple present, not <i>will</i> or <i>be going to</i> .

Use *while* for two or more things that happen at the same time.
Use *until* for something that happens up to a point in time and then stops.

E Grammar in Action Circle the correct time expression.

- Gisela plans to enroll in a technical college (when / before) she graduates from high school.
- Students in the US go to high school (before / after) they finish middle school.
- Adán went to a private school (until / while) the tuition got too high. Then he went to a public school.
- Students in the US go to elementary school (before / while) they go to middle school.
- Clara is at home right now. She is taking care of the children (while / after) her husband is giving a lecture at the university.
- I can't talk now because I'm in the car. I'll call you back (until / when) I get home.

F Complete each sentence with the correct form of the verb in parentheses.

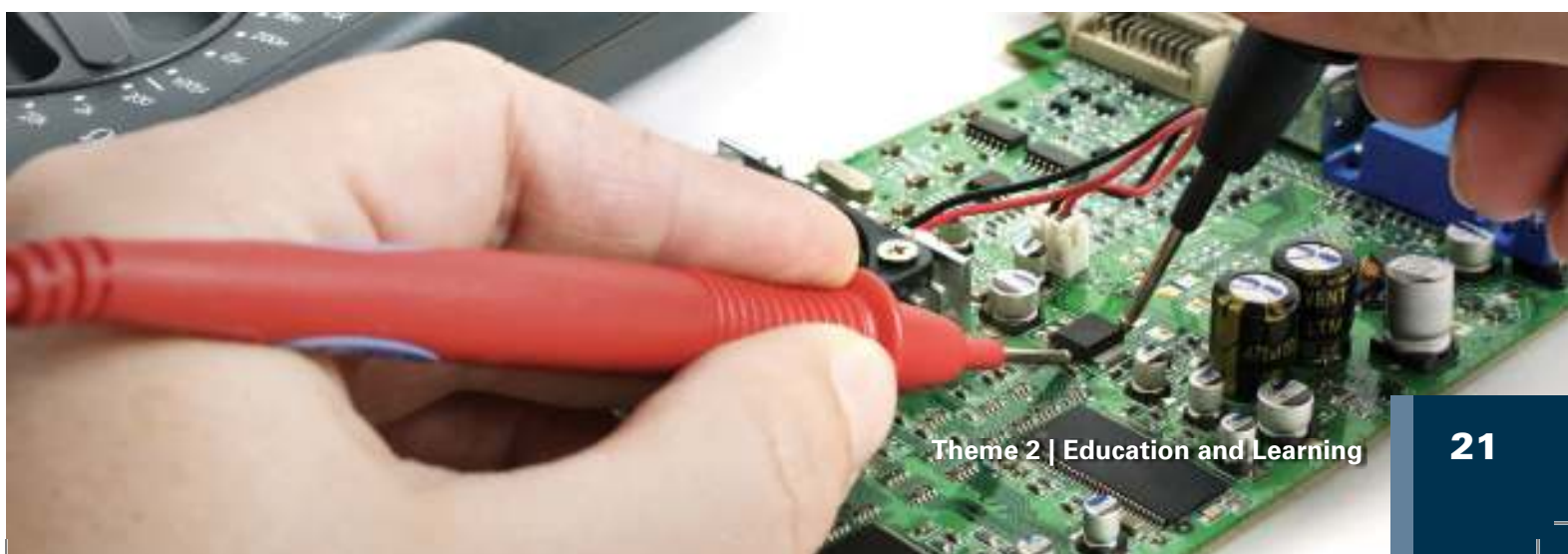
- Gabriela will graduate after she finishes this course. (finish)
- They'll go to the store before they _____ home. (go)
- Fabio will stay in Puebla until his uncle _____ from Uruguay. (return)
- I'm going to live with my parents until I _____ a good job. (find)
- The teaching assistant will give lectures while the professor _____ ill. (be)
- She's going to be upset when she _____ the truth. (learn)

When this class ends, I'm going to go to my next class.

Not me. I'm going to go to the library.

G Communicate Talk to your partner about your plans. What are you going to do . . .

- when this class ends?
- before you leave school today?
- while you're at home this weekend?
- after you graduate?



LESSON E How Do You Feel About Learning?

A Vocabulary in Context Read the information and study the words in bold.



For me, graduation day was the most **exciting** day of my life! Getting a degree was a big **achievement**, but it took a long time. My parents were always there to **encourage** me, and thanks to them, I have my diploma. It's a **valuable** thing now that I'm looking for a job.

History was my favorite **subject** in school. It was always **interesting**, but I had to study science, math, and other subjects, too. Fortunately, I had great teachers, so I was never **bored** in any class. They helped **prepare** me to do anything in life—even the difficult things.



B Vocabulary in Action Complete the sentences with word from **A**.

1. If something is exciting, it makes you feel very happy or enthusiastic.
2. If something is _____, it's worth a lot because it's useful or helpful.
3. If you are _____, you feel tired and impatient.
4. If someone wants to _____ you for something, they help you get ready.
5. If something is _____, it attracts you or holds your attention.
6. In school, a _____ is an area of study such as music or biology.
7. If you _____ someone, you say things to give them hope and confidence.
8. An _____ is a good thing you finish after a lot of hard work.

C Communicate Write answers to the questions. Then share your answers with a partner.

1. For you, what is the most interesting school subject?

2. When do you feel bored at school?

3. Who encourages you and helps you with your education?

4. Why is education valuable to you?

5. What is one of your past achievements?

6. What are you doing now to prepare for your future?

D Grammar in Context Study the chart.

Second conditional

Examples

If I **had** enough money, I **would** buy that jacket. (I don't have enough money.)

They **would** be happier **if** they **moved** to Monterrey. (They haven't moved to Monterrey.)

If I **were** you, I would attend a different school.
I would like mathematics **if** it **were** a more exciting subject.

Explanations

Use the **second conditional** to talk about unreal or untrue conditions in the present or future.

Use an **if** clause with a verb in the simple past and a result clause with **would** to form the second conditional.

Use **were** with all subjects when the verb in the **if** clause is **be**.

In informal speaking, people sometimes use **was** instead of **were** in the **if** clause with *I, he/she*.

E Grammar in Action Match the beginning of each sentence to the correct ending.

- | | |
|-----------------------------------------|-------------------------------------------------|
| 1. ___ If I learned Portuguese, | a. if I had enough money for music lessons. |
| 2. ___ If you sent her an email, | b. if you studied more. |
| 3. ___ I would learn to play the guitar | c. I would be able to speak to Brazilians. |
| 4. ___ The teacher would be happy | d. she would probably read it. |
| 5. ___ If you never traveled, | e. you would never learn about other places. |
| 6. ___ You would get better grades | f. if all of the students did well on the test. |

F Complete each sentence with the correct form of the verb in parentheses.

- I would enjoy my classes more if we did more group projects. (do)
- If I won the lottery, I would _____ a new house for my family. (buy)
- I would spend more time with my sister if she _____ closer to me. (live)
- If you _____ a computer technician, they would pay you more money. (be)
- If Jorge got a haircut, he would _____ a lot better. (look)
- Learning would _____ easier if we always remembered everything. (be)

I would like to learn how to make Chinese food. It's my favorite.

I love Chinese food, too!

G Communicate In your notebook, list three or four things you would like to learn about. Then tell a partner why.



A Language Builder Study the chart.

Modals of possibility

Examples	Explanations
Mr. Vásquez is here today, so you could talk to him. They say it's a good movie, but I might not have enough money to go.	Use may (not), might (not), and could to talk about things that are possible.
Ariana may go to Zacatecas this summer. The school might call you, or they might send you a letter.	Use the base form of a verb after a modal.

B Reading Read the article and look at the words in bold.

A Love of Science and Indigenous Culture

In 2012, Claudia Ángel Pérez made history. How? She earned a master's degree in biological sciences from the Universidad Autónoma Nacional de México (UNAM). This is a major achievement since Pérez is the first woman from Oaxaca to do this.

Claudia Ángel Pérez is a Zapotec Indian who grew up in the small village of San Juan Jaltepec. Through her research, she showed that a kind of native fish called



Lutjanus is good to eat. This is exciting news, and it **could help** many people in the area.

In rural areas, getting an education isn't always easy. But Claudia's mother encouraged her to be proud of her indigenous background, and that

helped her through difficult times. Her goal is to bring low-cost techniques for raising the Lutjanus fish to her home state. In the future, this fish **might** be very valuable as food and as a source of income for indigenous people.

C Getting Information from a news article Read the article again. Then discuss these sentences with a partner and write True (T), False (F), or Not Sure (NS).

- Claudia Ángel Pérez's achievement is important. _____
- She grew up in a big city. _____
- She attended a university in a big city. _____
- Her Zapotec heritage is important to her. _____
- Her father encouraged her to study science. _____
- Her work could help people in Oaxaca. _____

Making a Difference in Mexico

Research a present-day Mexican scientist, educator, inventor, or other person who is solving problems and improving life in Mexico. What has the person done, or what would they like to do? Where did they get the knowledge to do it? Create an infographic video that introduces the person to your classmates.

A Brainstorm What do you want to know about the person? Use some of the words in the box. In a small group, make a list of *Wh-* questions. Write them in the chart in **B**.

goal improve	degree prepare	achievement education	contribute solve
-----------------	-------------------	--------------------------	---------------------

B Research Look at your questions. Use news articles from the Internet to research a person from Mexico. Write answers in the chart.

Questions	Answers

C Share Share your information with a partner. Is there any information you left out? Prepare and make an infographic video.

D Present Present your video to your classmates. Answer your classmates' questions.



LESSON F LEARNING STYLES



A **Listening in Context** Listen to the recording and circle the correct phrase.

8

1. The speaker is probably (talking on the telephone / giving a lecture).
2. Learning styles are (ways we learn / reasons for learning).

B **Listening for Main Ideas** Listen again. Number the learning styles in the order you hear about them, and cross out the item that is NOT a learning style.

8

- ___ visual learning
- ___ physical learning
- ___ mental learning
- ___ auditory learning

C **Pronunciation** Listen to each group of words and look at the underlined letters. Notice the different ways to spell each consonant sound.

9

- | | | | | |
|----|------------------|-----------------------|-----------------|------|
| 1: | <u>z</u> ero | phys <u>i</u> cal | styl <u>e</u> s | /z/ |
| 2: | <u>s</u> ee | convers <u>a</u> tion | book <u>s</u> | /s/ |
| 3: | meas <u>u</u> re | vis <u>u</u> al | beig <u>e</u> | /zh/ |

D Listen to the words and write the consonant sound (z, s, or zh) that you hear. Then practice saying each word.

10

- | | | | |
|------------|----------|----------|-------|
| 1. sits | class | trips | _____ |
| 2. leisure | treasure | pleasure | _____ |
| 3. tries | ears | eyes | _____ |

E Speaking Which of the three learning styles works best for you? Give reasons for your answers.

I might be a visual learner because I love to watch movies and videos.

I'm really active, so I may be a physical learner.

F Writing Complete the paragraphs with sentences from the box. Write the letter of the correct sentence on the line.

- a. For example, I like to do things with my hands such as drawing pictures.
- b. That's because I remember things well when I hear them.
- c. That way, I can't see anything and I can concentrate on the professor's words.
- d. I don't think the visual learning style works very well for me.



I think the auditory learning style works best for me. (1) For example, if I'm listening to a lecture, I close my eyes. (2) I might also be a physical learner some of the time. I would rather be active than to sit still. (3) I also use my hands a lot when I talk!

(4) I don't like to sit at the front of the class because I don't need to see the teacher. It's better for me just to listen. On the other hand, I do like books that have a lot of beautiful pictures, so a small part of me could be a visual learner!

G Write one or two paragraphs about your own learning style. Give reasons and examples.

H Look at your partner's paragraph(s). Does he/she explain which learning style works best for him/her?

GET CLOSE TO MEXICO

Using gestures and moving one's hands during a conversation varies from culture to culture. What are some gestures people in Mexico use?

SURVIVAL SCHOOL

A Connect with the Text Look at the title and pictures. Answer the questions.

1. What do you see in the pictures? _____
2. What do you think people at this school learn about? _____

B Scan Quickly look at the text to answer the questions.

1. Where is the survival school? _____
2. What's the name of the survival school? _____



1 Southern Utah in the USA is a land of extremes. The dry desert is sometimes flooded by summer rainstorms. The days are hot and the nights are cold in Utah's mountains. Utah also has beautiful parks and forests, so it's a great place for hiking, camping, and mountain biking. And for some people, Utah is a place where they can learn to **survive** in the **wilderness** with little food or water and no modern equipment.

2 The Boulder Outdoor Survival School (BOSS), founded in 1968, is the world's oldest survival school. With its philosophy of "Know more, carry less," BOSS teaches its students how to survive outdoors without tents, flashlights, or blankets. The students learn to make a **shelter** from leaves or snow, to find and purify water, and to eat foods that they find in the wilderness.

3 The school courses are not for everyone. Students must be healthy. They take long hikes through Utah's deserts and canyons. They learn survival **skills** from the BOSS instructors, and finally, they take a field course. This can last from one week to one month, and it includes "solo" time, when students must use every skill they have learned.

For BOSS's students, there is nothing better. If they wanted comfort, they would bring their camping equipment and relax in a park. Instead, these people love the way BOSS **challenges** their minds and bodies, and learning how to survive without a lot of technology gives them a great feeling of achievement.

survive, v. – not die despite a difficult situation

wilderness, n. – area of natural land with few or no people

shelter, n. – covered place to protect people from weather or danger

skills, n. – things a person knows how to do and is able to do

challenges, v. – encourages one to do more or do better

C Read in Depth Read the article. Then write answers to the questions.

1. What activities can people do in Utah's parks and forests?

2. What is the philosophy of the survival school?

3. What do students at the school drink and eat?

4. How long does the field course last?

5. Would you like to attend this school? Why or why not?

The Lost World

Visitors who make the long journey to Canaima National Park—located deep in the Amazonian jungle near Venezuela’s southeastern frontier with Guyana and Brazil—are rewarded with some of the most dramatic scenery in South America. Covering an area of three million hectares (7.5 million acres), the park is famous for its steep cliffs and enormous “table mountains” (known as tepuis) that rise from the jungle like islands in a sea of green.

Meaning “house of the gods” in the native Pemon language, the tepuis rise to 2,700 meters above the surrounding forests, so high that each tepui seems wrapped in clouds. Formed out of **sandstone** over billions of years, their surfaces are scarred by canyons several hundred meters deep, and their vertical sides are continually being altered by water from heavy rainfalls. The rain helps to enhance the beauty of the landscape by creating hundreds of waterfalls, including the world’s tallest—Angel Falls.

A Dangerous Frog

Canaima is home to the yellow-banded poison dart frog, easily differentiated from other species by its brightly-colored body. The frog is precious to the Pemon—the native people of Canaima—as they traditionally use the chemicals in the frog’s **poisonous** skin to cover the tips of their hunting darts.



Glossary

plateau: a large area of high and fairly flat land

poisonous: able to kill or harm if swallowed or absorbed

sandstone: a type of rock that contains a lot of sand

vaporize: change from a solid or a liquid into a gas, or vapor

World Heritage Spotlight

Sites: **Canaima National Park**
Location: **Venezuela**
Category: **Natural**
Status: **World Heritage Site since 1994**



Canaima - National Park, Venezuela



The Tallest Waterfall

Although it was first discovered in the early 20th century by explorer Ernesto Sanchez La Cruz, Angel Falls was not known to the wider world until decades later, when American pilot Jimmie Angel became stuck in the mud while attempting to land on Auyan-tepui. During his 11-day hike back to civilization, Angel came across the waterfall that now has his name. Known as the “waterfall of the deepest place” to the Pemon, it falls through layers of cloud to a depth of 980 meters (2,940 feet). At the bottom, visitors to the park can barely feel the water at all: the height of the falls is so great that before it reaches the ground, the water is **vaporized** by intense winds.



