

In This Unit

Theme This unit is about life in the dark.

Content Objectives

- Students will
- examine the world at night, living in darkness, and nocturnal animals.
 - read about creatures that live at the bottom of the ocean and create their own light.
 - discuss a marine biologist and his ideas about how to protect ocean life.

Language Objectives

- Students will
- talk about night, darkness, and nocturnal activities.
 - ask for and give help with schoolwork.
 - use the present progressive to say what is happening now.
 - use *at*, *on*, and *in* to talk about when things happen.
 - write about an event, using sensory details.

Vocabulary

- pp. 44–45 *active, dark, darkness, festival, to go to sleep, headlight, horizon, to light up, north, south, sunrise, sunset*
- p. 46 *daylight, healthy, streetlight*
- p. 49 *asleep, awake, east, time zones, west*
- p. 50 *dawn, to fascinate, to glow, to observe, pattern*

Vocabulary Strategies Compound words; Using a dictionary

Speaking Strategy Asking for help with schoolwork

Grammar

Grammar 1 Use the present progressive to say what is happening now

Grammar 2 Use *at*, *on*, and *in* to say when things happen

Reading *In the Dark of the Ocean*

Reading Strategy Describing words

Video Scene 3.1: *What Glows Beneath*; Scene 3.2: Meet David Gruber

Writing Description of an event

National Geographic

Mission Understand and Protect

Project

- Poster
- Blog entry
- “Day-and-night” video

Pronunciation Present progressive: Stress of the verb *to be*

Pacing Guides 1.3.1, 1.3.2, 1.3.3

Secrets of the Dark

“To me, science is fiction because sometimes it just seems unreal. Looking at bioluminescence, it’s just beautiful. It’s artwork.”

—David Gruber

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Introduce the Unit

- **Build background** Ask *What is darkness?* (the absence of light) Say *Some people don’t like being in the dark. They think it’s uncomfortable, even scary.* Ask *Why do you think that is?* Explain that although people can see in the dark, we can’t see colors well in the dark. Ask *When is it dark?* (at night) *You can see beautiful things at night. What can you see at night that you don’t see in the day?*
- Have students open their books to pp. 42–43. Ask *What do the squiggly lines look like?* (colored string, worms, tree roots) Have a student read the caption. Tell students the photo was taken using a special technique (time-lapse photography) that allows events to be sped up and seen in a different way.
- Ask questions to encourage further discussion of the photo:
 - What are some other ways to describe the photo?*
 - How does it make you feel about nature, photography, and darkness?*
- Have a student read Question 1 on p. 43 aloud. Write some responses on the board. Explain that the light produced by fireflies



Blue ghost fireflies

1. In the photo, fireflies create a beautiful light. What other things in nature produce light?
2. Bioluminescent animals use lights to communicate with one another. How do humans use lights to communicate?
3. Where do you feel comfortable in the dark? Why?

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and other creatures is called *bioluminescence* and is the result of a chemical reaction within their bodies.

- Say *bioluminescent* and have students repeat. Say *This is the adjective that describes an animal that produces light, as in “Fireflies are bioluminescent insects.”* Then read aloud Question 2. Explain that animals use bioluminescence to attract mates, defend their territory, and keep predators away. Ask *How do we use light to communicate?* (for signaling; with lighthouses and flashlights)
- Have a student read Question 3 aloud. Ask *Do you ever feel uncomfortable in the dark?* Guide students to think about and discuss what it is about darkness that makes some of us uncomfortable.
- Read the quote on p. 42 by David Gruber aloud. Then say *Science is about finding out how real things work. How can science be fiction, which is about things that are made-up?*

Extend

- Distribute **Worksheet 1.3.1**. Explain that partners will be thinking and writing about the dark and the beauty to be found in science.

Unit Opener

Objectives

- Students will
- describe and discuss a photo.
 - discuss darkness and how some animals create their own light.