◀ **Canaima's remote landscape** became the imaginary setting for Conan Doyle's famous fantasy novel *The Lost World*.

Land of Dinosaurs?

In 1912, Arthur Conan Doyle, author of the Sherlock Holmes stories, published a novel entitled *The Lost World*. The story follows four brave adventurers on an expedition to a **plateau** in South America

where prehistoric animals (dinosaurs and other extinct creatures), and ape-men still survive. Various film and TV versions have since been made of this tale of adventure and discovery. Parts of Conan Doyle's story have been attributed to

tales told by early explorers who visited Roraima, the oldest and highest table mountain in Canaima. Sadly, however, there is no truth in the notion that dinosaurs still exist—even in a place as remote as the tepuis.



Theme

Unit 2

3

Opening Activity

Look at the picture and answer the questions.

1. Where do you think this picture was taken?
2. What do you think happened (or is happening) here?
3. Do you think this is an important animal?
Why or why not?

An aerial photograph of a riverbed filled with numerous light-colored, rounded rocks of various sizes. A large, flat, white ice floe is partially submerged in the water on the right side of the frame. The water is a clear, light blue color.

NATURAL RESOURCES

Theme Goals

In this theme, you will learn to:

- talk about the natural world.
- talk about natural areas in Mexico.
- talk about the importance of conservation.
- use the passive voice in the present and the past.
- understand tag questions.
- use prior knowledge when listening.

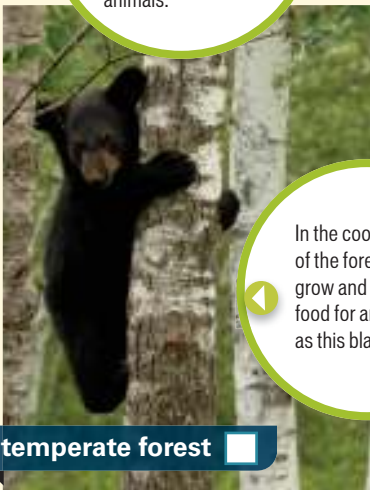
LESSON A HABITATS AND CONSERVATION

A Vocabulary in Context Look at the pictures and read the information.



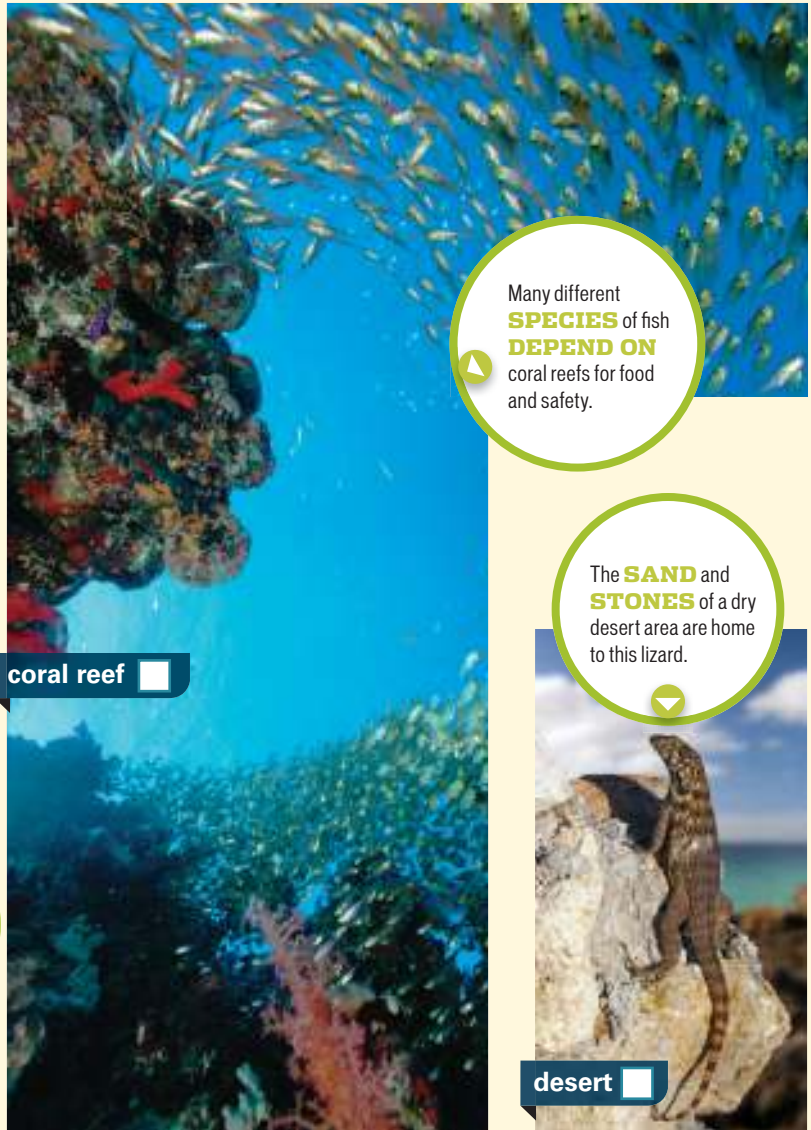
tropical rainforest

Warm tropical rainforests with plenty of rainfall provide a **HABITAT** for many plants and animals.



temperate forest

In the cool **SOIL** of the forest, plants grow and provide food for animals such as this black bear.



coral reef

Many different **SPECIES** of fish **DEPEND ON** coral reefs for food and safety.

The **SAND** and **STONES** of a dry desert area are home to this lizard.



desert

B Listen to the audio. Number the habitats in **A** in the order that you hear them.

C Vocabulary in Action Match each word to its definition.

- | | |
|------------------|---------------------------------------------------------------|
| 1. ___ species | a. substance on the surface of the earth in which plants grow |
| 2. ___ stone | b. rocks, pieces of a very hard substance |
| 3. ___ habitat | c. specific kind of animal or plant |
| 4. ___ sand | d. natural environment where something lives |
| 5. ___ soil | e. to need someone or something in order to live |
| 6. ___ depend on | f. substance that most deserts and beaches are made of |

D Grammar in Context Study the chart.

The passive voice	
Examples	Explanations
Small fish find food in the coral reef. <i>subject verb object</i>	In active sentences , the subject comes before the verb and the object.
Food is found by small fish in the coral reef. <i>subject verb agent</i>	In passive sentences , the object comes before the verb and agent in the subject position at the beginning of the sentence.
Insects are eaten by many animal species.	Form the passive with to be + the past participle of a verb.
Rainforest trees are used (by birds and other animals) as safe places to sleep.	The by phrase, which includes the agent, is optional in the passive voice.

The past participle form of a verb can have an *-ed* or *-en* ending, or can be irregular. For example:

- use used **used**
- need needed **needed**
- take took **taken**
- see saw **seen**
- lose lost **lost**
- buy bought **bought**

E Grammar in Action Read each sentence. Decide whether each underlined verb is active (A) or passive (P).

1. Most plants need soil in order to grow. (A) P
2. Fish hide among the coral in a reef. A P
3. This species of fish is eaten by larger fish. A P
4. These birds depend on fruit trees for food. A P
5. Many rainforest trees are cut down each year. A P
6. Flowers are enjoyed for their beauty and their smell. A P

F Complete each sentence with the passive form of the verb in parentheses.

1. This road is used by both humans and animals. (use)
2. Flamingos _____ near water most of the time. (see)
3. Heat from the sun _____ by rocks in the desert. (absorb)
4. Guadalajara _____ "The City of Roses." (call)
5. Natural habitats _____ by human activity. (change)
6. Trees _____ every year by forest fires. (destroy)

G Communicate With a partner, list three or more natural habitats in your country. Then discuss some of the animal species that depend on those habitats.

We have the Gulf of Mexico. Many kinds of fish live there.

Right, and mountain lions and wolves depend on the deserts in the north.

Thousands of hectares of forest habitat are burned each year by forest fires.

When you have **success**, you achieve something you wanted to achieve.

A Vocabulary in Context Read the article and study the words in bold.



Mexico's Sian Ka'an Biosphere Reserve

Located on the Yucatan peninsula in the state of Quintana Roo, the Sian Ka'an Biosphere Reserve is part ocean, part wetland, and part tropical rainforest. Hundreds of species of birds, fish, and even large mammals such as the jaguar and puma live in the reserve.

Like many natural areas, however, Sian Ka'an is **threatened** by **development**. The reserve has become a popular place for **ecotourism**, so some people want to build roads and hotels in the reserve. Other people think that **conservation** is more

important than development. They want to **protect** the land, water, and animals. After all, those are the things that attract tourists to Sian Ka'an.

What does the future hold for Sian Ka'an? Although ecotourism brings money into the area, natural areas can be **damaged** by human activity. So for now, several NGOs (non-governmental organizations) are working to limit development and other kinds of human activity in the reserve. And the animals and plants that live there are depending on the NGOs' success.



threatens
damage
ecotourism
protects

B Vocabulary in Action Fill in each blank below with a word from the box.

Conservation	Development
<ul style="list-style-type: none"> •(1) <u>protects</u> the land, water, and animals from human activity. •supports (2) _____ since ecotourists want to see the land, water, and animals in the reserve. 	<ul style="list-style-type: none"> •(3) _____ the land, water, and animals since people want to build roads and hotels in the reserve. •hurts ecotourism if roads and hotels (4) _____ natural areas.

C Listen and repeat each word after you hear it.



- | | | |
|----------------|-----------------|------------|
| 1. threatened | 3. ecotourism | 5. protect |
| 2. development | 4. conservation | 6. damaged |

D Grammar in Context Study the chart.

Using the passive

Examples	Explanations
Forest fires damage the forest habitat every summer. (active; emphasis is on the fire)	Use the passive to emphasize the receiver or the result of the action.
The forest habitat is damaged by forest fires every summer. (passive; emphasis is on the forest habitat)	
Many different bird species are found (by people) in the reserve. Jaguars are seldom seen (by people) in the wild nowadays.	Use the passive when the agent (the doer) is not important or not known.
I see my neighbor's cat every day.	Use active sentences if there is no reason to use the passive.

E Grammar in Action Rewrite each active sentence as a passive sentence.

1. Logging threatens forest habitats.

Forest habitats are threatened by logging.

2. Federal laws protect many species.

3. Tourists need roads and hotels.

4. Roads damage natural areas.

5. Thousands of tourists visit Sian Ka'an each year.

6. Ecotourism brings in a lot of money.



F Communicate Make a list of places in Mexico that are popular with tourists. Which places are popular because of the natural environment?

Tourists love to go to Cancun.

Do you think they go there for the ocean, or for the hotels and restaurants?

LESSON B CONSERVING OUR NATURAL RESOURCES AND THE DEVELOPMENT IMPACT

New Homes in Loreto, Baja California Sur

A Vocabulary in Context Read the questions and answers and look at the words in bold.

BAJA CALIFORNIA FAQs



Q: Why is the Baja California peninsula popular with ecotourists?

A: It's on the Pacific Ocean and the Sea of Cortez, so ecotourists can enjoy sea life such as dolphins, whales, and fish. The beautiful mountains and deserts are also **wonderful** for **hiking** and **sightseeing**.

Q: What kind of development is happening on the Baja California peninsula?

A: A lot of houses and condominiums. Most families only use these homes during vacations.

Q: Can anyone **own** a vacation home here?

A: Yes. You don't have to be a Mexican citizen to own a home here. Many vacation homes are owned by people from other countries, **especially** Canada and the United States.

Q: Are there a lot of new vacation homes for sale?

A: Yes, especially in the south near Cabo San Lucas and La Paz. They're building many new houses and hotels quickly there.

Q: Is the development in Baja California **sustainable**?

A: Maybe not. Some people worry about damage to the environment as more and more people arrive. It's also very dry, so having enough drinking water for everyone is another problem.

B Vocabulary in Action Complete each sentence with one of the words in bold.

1. If you _____ something, it is yours.
2. If something is _____, it is very, very good.
3. If you enjoy walking, you probably also enjoy _____.
4. If you love chocolate, _____ dark chocolate, people might call you a "chocoholic."
5. If you want to see a new place, you should go _____.
6. If something is _____, people can do it for a long time without damaging the earth.

C Grammar in Context Study the chart.

The passive in the past

Examples

Our home **was built** by my grandfather.
 The road to the beach **was opened** in 2009.
 People in the area **were asked** to conserve drinking water last August.

Explanations

Form the **past passive** with **was/were** + the past participle form of the verb.

D Grammar in Action Complete each sentence with the past passive form of the verb in parentheses.

1. That land was owned by my family until the 1970s. (own)
2. Last month, several beaches _____ because of water pollution. (close)
3. Wonderful Mayan ruins _____ here in the early 1900s. (discover)
4. Sustainable development _____ at the meeting last week. (discuss)
5. This area _____ in the past for hiking, but nowadays nobody comes here. (use)
6. In the past, development of this area _____ by government policies. (encourage)

E Read the events in the chart. Then complete the sentences below with the past passive.

Development of the Baja California peninsula	
1700s	Catholic priests built missions.
1800s	Miners extracted gold, silver, and copper.
1900s (early)	Mining companies constructed roads.
1930	The Mexican government divided the peninsula into Northern and Southern territories.
1900s (late)	Jobs attracted people to northern cities such as Mexicali and Tijuana.
Recently	Developers have built vacation homes and hotels near southern cities such as Cabo San Lucas and La Paz.

1. In the 1700s, missions were built by Catholic priests.
2. In the 1800s, metals such as gold and silver _____ by _____.
3. In the early 1900s, roads _____ by _____.
4. In 1930, the peninsula _____ into Northern and Southern territories by _____.
5. In the late 1900s, people _____ to northern cities such as Mexicali and Tijuana by _____.

F Communicate What attracted developers to Baja California in the past?



Why do people still want to go there now? Discuss with a partner.

CONSERVING OUR NATURAL RESOURCES



A Language Builder Study the chart.

Tag questions in simple present

Examples

This kind of farming is sustainable, **isn't it?**
Pelicans aren't endangered, **are they?**

They don't grow a lot of rice here, **do they?**
We should turn off the lights, **shouldn't we?**
Use pronouns in **tag questions**.

You enjoy sightseeing, **don't you?**
They can't build houses there, **can they?**

They are tomato plants, **aren't they?**
Yes, they are. / No, they aren't.
He has a sister, **doesn't he?**
Yes, he does. / No, he doesn't.

Explanations

Use **tag questions** to check your information or when you believe something is probably true.
Form **tag questions** with **be** after statements with **be**.

After other verbs, use **do** or another auxiliary such as *should*.

Use **negative tag questions** after affirmative statements. Use **affirmative tag questions** after negative statements.

Answer **tag questions** in the same way you answer other kinds of questions.

B Listening Listen to the conversation and answer the questions.



13

1. What kind of place are the speakers talking about? _____
2. Where is the place? _____

C Read the statements. Then listen to the conversation again and check True or False.



13

- | | True | False |
|------------------------------------------------|--------------------------|--------------------------|
| 1. The man wants the woman to see a picture. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. The woman saw a TV show about the place. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The place has a lot of forests and lakes. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Many pandas live in the reserve. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. The pandas' habitat is being destroyed. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The speakers talk about the pandas' future. | <input type="checkbox"/> | <input type="checkbox"/> |

Nature Reserves

Research a nature reserve in another country. Share information about the reserve and explain its importance. Create a handout with a map, pictures, and information to share with your classmates. Choose a nature reserve from the list below.

Srebarna Nature Reserve, Bulgaria	Kruger National Park, South Africa
Zealandia/Karori Sanctuary, New Zealand	Cascade Head, United States
Phoenix Islands Protected Area, Kiribati	Manú National Park, Peru

- A Brainstorm** What do you want to know about any nature reserve? In a small group, make a list of *Wh-* questions. Write them in the chart in **B**.
- B Research** Look at your questions. Use the Internet to research one of the nature reserves. Write answers in the chart. Find a clear map and some pictures, too.

Questions	Answers

- C Share** Share your information with a partner. Is there any information you left out? Create a one-page handout with information, a map, and pictures. Make copies for your classmates.
- D Present** Tell your classmates about the nature reserve. Explain the information on your handout. Answer your classmates' questions.



LESSON C STORIES OF CONSERVATION

A Listening in Context Listen to the audio.



14

1. Who is the speaker? _____
2. What is she talking about? _____

B Using Prior Knowledge Choose a word in parentheses to complete each sentence. Listen again to check your answers.



14

I already know...	I can guess ...
1. Animals are not killed in a nature reserve.	1. Fish are not (killed / safe) in a marine reserve.
2. Millions of people catch fish for a living.	2. More fish to catch means a (better / worse) economy.
3. People are often unhappy when the government tells them what to do.	3. Fishermen in New Zealand were (happy / unhappy) when the government created the coastal marine reserves.
4. People are usually happy when they can make more money.	4. Fishermen in New Zealand were (happy / unhappy) when they started catching more fish.

C Pronunciation Listen to these word pairs and notice how the final consonant sound of the first word is connected, or linked, to the vowel sound at the beginning of the second word.



15

1. tired of
2. news about
3. areas of
4. human activity
5. popular idea
6. coastal areas

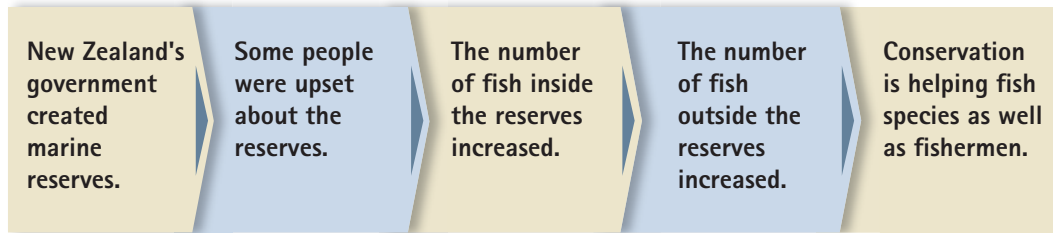
D Listen and repeat these phrases. Speak smoothly and do not pause between the linked words.



16

1. tired of hearing bad news
2. news about the environment
3. areas of coastal waters
4. all kinds of human activity
5. always a popular idea
6. catch fish in coastal areas

E Speaking Read the events and then write five questions with *Why...* in your notebook. Ask and answer the questions with a partner.



Why did they create the marine reserves?

To protect fish.

F Writing Read the information below about one scientist's conservation success story.



Who?	Jenny Daltry, explorer and scientist
Where?	The Cardamom Mountains in Cambodia
What?	<ul style="list-style-type: none"> • Daltry and her scientific team walked in the mountains. • They made a record of the plants and animals there. • They found some Siamese crocodiles. Most people thought the Siamese crocodiles were gone.
Why?	<ul style="list-style-type: none"> • Daltry's work showed people the importance of the Cardamom Mountains. • Over 1.5 million hectares of land were protected. • No logging will be done in the area.



Siamese crocodile

G Write in your notebook a paragraph about Jenny Daltry's conservation success story. Use information from **F**.



GET CLOSE TO MEXICO

Hundreds of sculptures by artist Jason de Caires stand on the ocean floor near the Isla Mujeres National Marine Park. The sculptures are a home for fish and coral. What other nature reserves do you know of in Mexico?

Coral Reefs

Coral reefs are home to a variety of fish species.

A Connect with the Text Look at the pictures and read the captions. Answer the questions.

1. Why are coral reefs important to fish?

2. How does the beauty of coral reefs threaten the reefs?

B Understand Paragraphs Scan the reading and choose the correct answer.

1. How many paragraphs are in the reading?

- a. two b. three c. four d. five

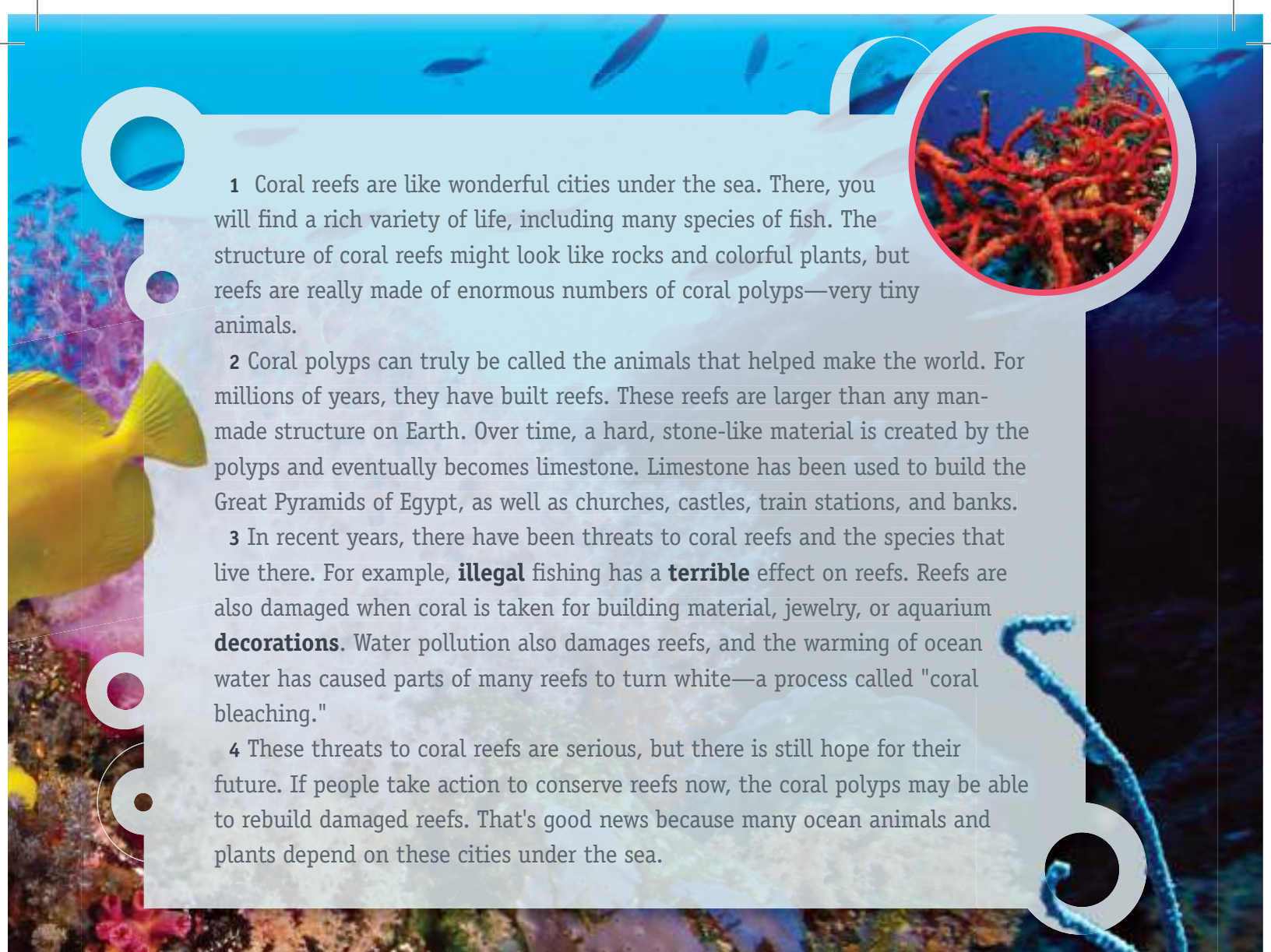
2. What is the purpose of paragraph 2?

- a. to explain why fish and other sea life need coral reefs
b. to describe the large structures made from coral polyps

3. What is the main idea of paragraph 3?

- a. Water pollution is harmful to coral reefs.
b. Coral reefs are threatened in several ways.





1 Coral reefs are like wonderful cities under the sea. There, you will find a rich variety of life, including many species of fish. The structure of coral reefs might look like rocks and colorful plants, but reefs are really made of enormous numbers of coral polyps—very tiny animals.

2 Coral polyps can truly be called the animals that helped make the world. For millions of years, they have built reefs. These reefs are larger than any man-made structure on Earth. Over time, a hard, stone-like material is created by the polyps and eventually becomes limestone. Limestone has been used to build the Great Pyramids of Egypt, as well as churches, castles, train stations, and banks.

3 In recent years, there have been threats to coral reefs and the species that live there. For example, **illegal** fishing has a **terrible** effect on reefs. Reefs are also damaged when coral is taken for building material, jewelry, or aquarium **decorations**. Water pollution also damages reefs, and the warming of ocean water has caused parts of many reefs to turn white—a process called "coral bleaching."

4 These threats to coral reefs are serious, but there is still hope for their future. If people take action to conserve reefs now, the coral polyps may be able to rebuild damaged reefs. That's good news because many ocean animals and plants depend on these cities under the sea.

Because corals are so beautiful, they are often used for jewelry or decorations.

C Read in Depth Read the article. Then write the answers to the questions.

1. What is the most important idea in the article?

2. What are coral reefs made of?

3. How have coral polyps "helped make the world" in the ocean?

4. How have coral polyps "helped make the world" on land?

5. What is the cause of coral bleaching?

6. What does the author want people to do now?

illegal, adj against the law
terrible, adj extremely bad
decoration, n something that adorns a place and makes it more attractive

EXPLORATION

A photograph of a yellow tent pitched on a sandy beach at dusk. The tent is illuminated from within, casting a warm glow. To the right of the tent, there is a red backpack and some gear. The background shows the ocean and a clear sky with a few stars visible.

Theme

UNIT 2

46

4

Opening Activity

Look at the picture and answer the questions.

1. What do you see in the picture?
2. Where do you think this is?
3. Why do people want to explore places like this?



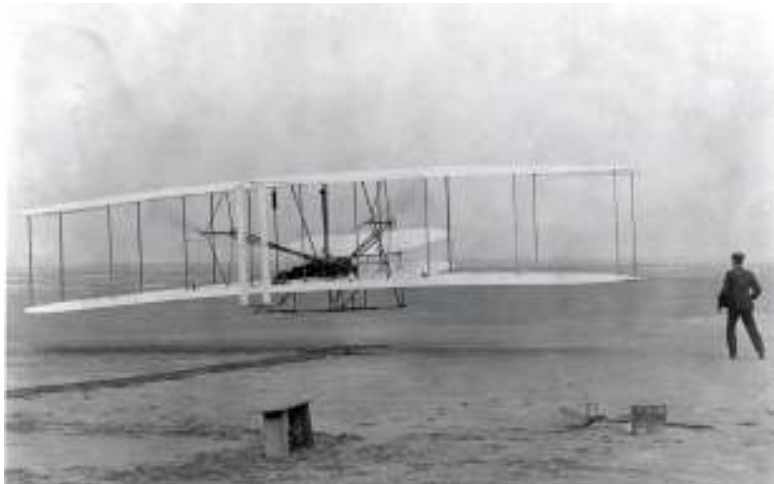
Theme Goals

In this theme, you will learn to:

- talk about explorers and exploration.
- talk about accomplishments and challenges.
- talk about air and space travel.
- understand the simple past and past progressive.
- use the present perfect.
- use *for* and *since* with the present perfect.

LESSON D NEW FRONTIERS

A Vocabulary in Context Read the information and study the words in bold.



In 1903, two American brothers named Orville and Wilbur Wright traveled a short distance in the world's first real **airplane**. It had a gasoline motor, and on the first day of tests, it stayed in the air for 59 seconds.



In 1961, human beings were able to leave the earth's **atmosphere** and travel high above the earth in a **spacecraft** for the first time. Yuri Gagarin, from the Soviet Union, was the first person in space. He returned after 108 minutes.

B Vocabulary in Action Listen to the audio. Number the words in **A** in the order that you hear them.

C Match each word to the correct definition.

- | | | |
|-------------------|-----------------|-------------------|
| 1. ___ airplane | 3. ___ mountain | 5. ___ spacecraft |
| 2. ___ atmosphere | 4. ___ ocean | 6. ___ underwater |

- a. very large body of water such as the Atlantic or Pacific
- b. vehicle for traveling to space
- c. happening below the surface of a lake, river, or ocean
- d. vehicle for traveling through the air
- e. mixture of oxygen and other gases that surround the earth
- f. very high area of land with steep sides



Before 1943, human beings could only stay **underwater** for a short time. Then French explorers Jacques Cousteau and Emile Gagnan introduced technology for "scuba diving," a new way for people to explore the world's lakes and **oceans**.

The highest **mountain** in the world, Mount Everest, was no place for human beings. Then, a team of expert mountaineers combined their knowledge. In 1953, Edmund Hillary from New Zealand and Tenzing Norgay from Nepal became the first people to stand at the earth's highest point.



D Grammar in Context Study the chart.

Simple past vs. past progressive

Examples	Explanations
The satellite returned to earth in 1979. Our airplane left the airport at 3:30 p.m.	Use the simple past tense to talk about completed actions or states in the past.
In the 1950s, both countries were developing new technology. Hugo wasn't at home at 7:15 this morning. He was driving to work.	Use the past progressive tense to talk about actions that were in progress at a specific time in the past. Form the past progressive tense with was / were + the -ing form of a verb.
Millions of people were watching their televisions when the spacecraft returned to earth.	With the past progressive, we often use when + a time clause in the simple past to express a specific past time.
Engineers were talking to Gagarin by radio while his spacecraft was orbiting the earth.	Use while with the past progressive for two things in progress at the same time in the past.

E Grammar in Action Complete each sentence with the simple past or past progressive form of the verb in parentheses.

- Clara was reading a book at 9:00 last night. (read)
- The first woman _____ into space in 1963. (go)
- Rodolfo Neri Vela _____ seven days in space in 1985. (spend)
- At 2:00 yesterday we _____ lunch in the cafeteria. (have)
- My cousin wasn't at home last month. He _____ in Uruguay. (travel)
- The airplane _____ at 9:15 yesterday morning. (arrive)

F Complete each sentence with *when* or *while*.

- Mike and Dolores were eating dinner _____ the phone rang.
- Hillary and Tenzing were feeling tired but happy _____ they got to the top of Everest.
- Engineers were talking to Gagarin by radio _____ he was traveling in the spacecraft.
- _____ Cousteau was swimming underwater, scientists were waiting for him on the boat.
- _____ we saw Guillermo, he was sitting alone in the park.
- I was learning Chinese _____ you were learning German.

G Communicate Tell your partner what you were doing at the time of the events.

World Cup tournament

Mexico's bicentennial

New Year's Eve

I was watching the game at my uncle's house when Spain won the World Cup.

Cool! I was watching at a café in my neighborhood.

UP AND AWAY

A Vocabulary in Context Look at the pictures and read the information.



A flight engineer astronaut in the International Space Station experiences weightlessness.

___ astronaut ___ weightless
___ gravity ___ float



A pilot in Wyoming, USA, flies a small plane that carries only a few passengers.

___ fly ___ flight
___ pilot ___ passenger

The suffix *-less* means

without.

weightless without weight

fearless without fear

limitless without limits

B Vocabulary in Action Listen to the audio. Number each set of words in **A** in the order that you hear them.

C Complete each sentence with one of the words from **A**.

- In space, people are not heavy. In fact, they're almost *weightless*.
- A person who controls an airplane is called a _____.
- A person who travels in an airplane, but does not control the airplane, is a _____.
- Birds and insects can move quickly through the air. They are able to _____.
- If you throw a ball in the air on earth, it falls because of _____.
- A person who flies in a spacecraft is called an _____.
- Clouds in the sky seem to _____. They don't fall from the sky.
- _____ is the action of flying.

D Grammar in Context Study the chart.

Present perfect

Examples

Scientists and engineers from several countries **have worked** on the International Space Station.

The Hubble Space Telescope **has taken** many excellent photographs of objects in space.