Content Vocabulary *comfortable, fireflies*

Resources Worksheet 1.3.1 (Teacher’s Resource CD-ROM/Website); CPT: Unit Opener

Be the Expert

About the Photo

This photo of thousands of blue ghost fireflies was taken in a forest in North Carolina. These tiny fireflies are common throughout the southeastern United States and are called blue ghosts because of the blue and green light they produce. Their uniqueness lies in the fact that their “blink pattern” is much longer than the common firefly’s, and they tend to hover about a foot off the ground. They seem not to flash so much as glow.

Fireflies emit light to attract mates, defend their territory, and warn predators to stay away. In some species, only one gender lights up. In most, however, both genders produce light.

Teaching Tip

Students may not tell you when they don’t understand a word or a concept. Before beginning a lesson, preview some of the more challenging concepts or vocabulary. You may want to pair a fluent student with a less-fluent one and allow them to communicate briefly in their first language, if necessary, to clarify understanding. During class discussions, walk around the room and check students’ understanding by asking individuals to share ideas with you.

1 What would be difficult about living without sunlight for two months every year? Discuss. Then listen and read. TR: 32

Objectives

- Students will
- use vocabulary related to sunlight and darkness.
 - use new vocabulary to read about and discuss winter in northern Norway.

Target Vocabulary *active, dark, darkness, festival, to go to sleep, headlight, horizon, to light up, north, south, sunrise, sunset*

Content Vocabulary *Norway, Norwegian, nutrients, sunlight, vitamins*

Resources Worksheet 1.3.2 (Teacher's Resource CD-ROM/Website); TR 32–33; (Audio CD/Website/CPT); CPT: Vocabulary

Materials globe of the world (optional)

For most of us, the days are divided into day and night. But for two months each winter in northern Norway, it's **dark** for 20 hours a day. There is no **sunrise** or **sunset** because the sun never gets above the **horizon**.

Would you like to live in **darkness** for this long? It may seem difficult, but many Norwegians love the beautiful colors of these

months. To the **south** are the red and gold colors of the horizon. To the **north**, the sky is a magnificent blue. Even the moon and stars look blue. In the towns, streetlights shine like little yellow diamonds.

People do need light to be healthy and happy. Since they don't have much daylight during this time of the year, Norwegians

exercise and eat foods with vitamins A and D, nutrients people normally get from being in the sun. And darkness doesn't stop Norwegians from having a good time. Each winter, people are skiing on hills and skating on ponds that are **lit up**. Some people are dogsledding (with **headlights**, of course!). Others are going to

film and music **festivals**. And other people are spending time with friends in cafés and restaurants. Of course, not everyone is so **active** in the dark months. Many people are just **going to sleep** a little earlier until the sun returns in the spring.



In the town of Longyearbyen, in northern Norway, there's no sunlight from November to January. However, the sun doesn't set from the end of April to the end of August.

Present 1 2

- 1 Have students open their books to pp. 44–45. Read the photo caption on p. 44. Then have a student read aloud the Activity 1 question at the top of the page. Ask *What would it be like to be in darkness for twenty-four hours a day? What would be missing?* Write students' responses on the board. (sunrise, daylight, the sun, sunlight, warmth)
- Ask *How would life be different without sunlight?* Prompt students with ideas such as the following: getting up every morning in the dark, always having a light on, using a flashlight when you go outside.
- *Let's list some things that would be difficult to do without sunlight.* Have several students take turns completing the following frame:

I think _____ would be difficult without sunlight.

- Play TR: 32 and have students listen and read. Then discuss the photo and the reading with students. Ask questions such as the following:
 - What do you think is beautiful in the photo?*
 - Why do we need sunlight to be healthy?*
 - How do Norwegians have a good time in winter?*
- 2 Play TR: 33. Have students listen and repeat. Have partners or small groups take turns saying each word. Then assign three or four vocabulary words to each group. Say *Work together to write a new sentence for each of your words.* Model an example. Write *In winter, people in Norway go to film and music festivals.*