Has the space agency **decided** to travel to Mars?
Yes, they **have**. No, they **haven't**.

Have you **ever flown** in an airplane?

Why has the airplane **turned** around?
Where have you **seen** that man before?

Explanations

Use the **present perfect tense** to talk about things that:

- happened in the past and are important or relevant in the present.
- began in the past and are still true now.
- happened more than once in the past.

Use **has** or **have** to ask a *Yes/No* question with the **present perfect**.

Use **ever** in *Yes/No* questions with the present perfect to ask about any time before now.

Use a *wh-* word + **has** or **have** to ask a *wh-* question with the **present perfect**.

E Grammar in Action Complete each sentence with the present perfect form of the verb in parentheses.

1. The pilot has flown this kind of airplane many times. (fly)
2. I _____ several TV programs about space exploration. (watch)
3. The astronauts will return on Thursday. They're happy because the mission _____ very successful. (be)
4. Mike and Tina _____ the bill, so we can leave any time. (pay)
5. Raul _____ optimistic about the future since the day he got his job. (be)
6. Astronauts _____ ways to deal with weightlessness in space. (learn)

Past participles

Regular: talked, traveled, watched, explored

Irregular: spoken, gone, paid, gotten, seen

F Write short answers to the questions. Use your own knowledge.

1. Have astronauts ever walked on the moon?
Yes, they have.
2. Have you ever been a passenger on an airplane?

3. Have human beings ever walked on Mars?

4. Have you ever seen a satellite in the night sky?

5. Have people from several different countries worked on the International Space Station?

6. Have you ever wanted to travel in space?

G Communicate In your notebook, write three questions with *Have you ever...*? Ask your partner the questions and talk about the answers.

Have you ever seen a UFO?

Maybe. Several years ago I saw...

LESSON E VISITING PLACES

A Vocabulary in Context Read the information and study the words in bold.



Exploring the Kalimantan region in Indonesian Borneo is not easy. There are no roads to the Marang Mountains, but that's where Luc-Henri Fage wanted to go. At first, the trip was an **adventure**—an exciting vacation for Fage and his friends. All of them liked to explore caves, and the caves in the Marang Mountains seemed like a fun **challenge**.

The mountains are in a hot, humid jungle region. To get there, Fage and his friends **traveled** in canoes. They **camped** in tents, and during one storm, fire ants **tried** to enter the tents to get out of the rain. After several days, the men **reached** the mountains and **climbed** up to the highest caves. There they found prehistoric cave paintings. The paintings are of human hands, and some of them are over 10,000 years old!

Fage and a team of scientists have now found almost 2,000 hand paintings. They have written a book about the paintings, and they hope the information results in the protection of the paintings.

cave large hole in the side of a hill or mountain

tent shelter usually for camping

fire ants aggressive insects that bite people

Find out more about Fage and the cave paintings at www.kalimanthrope.com.

B Write answers using the words and information from **A**.

1. How did the men get to the mountains?
They traveled in canoes.
2. What did the men do at night?

3. What did the fire ants try to do?

4. How long did it take to reach the Marang Mountains?

5. How did the men reach the caves?

6. What did the men find in the caves?

C Talk about the questions with a partner.

1. Does Fage's trip to the Marang Mountains sound enjoyable to you?
2. A challenge is something that is difficult, but also beneficial or satisfying. In your opinion, why did Fage think the trip would be "a fun challenge"?

D Grammar in Context Study the chart.

Simple past vs. present perfect

Examples	Explanations
Leandro climbed El Pico de Orizaba in 2011. We went to the café for a sandwich last night.	Use the simple past tense to talk about completed actions or states in the past.
Lucía has gone to Acapulco before, so she wants to go to a different city for her vacation.	Use the present perfect tense to talk about past actions or states that impact the present.
We have walked a long way this morning. Maybe we should stop and rest now.	Use the present perfect to talk about a time period that began in the past and includes the present.

E Grammar in Action Complete each sentence with the simple past or present perfect form of the verb in parentheses.

- I have eaten a lot today, so I'm not hungry now. (eat)
- Camila _____ Mount Fuji when she visited Japan in 2009. (climb)
- Paco and Javier _____ to Belize three times. I think they really like going there. (travel)
- I _____ to call Marta yesterday, but she didn't answer her phone. (try)
- My brother _____ to Austria last year, and he liked it a lot. (go)
- Ramona _____ camping for a long time. Her family went camping when she was a baby, and now she takes her children on camping trips. (enjoy)

F Answer the questions with complete sentences using simple past or present perfect and information about yourself.

- In what year were you born?

- Where were you born?

- Which cities in Mexico have you visited?

- What are some things you have done today?

- Think of one musical group you like. When did you hear them for the first time?

- Think of one adventure from your past. What did you do?

G Communicate Share your answers from **F** with a partner.

I was born in Chiapas.

Really? Where in Chiapas?



Adventure Travel

Research destinations for adventure travel. Find out about some of the activities people do in those places. Create a video for one destination. You can post it on your preferred social network.

Brainstorm Where would you go if you could take an adventure vacation? What would you do there? Look at the travel destinations and example activities in the box. (You won't need them all.) In a small group, make a list of *Wh-* questions. Write them in the chart in **B**.

Travel destinations	Travel activities
Yucatan peninsula Costa Rica Australia The Galapagos Islands Kenya and Tanzania Belize	hiking, biking, tours of Mayan ruins hiking, river rafting, rainforest tours horse or camel riding, camping wildlife viewing, boating, kayaking wildlife viewing, mountain climbing swimming, snorkeling, diving

B Research Look at your questions. Use the Internet to research one of the adventure travel destinations. Write answers in the chart.

Questions	Answers

C Share Share your information with a partner. Is there any information you left out? Create your video.

D Present Show your classmates the video you created. Tell them about the travel destination and the activities that tourists can do there.



Spacewalk

A Before You Watch Read the information and look at the underlined words. Then match each word to the correct definition.

Can you imagine floating in space with only a spacesuit to protect you? There is no oxygen to breathe in space, and temperatures can rise very high or drop very low. There is also dangerous radiation from the sun and from outside our solar system. On Earth, of course, the atmosphere gives us oxygen and protects us from radiation and extreme temperatures. But on a spacewalk outside the International Space Station, the situation is very different.

- | | |
|------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> 1. spacesuit | a. how hot or cold something is |
| <input type="checkbox"/> 2. oxygen | b. go down |
| <input type="checkbox"/> 3. temperatures | c. spending time in space outside a spacecraft |
| <input type="checkbox"/> 4. rise | d. a gas in the earth's atmosphere that human beings need |
| <input type="checkbox"/> 5. drop | e. special clothing worn by people in space |
| <input type="checkbox"/> 6. spacewalk | f. go up |

B While You Watch As you watch the video, listen for the words in a. Check (✓) each word when you hear it.

C After You Watch Read the questions. Then watch the video again and write answers.

1. What high and low temperatures are possible in space?

2. What nationality was the first person to walk in space?

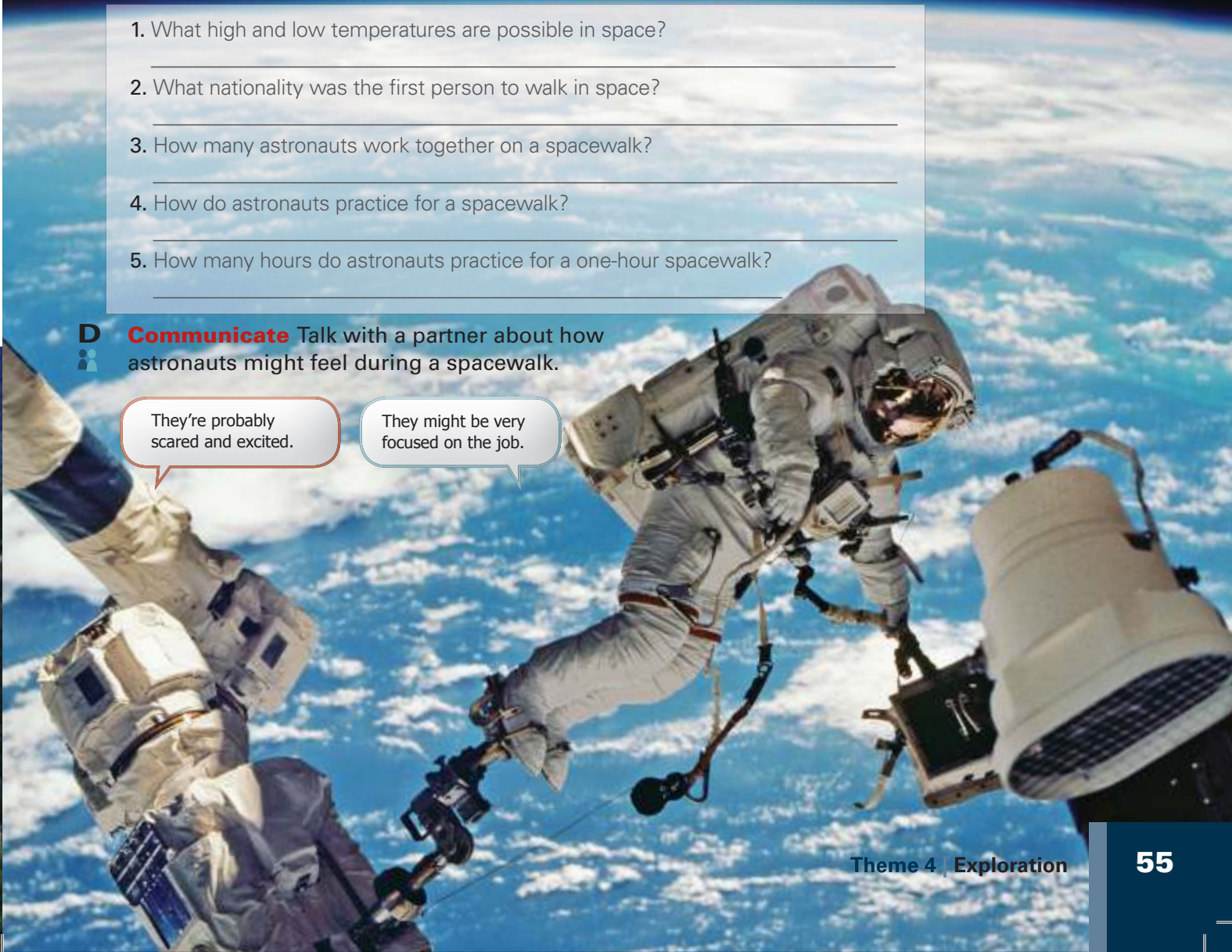
3. How many astronauts work together on a spacewalk?

4. How do astronauts practice for a spacewalk?

5. How many hours do astronauts practice for a one-hour spacewalk?

D Communicate Talk with a partner about how astronauts might feel during a spacewalk.

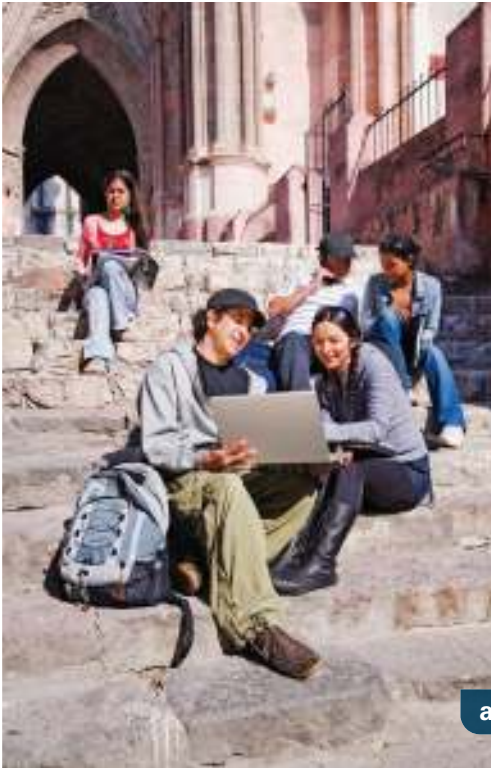
- They're probably scared and excited.
- They might be very focused on the job.



LESSON F EXPLORING FAR AND NEAR

A **Listening in Context** Listen to the audio. Answer the questions.

- 20 **1.** What are the friends looking at? _____
2. What modern Mexican city are they talking about? _____



B Listen again and write the letter of the photo that matches each sentence.

- 20
 ___ 1. Claudia has visited Monte Albán.
 ___ 2. Jenny likes to walk around the university campus.
 ___ 3. Jenny explored a place that was part garden and part museum.
 ___ 4. The university campus is a good place for people watching.
 ___ 5. Claudia went on a long car trip last winter.
 ___ 6. El Orchidario has a lot of information about orchids.

Tip Make sure your top teeth touch the inside of your bottom lip to make the /v/ sound.

C **Pronunciation** Listen to each sentence and look at the underlined letters.

21 Notice the /v/ sound.

1. Hve you seen this picture?
 2. I nver go very far.
 3. I've heard of that place.

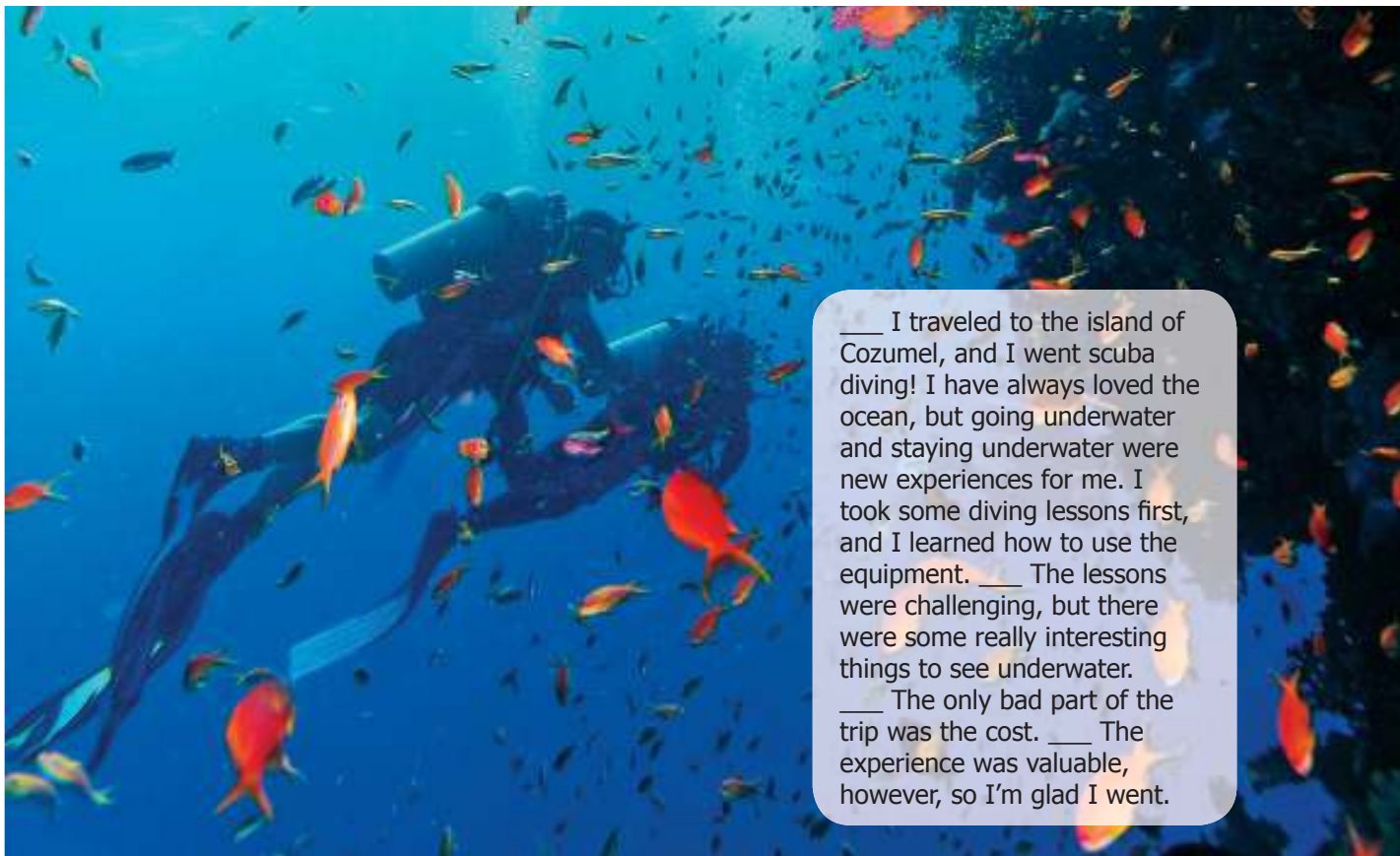
D Listen and repeat each word.

- 22
- | | | | |
|------------|-------------|---------------|------------|
| 1. very | 4. valuable | 7. never | 10. arrive |
| 2. virus | 5. private | 8. university | 11. save |
| 3. variety | 6. ever | 9. have | 12. above |

E Speaking Write three sentences in your notebook about places you have explored. Tell your partner what you saw.

F Writing Complete the paragraph with the sentences in the box. Write the letter of the correct sentence on the line.

- a. I saw a coral reef, an old ship on the bottom of the ocean, and a lot of fish.
- b. The hotel, meals, transportation, and scuba lessons all cost money.
- c. Last month I had a wonderful adventure.
- d. When you go scuba diving, you wear a special suit, and you carry your own air in tanks on your back.



___ I traveled to the island of Cozumel, and I went scuba diving! I have always loved the ocean, but going underwater and staying underwater were new experiences for me. I took some diving lessons first, and I learned how to use the equipment. ___ The lessons were challenging, but there were some really interesting things to see underwater. ___ The only bad part of the trip was the cost. ___ The experience was valuable, however, so I'm glad I went.

G Write a paragraph about a travel experience or some other past experience in your life. Use the simple past and present perfect one or more times.

H Look at your partner's paragraph. Does he/she use the simple past and present perfect correctly?

GET CLOSE TO MEXICO

Tourism is very important in Mexico. What are some popular destinations in Mexico for tourists?



A Connect with the Text Look at the pictures and answer the questions.

1. Do these vehicles look like airplanes or spacecrafts to you?

2. How would you feel about traveling in these vehicles?

B Using Visuals Look again at the picture on the next page and read the caption. Answer the questions.

1. Which vehicle was made first? How do you know?

2. How much longer is *SpaceShipTwo* than *SpaceShipOne*?



Virgin Galactic's *SpaceShipTwo*, at 18 meters long (60 feet), will be twice as long as the original *SpaceShipOne*. It will carry six passengers and two pilots.

1 Burt Rutan was a teenager when the Soviets and Americans began sending satellites and then people into space. He wanted to travel to space, too. As an adult, though, Rutan realized that governments were not going to send ordinary people into space. "If my **dream** was going to come true—of floating weightless in the black sky and being **thrilled** by the sight of Earth from outside our atmosphere—I'd have to get things started myself," said Rutan.

2 The history of airplanes encouraged Rutan to build his own spacecraft. Not many years after the Wright brothers' first flight in 1903, private **factories** in France, England, and Germany were producing hundreds, and then thousands of airplanes a year. So Rutan decided to build his own spacecraft, *SpaceShipOne*.

3 In 2004, Rutan successfully entered space and returned to Earth twice in two weeks, and won the ten-million dollar Ansari X Prize—a prize to encourage the development of private space travel. His success got the world's attention, and ideas for private space travel began to appear.

4 One private company, Virgin Galactic, plans to build a spacecraft in which passengers will float weightless in space for six thrilling minutes and view space through a large window. "Of all the things we've done," Richard Branson, the owner of Virgin Galactic, says, "Virgin Galactic is the one I'm most excited about. [...] People have been waiting for this moment for thousands of years."

dream, n.- something you would like to have happen
thrilled, adv.- very happy and excited
factory, n.- large building where things are made

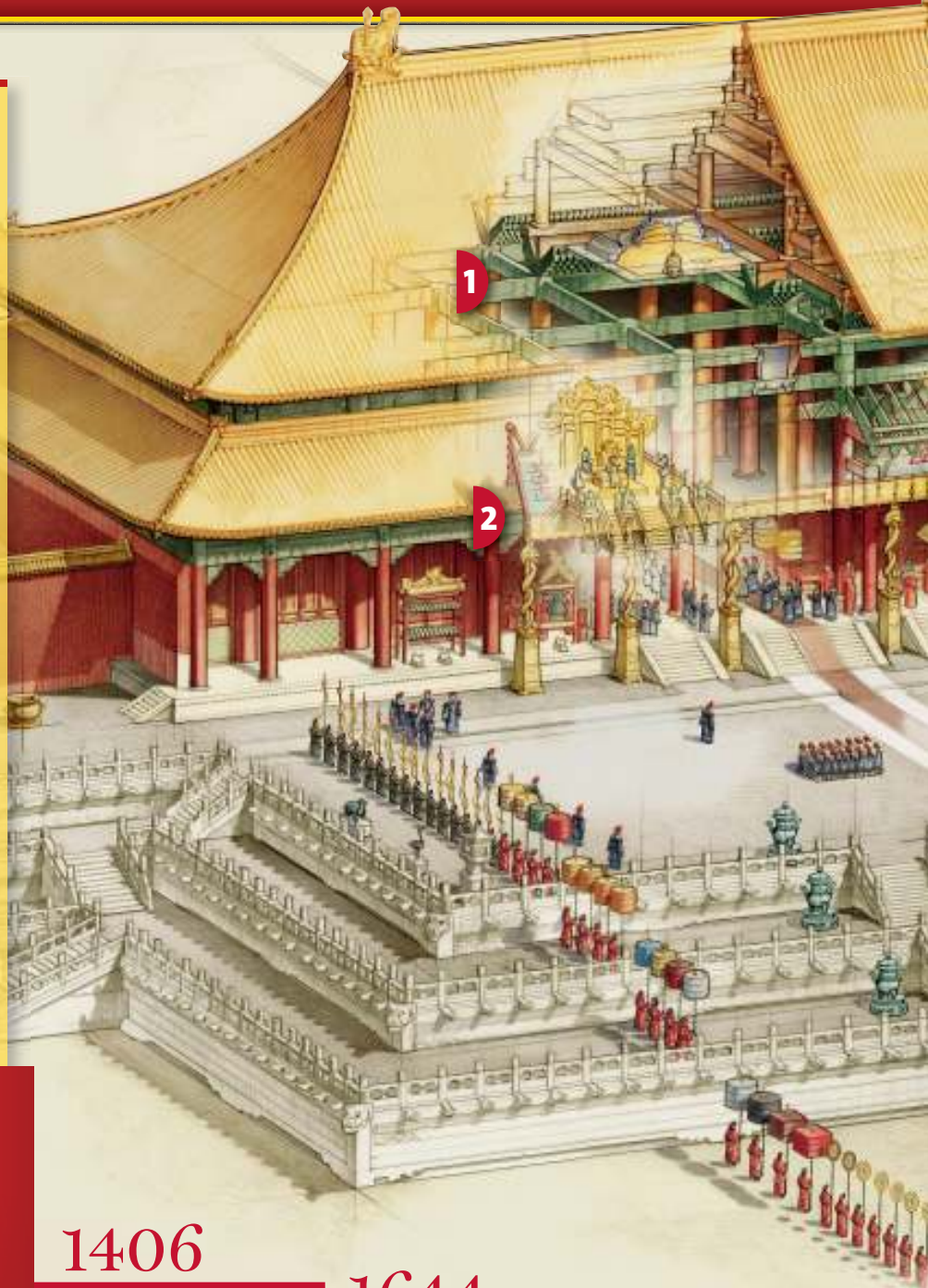
C Read in Depth Read the article again. Then circle the correct answer to the questions.

1. What was Burt Rutan able to build?
 - a. his own airplane
 - b. his own factory
 - c. his own spacecraft
2. Why was Rutan encouraged by the history of airplanes?
 - a. They were made by private companies.
 - b. They were made by governments.
3. According to the article, which statement about Virgin Galactic's private space travel is true?
 - a. They're offering it now.
 - b. They plan to offer it in the future.

The Forbidden City

For nearly 500 years, from the early 15th century to the early 20th century, 24 emperors of the Ming and Qing **dynasties** ruled China from a vast palace city in the heart of Beijing. Built with walls nearly ten meters tall, the **Forbidden City** served as the home for China's ruling family, and as the scene for important religious and official ceremonies.

For centuries, only the emperor's family and officials could enter this fascinating hidden city. Since its opening in 1925, thousands of visitors have passed through its gates, drawn not only by the **imperial** city's historical importance, but also by its huge size and magnificent architecture. The site also contains an astonishing range of imperial treasures—an accumulation that comprises nearly 50,000 paintings, 320,000 pieces of **porcelain**, and up to 1,000 precious timepieces, including historical pieces from Switzerland, Britain, and the U.S.A.



Glossary

- dynasty:** a series of rulers who belong to the same family
- forbidden:** not allowed
- harmony:** pleasing or peaceful arrangement of parts
- imperial:** referring to people or things connected with an empire
- porcelain:** a hard, shiny material made by heating clay
- supreme:** very great; at the highest level

1406

Ming emperor Yongle (Zhu Di) moves his capital from Nanjing to Beijing, where he builds the Forbidden City on the site of Kublai Khan's palace (described by explorer Marco Polo).

1644

The last Ming emperor kills himself as the capital erupts in violence; after a brief struggle for power the Qing (Manchu) gain control, beginning a new dynasty.

1912

The last Qing emperor, six-year-old Puyi, gives up his power; he is allowed to live temporarily in the Forbidden City until subsequently forced to depart in 1924.

World Heritage Spotlight

Site: Imperial Palace of the Ming and Qing Dynasties
Location: Beijing, China
Category: Cultural
Status: World Heritage Site since 1987



Beijing, China

Chinese artists utilized bright colors to give the Forbidden City its brilliant appearance.



An Imperial Wedding

In March 1889, more than 500 officials and male family members gathered at the Hall of Supreme Harmony for the ritual of announcing the marriage of the emperor Guangxu and empress Longyu. The event coincided with the start of the Qing dynasty's decline—an imperial wedding was never celebrated on such a vast scale again.

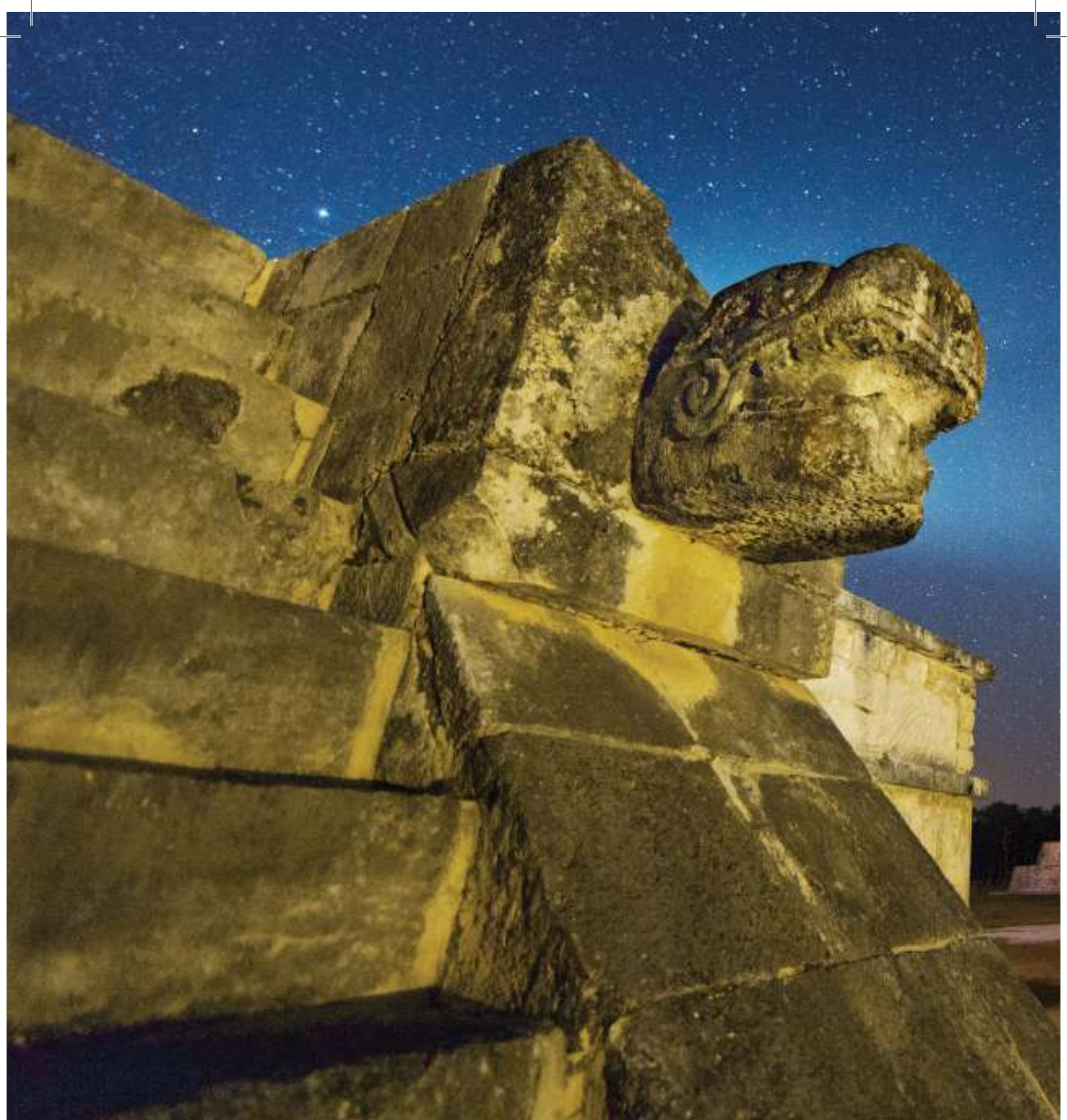
- 1** The Hall of Supreme Harmony's roof is supported by painted beams connecting 72 columns nearly 12 meters (39 feet) tall.
- 2** In the center of the building, the emperor sits on the dragon throne, the imperial seat of power.
- 3** In the courtyard, government ministers, accompanied by family members, line up according to rank.
- 4** The narrow avenue leading south is known as the Imperial Way; only the emperor can walk—or be carried—along this path.

1949

China's new leader Mao announces the establishment of the People's Republic of China from the Forbidden City's Tiananmen Gate.

The layout of the Forbidden City is built precisely along a central north-south line. This line continues south to Tiananmen Square, the world's largest public square.





Theme

UNIT 3

5

Opening Activity

Look at the picture and answer the questions.

1. What do you see in the picture?
2. Where do you think this is?
3. When do you think this place was built?

THE PAST

A large, multi-tiered stone pyramid, likely an ancient Mesoamerican structure, is illuminated from below, casting a warm glow. The pyramid is set against a dark night sky filled with numerous stars. The foreground is a dark, flat expanse, possibly a field or a cleared area, with some faint lights visible. The overall scene is serene and evokes a sense of history and mystery.

Theme Goals

In this theme, you will learn to:

- talk about world archeological sites.
- talk about visiting a historical site.
- talk about an ancient empire.
- use the past perfect tense.
- use the third conditional.
- talk about animals of the past.

LESSON A LEARNING FROM THE PAST



Egypt: The Great Pyramid at Giza



China: The Great Wall



Guatemala: Mayan Temple at Tikal



Cambodia: The Angkor Wat Temple



Peru: Incan ruins at Choquequirau

A Vocabulary in Context Read the information and look at the words in bold.

- The Great Pyramid at Giza was a **monument** to an Egyptian pharaoh—probably the pharaoh Khufu. It took 20 years to **construct** the pyramid.
- The Great **Wall** of China began as several smaller walls that were joined together over time. The wall is **evidence** of a history of conflict and even war with civilizations to the north.
- The **ruins** at Tikal and at other archeological **sites** tell us much about the daily lives of the people who lived there.
- The temples at Angkor are quite beautiful, but the engineers of the Khmer Empire also built huge **structures** called *reservoirs*. These held water for people to use during the dry season.
- People of the early Inca civilization used only simple **tools** to cut and fit together large pieces of stone, but their walls and buildings were very well made.

Archeology words:

- ruins
- evidence
- monument
- structures
- tools
- construct
- site
- wall

B Vocabulary in Action Circle the correct word or phrase to complete each sentence.

1. A monument is built in order to (remember / forget) someone.
2. Structures are things that people (build / learn).
3. Sites are (people / places).
4. Evidence is anything that gives us (information / happiness) about past events.
5. When you construct something, you (reach / build) it.
6. A wall in a house or apartment often has a (bed / window) in it.
7. Tools are things you can use to (build / buy) something.
8. When we see ruins, they're usually from a very (old / new) building or city.

C Complete each sentence with a word in bold from A.

1. Tlatelolco, Cempoala, and El Cerrito are some of the archeological sites in Mexico.
2. People built several _____ at El Cerrito, including a pyramid and a palace.
3. This statue is a _____ to Benito Juarez. I think it looks exactly like him.
4. The city plans to _____ a new building across from the plaza.
5. There was a beautiful temple here in the past, but now you can only see the _____.
6. Most of the living room will be white, but one _____ will be blue.

D Grammar in Context Study the chart.

Past perfect with simple past

Examples	Explanations
When they arrived at the train station, the train had left .	Form the past perfect tense with <i>had</i> + the past participle of a verb.
The American explorer Hiram Bingham told the world about Machu Picchu in 1911. Few people knew about the village at that time because no one had lived there since 1572.	Use the past perfect tense with the simple past tense to make the sequence of past events or situations clear. The event or situation in the past perfect happened earlier—before another past time.
The Chinese (had) fought in many wars before they built The Great Wall.	When words such as <i>before</i> or <i>after</i> make the sequence of past events clear, the simple past is often used instead of the past perfect.
Had you seen pictures of the Great Pyramid at Giza before today? How long had Machu Picchu been abandoned when Hiram Bingham first saw it? We hadn't been there very long when it began to rain.	Form <i>Yes/No</i> questions, <i>Wh-</i> questions, and negative statements with the past perfect.

E Grammar in Action Complete each sentence with the simple past or past perfect of the verb in parentheses.

- In 2002, workers discovered (discover) parts of the ancient Thang Long Citadel in Hanoi, Vietnam.
- This was a problem because the government _____ (want) to construct a new building on the site.
- They decided to let archeologists explore the site. The archeologists _____ (find) the ruins of ancient palaces as well as thousands of interesting objects.
- The archeologists were surprised because they _____ (expect) to find very little at the site.
- The Thang Long Citadel _____ (become) an official World Heritage Site in 2010.
- At that time, modern people _____ (know) about the citadel ruins for only eight years.

Past participles

Regular:

asked
discovered
closed
believed

Irregular:

found
built
known
taken

F Communicate Do you ever wonder about the lives of people in the past? Write three questions. Talk about them with a partner.

How did they build stone cities high up in the mountains?

That's a great question!



A Vocabulary in Context Look at the picture and read the words.



Feelings	
Negative tiring, boring, confusing	Positive amazing, surprising, fascinating

B Vocabulary in Action Listen to the conversations and complete each sentence with a word from **A**.

1. The man in conversation 1 thinks the tour is boring.
2. The woman in conversation 1 thinks the tour is _____.
3. Both speakers in conversation 1 think the map is _____.
4. The woman in conversation 2 thinks the tour is _____.
5. The man in conversation 2 thinks the pyramid is _____.
6. Both speakers in conversation 2 think the age of the temple is _____.

C Read the sentences. Then listen again and circle the correct word or phrase.

1. If something is tiring, it (gives you / takes away your) energy.
2. If something is fascinating, it (holds / doesn't hold) your attention.
3. If something is confusing, its meaning (is / isn't) clear.
4. If you say that something is amazing, you probably think it's (wonderful / terrible).
5. If you say that something is surprising, it means you (knew / didn't know) about it before.
6. If something is boring, it (holds / doesn't hold) your attention.

D Grammar in Context Study the chart.

Time expressions with past perfect

Examples

Before my grandfather died, we took the train to Los Mochis because he **had always enjoyed** traveling by train.

Before last week, I **had never visited** the museum.

I didn't eat lunch with Gisela because I **had (already) eaten already**.
When Rafa arrived, the party **hadn't (yet) started yet**.

Explanations

The time **expressions** *always, never, already, and (not) yet* are often used with the **past perfect**.

The **time expression** usually comes between *had* and the past participle of the verb.

Already and *yet* may also come after the past participle of the verb.

E Grammar in Action Complete each sentence with the simple past for the more recent event and the past perfect for the earlier event.

- The tourists wanted (want) to go see the temple. They had already seen (already/see) everything else at the historical site.
- We _____ (get) to the movie theater a little late, but fortunately the movie _____ (not/start/yet).
- Maria _____ (take) her vacation in Cuba because Cuban culture _____ (always/be) fascinating to her.
- She _____ (never/go) to Cuba before she _____ (take) her vacation there last month.

F Answer the questions using complete sentences.

- When you were ten years old, what had you always wanted to do?
I had always wanted to play the guitar. I did learn to play a few years later.
- Before this semester, what English word had you never heard before?

- When you got to class today, what had you already done?

- When you were ten years old, what kind of food had you never eaten before?

- When you got to class today, what had not happened yet?

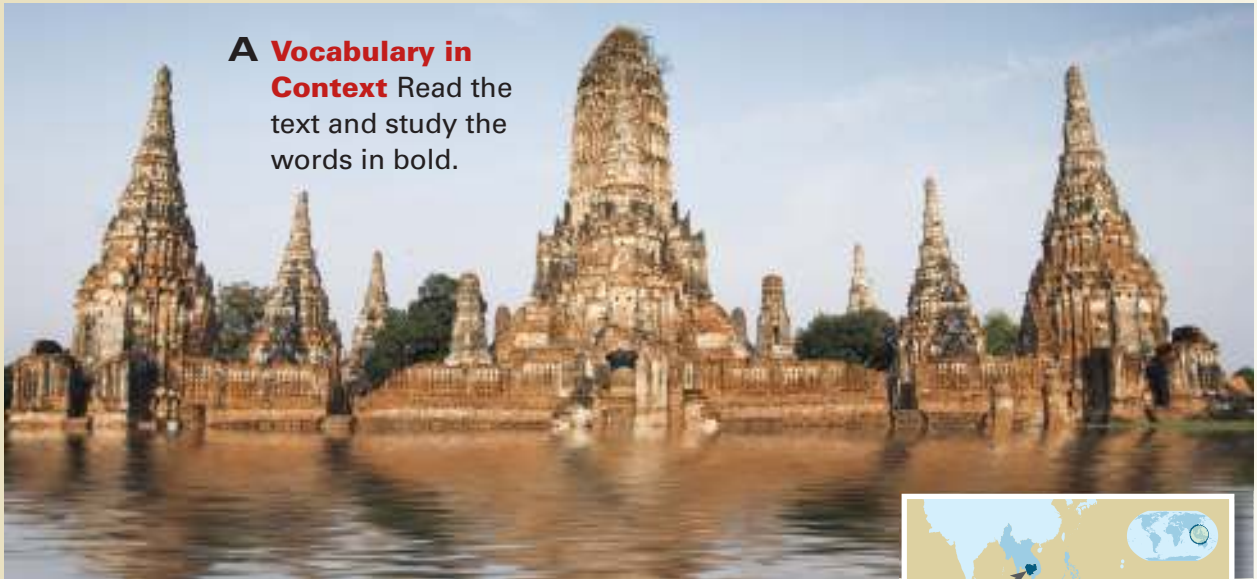
- Before this semester, how long had you already studied English?

G Communicate Discuss the questions with your partner.



- Before you took this class, what aspects of English had always been...
 - confusing to you?
 - boring to you?
- Now, what aspects of English are ...
 - clear to you?
 - interesting to you?

LESSON B THE RISE AND FALL OF AN EMPIRE



A Vocabulary in Context Read the text and study the words in bold.



Angkor The City and Its Water

Even in ruins, Angkor is a fascinating city. For hundreds of years, it was the capital of the Khmer **Empire**—now part of Cambodia. There are 50 temples, including Angkor's largest and most famous temple—Angkor Wat.

Nowadays, you'll mostly see tourists at Angkor, but in the 13th **century**, around 750,000 people lived there. They needed food and water, but Southeast Asia only gets a large **amount** of rain during a few months of the year. In order to have water for its **population** and for **farming**, Angkor's engineers built enormous structures to store water and to move it from place to place.

By the 16th century, however, Angkor's **economy** had changed from farming to **trading** by sea. Then, in the early 1700s, Vietnam took control of the Mekong River, and Khmer boats could no longer reach the South China Sea. The Khmer people couldn't use the river to buy and sell food and other **goods**, so they moved away from Angkor.

amount
century
economy
empire
farming
goods
population
trading

B Vocabulary in Action Listen to the audio. Circle the words in the box that you hear.

C Match each word to its definition.

- | | |
|--------------------|--------------------------------------------------------------------------------|
| 1. <u>e</u> amount | a. time period of 100 years |
| 2. ___ century | b. buying and selling, exchanging one thing for another |
| 3. ___ economy | c. the money, industry, and commerce of a country or region |
| 4. ___ empire | d. growing food crops for people or animals to eat |
| 5. ___ farming | e. quantity, how much of something there is |
| 6. ___ goods | f. all of the people who live in a certain place |
| 7. ___ population | g. things that are made to be sold |
| 8. ___ trading | h. several nations or groups under the control of one powerful leader or group |

D Grammar in Context Study the chart.

Third conditional

Examples

If Brandon **had gotten** to class on time, he **would have heard** the teacher's instructions.

If people **had stayed** in Angkor, they **would not have been** able to make a living.

If he had been the king, he **would have** had a monument built in his honor.

Explanations

Use the **third conditional** to talk about unreal or untrue conditions in the past.

Use an **if** clause with a verb in the past perfect and a result clause with **would** + a verb in the present perfect to form the third conditional.

Always use the simple form of the verb **have** after the modal **would**.



E Grammar in Action Circle the letter of the statement that is true.

- We would have gone to the park if the weather had been better.
 - We went to the park.
 - We didn't go to the park.
- If I had not bought those expensive blue jeans, I would have more money now.
 - I bought the blue jeans.
 - I didn't buy the blue jeans.
- If Misael had talked to me, I would have helped him with his problem.
 - I helped Misael.
 - I didn't help Misael.

F Fill in the blanks to form a sentence using the third conditional.

- Angkor's engineers built the barays. The city had enough water. If the engineers had not built the barays, the city would not have had enough water.
- The Khmer kings ordered the construction of temples. The temples were built. If the kings _____, the temples _____.
- In earlier centuries, farmers grew a lot of rice. The population had enough food. If the farmers _____, the population _____.
- In later centuries, trading became important. Angkor's people needed to travel on the Mekong. If trading _____, Angkor's people _____.

G Communicate How would your life have been different if you had been born in the 19th century (the 1800s)? Finish the sentences in your notebook. Then tell your partner.

If I had been born in the 19th century, ...

I would have worn...

I would have worked...

I would not have...

LOSING THE PAST?

A Language Builder Study the chart.

Transitions	
Examples	Explanations
<p>Our language reveals a lot about our culture. In addition, it gives us a personal identity.</p> <p>When a language dies, it is lost forever. Furthermore, much of the knowledge and wisdom of the people who spoke it are also lost.</p>	<p>Use transitions to show relationships between ideas.</p> <p>Use <i>In addition,...</i> to add another idea.</p> <p>Use <i>Furthermore,...</i> to add an explanation.</p>
<p>Some indigenous languages are still widely spoken. For example, / For instance, more than eight million people speak the Quechua languages.</p>	<p>Use <i>For example,...</i> or <i>For instance,...</i> to introduce an example.</p>
<p>Many elderly Navajo people speak the language. In contrast, most young Navajo speak only English.</p> <p>Some children want to learn indigenous languages. On the other hand, they are not permitted to speak those languages at school.</p>	<p>Use <i>In contrast,...</i> or <i>On the other hand,...</i> to introduce a contrasting or opposing idea.</p>

B Listening Listen to the audio and answer the questions.



25

1. Approximately how many of the world's languages do we lose each year? _____
2. Besides Spanish, how many national languages are there in Mexico? _____

C Listen again and choose *True* (T) or *False* (F) for each sentence.



25

- | | True | False |
|--------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1. Around 6,000 languages are spoken in the world today. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Language loss occurs when languages are not spoken anymore. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Language loss is also the loss of culture and knowledge. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The Seri people of Sonora have more than 60 words for family relationships. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. While some languages are dying, Spanish, English, and Chinese are growing. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Using indigenous languages in the classroom is bad for those languages. | <input type="checkbox"/> | <input type="checkbox"/> |

Indigenous Languages

Research one of Mexico's indigenous languages. Tell your classmates how many people use the language, where it is spoken, and some other interesting facts about the language. Create a presentation for a small group of your classmates.

A Brainstorm What do you want to know about indigenous languages? What is happening now to preserve or to threaten these languages? Look at the indigenous groups and regions in the box. In a small group, make a list of *Wh-* questions. Write them in the chart in **B**.

Totonac (Veracruz)	Amuzgo (Guerrero/Oaxaca)	Huichol (Jalisco)
Tarascan (Michoacan)	Seri (Sonora)	Chichimeca (Guanajuato)

B Research Look at your questions. Use the Internet to research one indigenous language. Write answers in the chart.

Questions	Answers

C Share Share your information with a partner. Is there any information you left out? Create your presentation.

D Present Give your presentation. Use transitions to show relationships between your ideas. If possible, teach your classmates a few words from that language.



LESSON C BRINGING THE PAST TO LIFE



Technicians work on a Tyrannosaurus Rex model used in a movie.

A Listening in Context Listen to the conversation and answer the questions.



26

1. Who is talking? _____
2. What are they talking about? _____

B Listen again and choose *True* (T) or *False* (F) for each sentence.



26

- | | True | False |
|----------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1. Leticia thought the movie was confusing. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Sergio thinks it might be possible to bring dinosaurs back to life. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Sergio thinks dinosaurs lived at the same time as human beings. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Sergio would like to see real dinosaurs. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. All of the man-made dinosaurs at the New Jersey park have people inside them. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Leticia and Sergio have at least one daughter. | <input type="checkbox"/> | <input type="checkbox"/> |

C Pronunciation Listen to each group of words and look at the underlined letters. Notice which syllable gets the most stress or emphasis.



27

- 1: fascinating possible dinosaurs
- 2: become extingt confusing

D Listen to each group of words and write which syllable gets the most stress: *first* or *second*. Then practice saying the words.



28

- | | | | |
|------------|-----------|----------------|------------|
| 1. effects | 2. answer | 3. interesting | 4. prepare |
| become | robot | dangerous | adventure |
| conserve | millions | sister | construct |
| _____ | _____ | _____ | _____ |



At *Field Station: Dinosaurs* in New Jersey, USA, visitors learn about dinosaur biology and behavior.

E Speaking What do you know about dinosaurs? In your notebook, write three sentences. Tell your classmates.

F Writing Look at the picture and read about one person's visit to *Field Station: Dinosaurs*. Notice the transition words in bold.

TO: Carmela Torres
SUBJECT: Trip to New Jersey

Dear Carmela,

We had an amazing time in New Jersey! The best part was a place called *Field Station: Dinosaurs*. It's in a large and beautiful park, and they have fascinating dinosaurs—not real dinosaurs, but they look real! **First**, we walked to an area with carnivorous dinosaurs called raptors. We played a quiz game there, and the children knew more than the adults! **Next**, we saw models of dinosaur bones they had found in New Jersey and some of the tools that paleontologists use. **After that**, we learned how the birds we see today are connected to dinosaurs of the past. **Finally**, we walked to the "Dinosaur Meet and Greet." We saw baby dinosaurs there and learned about dinosaur families. The children really liked that part!

G Write in your notebook an e-mail message to a friend. Tell him or her about an interesting experience you've had. Use the transition words in **F**.

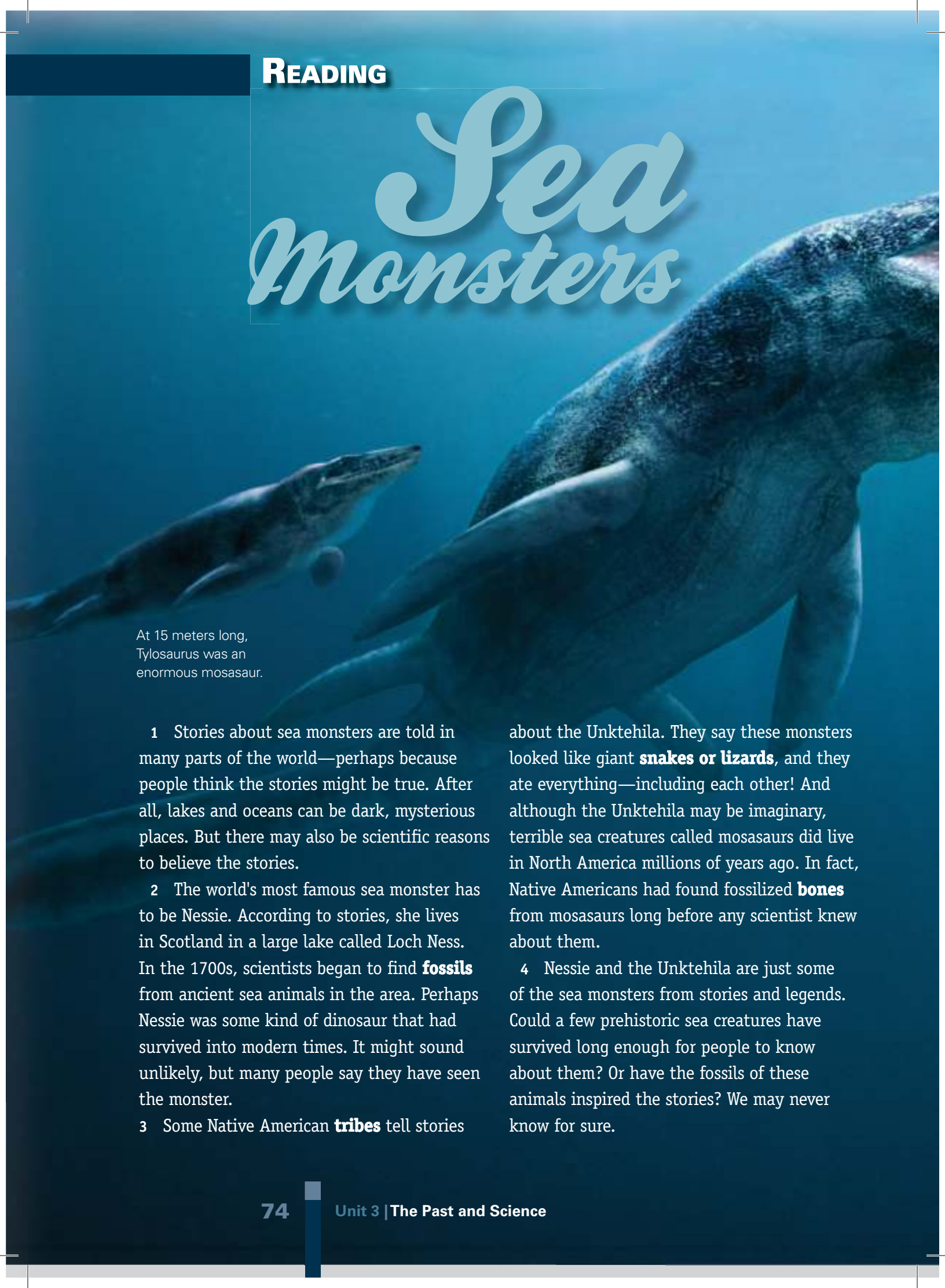
TO: _____
SUBJECT: _____

H Look at your partner's message. Does he/she use *first*, *next*, *after that*, and *finally* correctly?

GET CLOSE TO MEXICO

Many scientists think dinosaurs became extinct after a meteor from space hit the Yucatan peninsula and the Gulf of Mexico. What do you know about this event?

Sea Monsters



At 15 meters long, Tylosaurus was an enormous mosasaur.

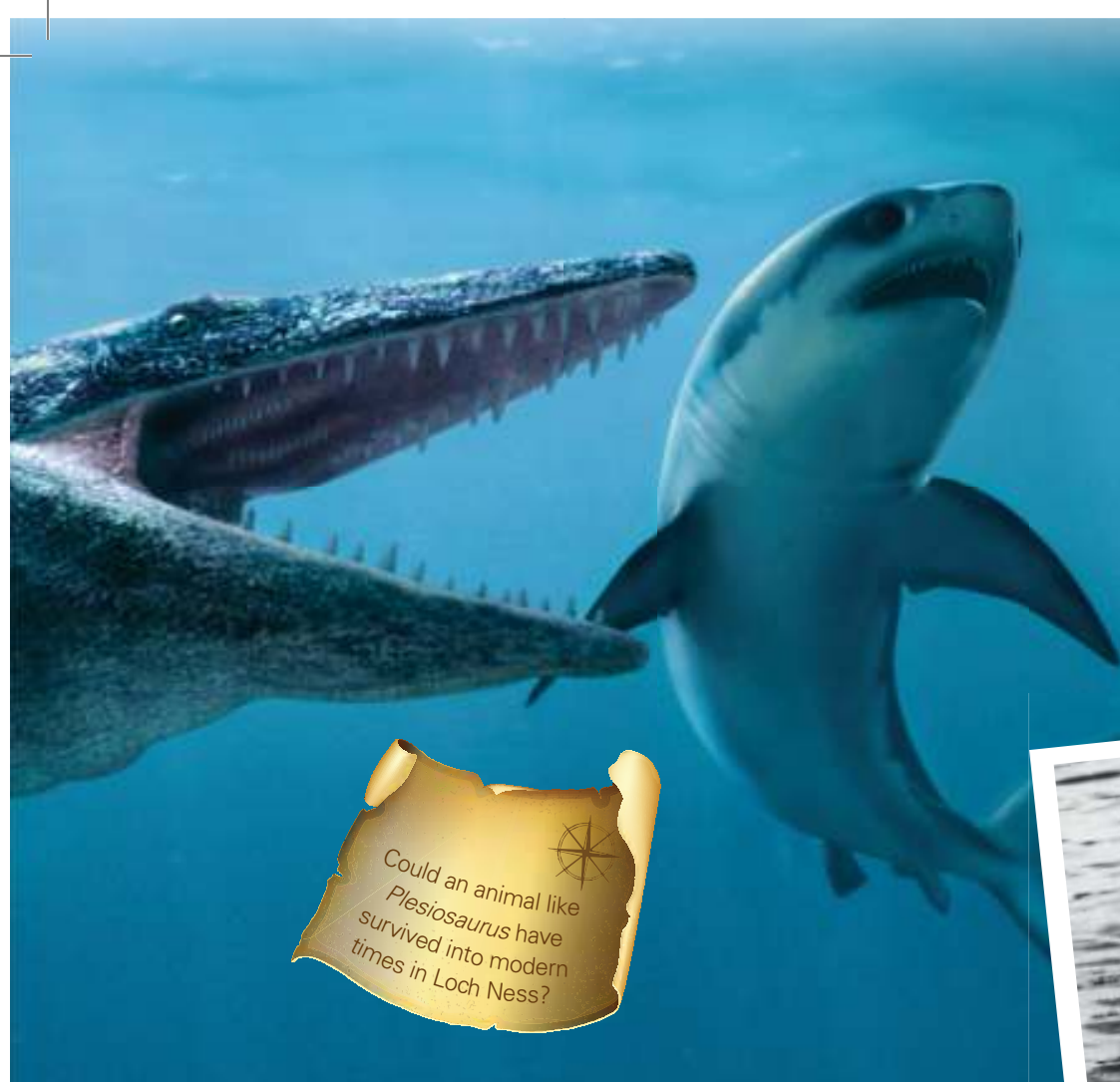
1 Stories about sea monsters are told in many parts of the world—perhaps because people think the stories might be true. After all, lakes and oceans can be dark, mysterious places. But there may also be scientific reasons to believe the stories.

2 The world's most famous sea monster has to be Nessie. According to stories, she lives in Scotland in a large lake called Loch Ness. In the 1700s, scientists began to find **fossils** from ancient sea animals in the area. Perhaps Nessie was some kind of dinosaur that had survived into modern times. It might sound unlikely, but many people say they have seen the monster.

3 Some Native American **tribes** tell stories

about the Unktehila. They say these monsters looked like giant **snakes or lizards**, and they ate everything—including each other! And although the Unktehila may be imaginary, terrible sea creatures called mosasaurs did live in North America millions of years ago. In fact, Native Americans had found fossilized **bones** from mosasaurs long before any scientist knew about them.

4 Nessie and the Unktehila are just some of the sea monsters from stories and legends. Could a few prehistoric sea creatures have survived long enough for people to know about them? Or have the fossils of these animals inspired the stories? We may never know for sure.



fossils, n remains of ancient plants and animals, often found within stone

tribes, n groups of people who share a language and culture

snakes and lizards, n long, thin animals in the reptile class

bones, n hard parts inside the body; together they form the skeleton

Could an animal like Plesiosaurus have survived into modern times in Loch Ness?



Some people say this is a photo of the Loch Ness monster.

A Connect with the Text Look at the pictures and answer the question.
Do you think the pictures show real animals or imaginary animals? Why do you think so? _____

B Understand Main Ideas Read the title and first paragraph. Then answer the questions.

1. What is the topic of the article?

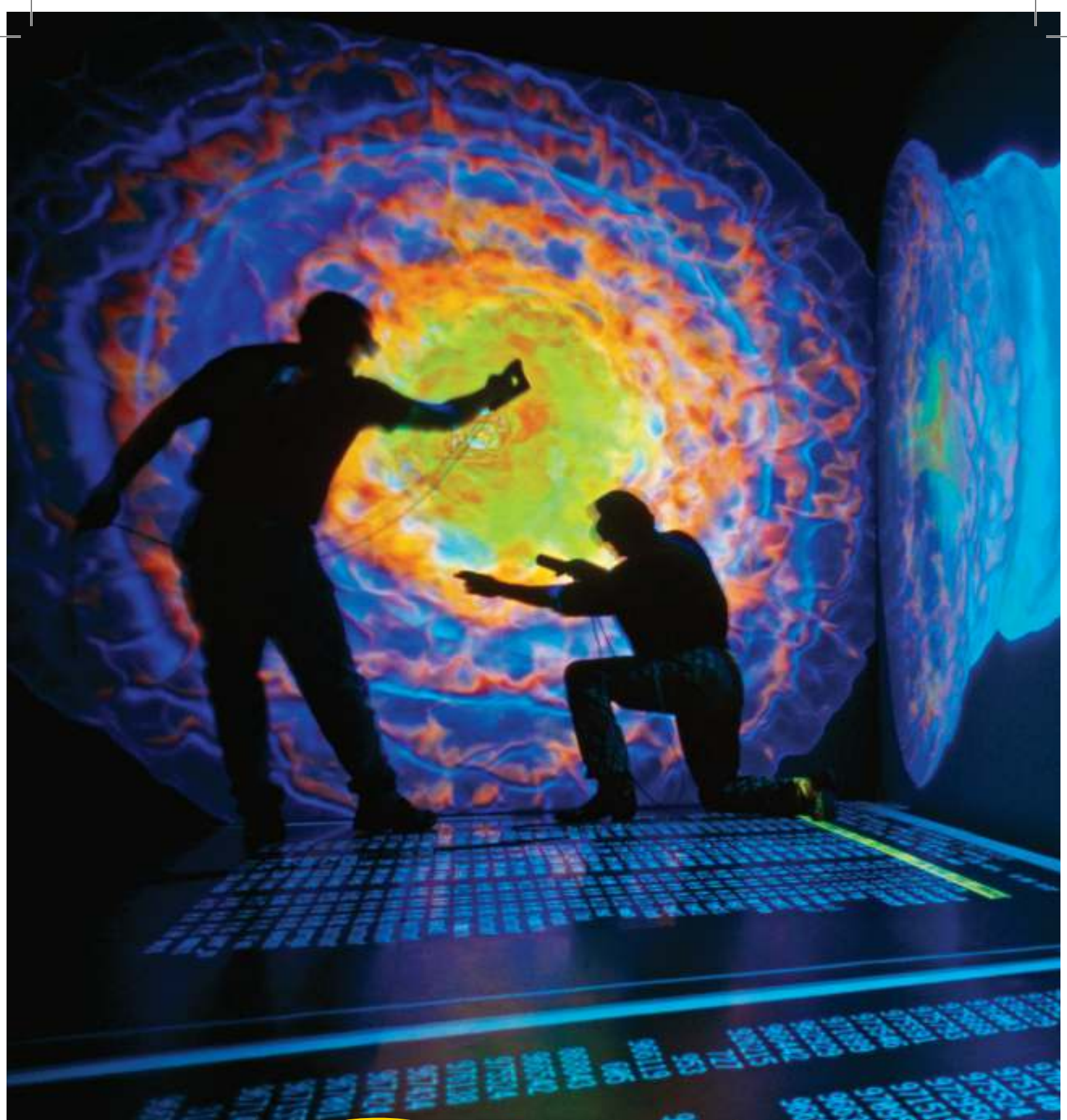
2. What possibility does the article discuss?

C Read in Depth Read the article. Then write the answers to the questions.

1. What did scientists find in the area around Loch Ness?

2. Who were the first people to find fossils of mosasaurs in North America?

3. The author implies that stories about sea monsters _____
a. are true b. may be true c. are not true



Theme

UNIT 3

76

6

Opening Activity

Look at the picture and answer the questions.

1. What do you see in this picture?
2. Where is this happening?
3. What are some things scientists are working on now?



SCIENCE

Theme Goals

In this theme, you will learn to:

- understand the scientific process.
- talk about heredity.
- talk about GMOs.
- talk about genetic diversity.
- understand and use relative clauses.
- use modals of necessity.

LESSON D THE SCIENTIFIC PROCESS



make an observation



work in a laboratory



reach a conclusion

A Vocabulary in Context Look at the pictures and read the words.

Collocations are words that often occur together.

- reach + conclusion
- form + hypothesis
- do + research

B Vocabulary in Action Listen to the recording. Number the pictures in **A** in the order you first hear about them.



form a hypothesis



do research



publish the results

C Complete each sentence with a word from the box. You won't need all the words.

- observation
- conclusion
- research
- laboratory
- results
- publish
- hypothesis

1. I think I can explain this observation. I've formed a hypothesis.
2. In the social sciences, interviews are one way to do _____ and collect information.
3. You've been studying this for a long time. Have you reached a _____ yet?
4. Dr. Aguirre made an interesting _____. Nobody had ever noticed it before.
5. We have very good equipment in our _____, so researchers like to work here.
6. Now that the research is completed, Dr. Leske is ready to _____ the results.

D Grammar in Context Study the chart.

Relative Clauses: Subjects and objects

Examples

Estela works in a laboratory. The laboratory has excellent scientific equipment.
Estela works in a laboratory **that has excellent scientific equipment**.

I sent an email to Cecilia. Cecilia lives in Madrid.
I sent an email to Cecilia, **who lives in Madrid**.

He published a book. The book changed our ideas.
He published a book **which/that changed our ideas**.

I gave her a book. The book was about insects.
The book **that I gave her** was about insects.
I met Julio last year. Julio studies physics.
Julio, **whom I met** last year, studies physics.

The hypothesis **(that) they formed** turned out to be correct.

Explanations

Use **relative clauses** to connect ideas and to give more information about nouns. A sentence with a relative clause is called a **complex sentence**.

In **subject relative clauses**, the relative pronoun (**who**, **that**, or **which**) replaces a subject.
Use **who** or **that** for people, and **that** or **which** for things.

In **object relative clauses**, the relative pronoun (**whom**, **that**, or **which**) replaces an object.
Use **whom** or **that** for people, and **that** or **which** for things.

In some cases, the relative pronoun is **optional** in object relative clauses.

In informal speaking, people sometimes use **who** instead of **whom** in object relative clauses.



E Grammar in Action Choose the correct relative pronoun to complete each sentence.

- I have an uncle (who / which) works in a laboratory.
- We made a hypothesis (who / which) turned out to be incorrect.
- I read an article (who / that) Dr. Gallego published in a medical journal.
- My friend Teresa, (who / which) speaks French, translated the article.
- The professor (whom / which) I talked to will retire after this semester.
- Einstein reached a conclusion (who / that) changed the field of physics.

F Read each pair of sentences and write the complex sentence.

- The professor told us something. It surprised everyone in the class.
The professor told us something that surprised everyone in the class.
- I have a friend. My friend does research at the university.

- She gave me a book. The book had a chapter about Mario Molina.

- Molina did research. The research helped us to understand air pollution.

G Communicate What kind of scientists and what kind of research does the world need now? Write four sentences in your notebook. Then tell your partner.

We need scientists who can work together to solve problems.

I agree, and they should do research that helps doctors to prevent diseases.

NATURE OR NURTURE?

A Vocabulary in Context Read the article and study the words in bold.

What makes us who we are? If **heredity** is more important, then **DNA** from our parents will **determine** much about us—appearance, intelligence, and health, for example. If **lifestyle** is more important, then our jobs, the places where we live, and our diet and exercise habits have a greater effect.

Identical **twins**, unlike most people, **inherit** exactly the same **genes** from their parents, so we expect them to look very much alike. Yet twins who were separated as babies can also have other similarities. In one case, twin boys were both named Jim by different families. As adults, they had similar jobs and were both 183 cm tall and weighed 82 kilos. They both married women named Linda—and got divorced. Their second wives were both named Betty, and they gave their sons almost the same name: James Allan and James Alan!



B Vocabulary in Action Match each word with its definition.

- | | |
|------------------|----------------------------------------------------------------------------|
| 1. ___ heredity | a. short form for a chemical called <i>deoxyribonucleic acid</i> |
| 2. ___ DNA | b. two babies from one mother who are born at the same time |
| 3. ___ determine | c. control what will happen |
| 4. ___ lifestyle | d. be born with a characteristic that one's parents or grandparents had |
| 5. ___ twins | e. the way in which one lives |
| 6. ___ inherit | f. the passing of characteristics from parents or grandparents to children |
| 7. ___ genes | g. pieces of DNA in a specific sequence; they control heredity |

C Complete each sentence with a word from B.

1. Your hair and eye color are both the result of heredity.
2. Our children might _____ my good health or my husband's diabetes.
3. I think I have the _____ for a long life. My grandparents lived to be quite old.
4. _____ is an acid with a complex structure.
5. He has a very healthy _____. He eats and sleeps well and gets a lot of exercise.
6. Juan and Marco look almost exactly the same. They're identical _____.
7. A baby's genes will _____ how tall or short he or she is as an adult.

D Grammar in Context Study the chart.

Relative Clauses: Identifying and Non-identifying

Examples	Explanations
The woman whose smart phone I found was very happy to get it back. That's the place where your mother and I met . We were surprised when we had twins.	Use whose as a relative pronoun to show possession. Use where and when as relative pronouns to talk about places and times.
Parents that have twins usually get less sleep and experience more stress than other parents.	If a relative clause is necessary to identify a noun, no special punctuation is needed. This type of relative clause is called identifying .
Manzanillo, where I grew up , is on the Pacific coast. I have two brothers and one sister. My sister, who lives in Jalapa , has three children.	If the noun is identified in some other way, the relative clause just provides extra information about the noun. This type of clause is called non-identifying , and it requires commas.
Bishkek, that which is the capital of Kyrgyzstan , is in the northern part of the country.	The relative pronoun that is not used in non-identifying relative clauses.

E Grammar in Action Complete each sentence with *whose*, *where*, or *when*.

- Professor Díaz, whose class I took last year, is an excellent instructor.
- Last year, _____ I was 15 years old, my family traveled to Costa Rica.
- The hotel _____ we stayed had a huge swimming pool.
- He is the person _____ car was stolen last night.
- Durango, _____ my aunt and uncle live, is a great city to visit.
- The day _____ my daughter was born was cold and rainy.

F Add commas to the sentences that need them.

- Jorge ✓ who has a very healthy lifestyle ✓ almost never gets sick.
- The restaurant that makes the wonderful salads is near my house.
- Last October when Pedro came to visit us we still lived on Prospect Street.
- Children whose parents are tall are often tall, too.
- Sr. Urbina who lives in Taxco is an expert on silver jewelry.
- The church where we got married is in Cuatro Ciénegas.

G Communicate Write in your notebook four sentences about the ideal family. Share them with your partner.

A good (father/mother/daughter/son) is someone who...

A good father is someone who spends time with his children.

I agree. I love spending time with my father!



A Vocabulary in Context Read the information and look at the words in bold.

HIGH-TECH FOOD

It might sound too good to be true: tomatoes that stay fresh for weeks, or bananas that contain a **substance** that prevents you getting sick from a virus. But these and other amazing things are now possible with **genetic** engineering.

Genetically modified organisms, or **GMOs**, are the result of

man-made changes to a plant or animal's DNA. In the case of *Bt corn*, for example, scientists can **insert** genetic information from a bacterium that kills insects into the corn's genes. Insects that eat the Bt corn plant die, so farmers don't have to use chemical pesticides on their **crops**.

Despite the possible benefits, GMOs are quite **controversial**. According to some people, not enough research has been done, so we don't know the **long-term** effects of GMOs on people or the environment. In fact, GMO crops are not grown or sold in some countries due to safety **concerns**.

B Vocabulary in Action Complete each sentence with a word in bold from **A**.

1. If something is controversial, people do not agree on it.
2. To _____ something means to put it inside another thing.
3. Farmers grow _____ such as corn, beans, rice, and melons.
4. If you have _____, you are worried about certain things.
5. _____ are not completely natural because people have changed their DNA.
6. A _____ study of something would happen over a long period of time.
7. A _____ is any kind of material—solid, liquid, or gas.
8. If you change a plant's DNA, you change its _____ information.



C Listen to the conversation and answer the questions.

30

1. What GMO are the people talking about?

2. What does the woman think about GMOs?

3. What does the man think about GMOs?

D Grammar in Context Study the chart.

Modal verbs for possibility (*may, might, could*)

Examples	Explanations
Companies must get permission from the government before they can sell GMOs. Luis has to find a new job. We need to go to the store before it closes.	To talk about necessity, use must, have to, or need to plus the simple form of a verb. In everyday speaking, we use have to or need to more often than must .
Tomato plants have got to have a lot of sunlight in order to grow.	Use have got to for extra emphasis.
Do food products with GMO ingredients (have to/need to) have special labels? Why do we have to go to Martina's house?	Use do/does plus have to or need to in questions.
Farmers don't (have to/need to) tell the public that they're growing GMOs.	To talk about a lack of necessity, use do/does not plus have to or need to .

In very informal speaking, people may say **got to** or **gotta** instead of **have got to**.



E Grammar in Action Write complete answers. Use your own information.

- How often do you have to do homework?

- How often do the students in your English class need to speak English?

- Do you have to do chores at your house?

- What do you need to do after school today?

- How early do you have to get up tomorrow morning?

- Do you need to talk to your teacher after class today?

F Make a list of rules regarding GMOs. Use your own ideas and *must, have to, need to, and have got to*.

- Scientists must do long-term research on new GMOs.*

- Scientists _____
- Farmers _____
- The government _____
- The public _____
- _____

G Communicate With your partner, make a list of six things that people need to know or do in order to eat a healthy diet.

They need to buy a lot of fruits and vegetables.

And they have to avoid eating at restaurants.



A Language Builder Study the chart.

Talking about the future

Examples	Explanations
Genetic engineering will become more common in the future.	Use will plus the simple form of a verb to make predictions.
My twin brother Jim is going to meet us at the restaurant.	Use be going to plus the simple form of a verb to talk about future plans.
The company is introducing a new kind of corn next month .	We may use the present progressive when context makes the future meaning clear.
Professor Bartell arrives on Thursday morning .	We may use the simple present for scheduled future events.

B Listening Listen to the news report and circle the correct answer to the questions.

- Which two diseases does the reporter mention?
 - dengue fever
 - malaria
 - river blindness
- What kind of mosquitoes does the company in England produce?
 - male
 - female
 - both male and female

C Listen again and circle the word or phrase that you hear.

- The diseases will probably become even (more / less) common in the future.
- The GMO mosquito (may / may not) be coming to your country soon.
- On the island of Key West, the company is (going to / not going to) release mosquitoes.
- If some of the people who live on Key West have their way, this will (never happen / happen soon).

Solving Health Problems

Research the progress that science is making with health problems in Mexico. Which health problems are the most serious? Is medical science working on new drugs or other treatments to solve these problems? What might happen in the future? Create a presentation about one health problem that scientists are trying to solve.

- A Brainstorm** What do you want to know about health problems in Mexico? What is happening now to solve these problems? Look at the diseases in the box. What do you already know about them? (You can research one of these diseases or choose another). In a small group, make a list of *Wh*- questions. Write them in the chart in **B**.

diabetes cholera heart disease cancer malaria tuberculosis

- B Research** Look at your questions. Use the Internet to research one health problem. Write answers in the chart.

Questions	Answers

- C Share** Share your information with a partner. Is there any information you left out? Create your presentation.

- D Present** Tell your classmates what medical scientists are doing to fight a disease that affects your country. Answer your classmates' questions.

There's going to be a new treatment soon.

What kind of treatment?



LESSON F WORKING WITH SCIENCES



A **Listening in Context** Listen to the conversation and answer the questions.

32

1. Who is talking? _____
2. What does the student want to know?

B **Note-Taking** Listen again and complete each sentence.

32

1. Most people who want to work in the sciences have a university degree.
2. The teacher suggests working hard in _____.
3. The teacher says Luisa needs to think about _____.
4. Luisa prefers to work _____, and she loves to _____.
5. Luisa is not interested in _____.

C **Pronunciation** Listen to each word and underline the syllable that gets the most stress.

33

science advantage travel
problem wanted university

D Listen again and look at the underlined letters. In many unstressed syllables in English, the vowel is pronounced as a schwa /ə/ sound.

33


science advantage travel
problem wanted university

E Speaking In your notebook, write three areas of science that are interesting to you, such as archeology, physics, or chemistry, etc. Tell your classmates why.

F Writing Complete the news article with the letter of the sentences in the box.

- It's one of the most famous institutions in the world for marine biology research.
- They do this by swimming together in large groups and causing ocean water to move.
- Sometimes she doesn't get much sleep because the animals that she studies are active at night.
- One part of that field work is going into the ocean and collecting data.

The Life of a Bioengineer



Meet Dr. Kakani Katija. She's an engineer who knows a lot about fluid dynamics—the way water and other liquids behave. She's also an expert on ocean life, so her title is "bioengineer."

For Dr. Katija, field work is the most exciting part of her job. _____ On the other hand, her job has disadvantages, too. _____ Dr. Katija does her laboratory work at the Woods Hole Oceanographic Institution in Woods Hole, Massachusetts. _____ She's trying to determine how the ocean's animal life affects the movement of ocean water. Jellyfish, which are found all over the world, are the focus of her research.

It may sound unlikely, but small animals such as jelly fish may influence the earth's climate. _____ This movement of ocean water is important because of its effects on climate as well as on ocean life.

G Write in your notebook a news article about a scientist. Provide interesting details about the scientist's work.



GET CLOSE TO MEXICO

Mexico has thousands of kilometers of coastline. What are some marine animals in the oceans around Mexico?



A Connect with the Text Look at the title and the pictures and answer the questions.

1. What kind of animals do you see?

2. According to the timeline, which animals were domesticated in the Americas?

B Context Clues Answer the questions with information from the text.

1. In paragraph one, which phrase describes domesticated animals?

2. In paragraph three, which word is another way to say "friendliness"?



C Read in Depth Read the article and answer the questions.

1. What is the most important idea in this article?

2. How were dogs useful to early human beings?

3. Why did so many shapes and sizes of dogs survive?

4. How long has the Siberian research facility been studying foxes?

5. As the research states foxes have become tamer, what else has changed?

Domesticated Animals

1 Which animal makes a better **pet**—a wolf or a dog? The answer is easy: dogs are more likely to see people as friends, and wild animals such as wolves usually fear human beings. But when we ask why domesticated animals such as dogs and chickens can live with us so easily, the answer is more complex.

2 According to scientists, the first animals that chose to live near human beings were wolves, which probably found food near human **settlements**. Over time, the wolf's **descendant**—the dog—became useful for hunting and protection. People began to take care of dogs, so dogs of all sizes, shapes, and colors were able to survive.

3 But why are dogs and other domesticated animals friendly? Is it their nature, or because human beings have cared for them for thousands of years? The answer may have been found at a research facility in Siberia, where wild foxes have been bred for friendliness, or tameness, for several decades. Over time, the appearance of the foxes has changed along with their personalities. This shows a possible connection among genes for tameness and the genes for color and ear shape, for example.

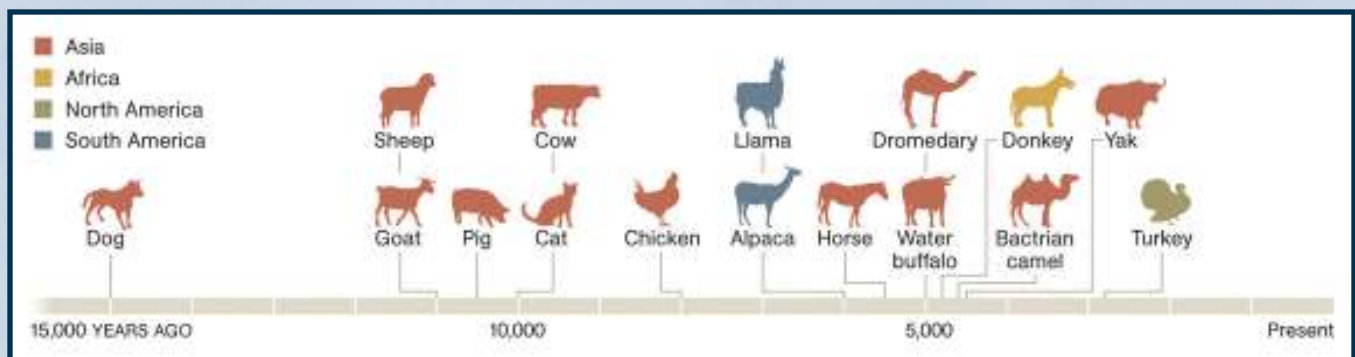
4 On the other hand, an individual animal of almost any species can be raised by human beings and be quite tame as an adult. But the **offspring** of a tamed tiger or zebra are born wild—with a natural fear of people. For the few animal species that people have domesticated, tameness appears to be genetic.

pet, *n.*- animal kept at home as a companion

settlements, *n.*- places where groups of people live

descendant, *n.*- relatives that are born later

offspring, *n.*- babies



History of Animal Domestication

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