Our World in Context

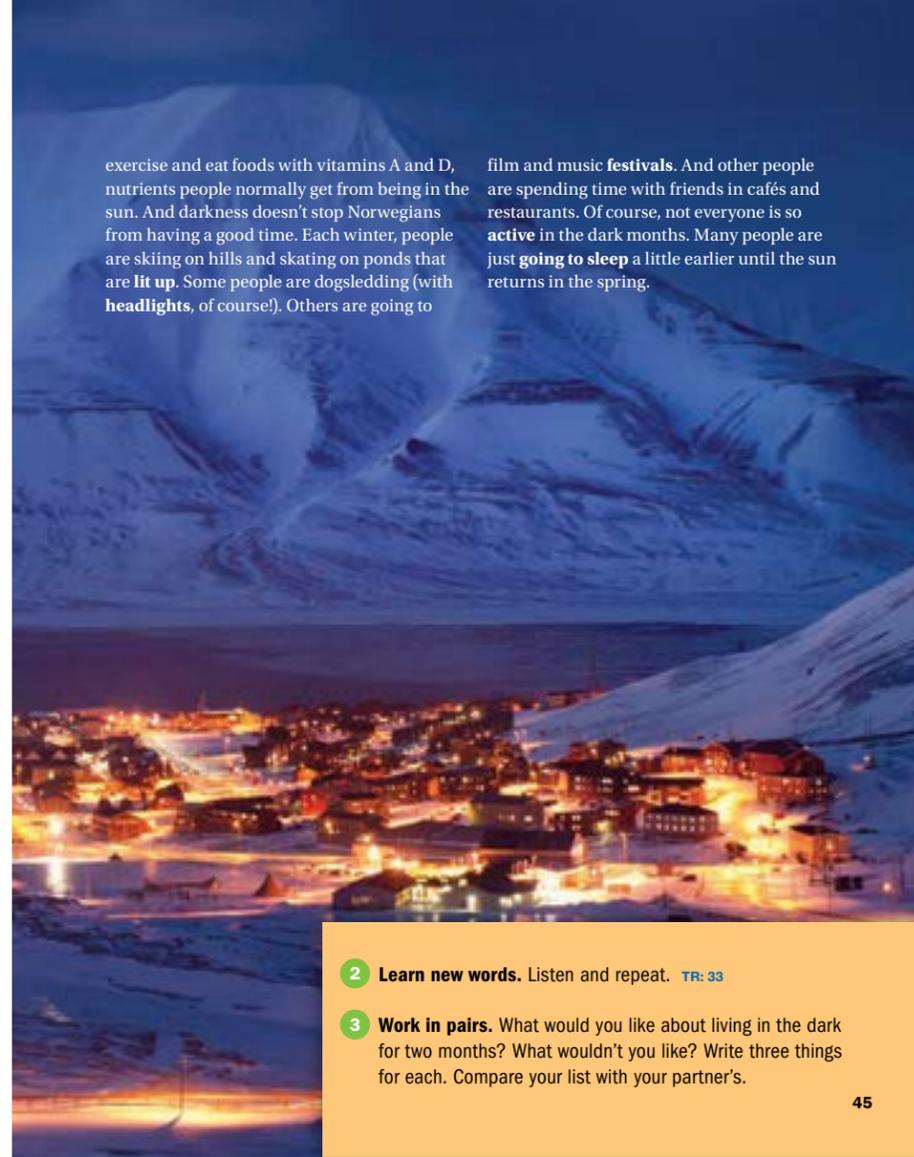
Longyearbyen is one of the world's northernmost towns. It is located on one of the Svalbard Islands, between Norway and the North Pole, in a region of the world called the high Arctic. The town is named after an American, John Munro Longyear, who founded the town and the neighboring coal mine. Mining remains an important part of the local economy, but today the town is a center of tourism and research. Snow covers the town from late September through May and, as everywhere in Svalbard, roaming polar bears pose a significant threat to the town's 2,500 inhabitants.

Teaching Tip

When an activity calls for classmates to work in pairs or groups and exchange information, remind students to pay close attention to what their partner or group members are saying. Encourage students to repeat aloud what their partners say, ask their partners to clarify unfamiliar or unclear information, and ask follow-up questions. These techniques will help students become active listeners and allow them to learn more about their classmates.

Related Words

glacier



2 Learn new words. Listen and repeat. TR: 33

3 Work in pairs. What would you like about living in the dark for two months? What wouldn't you like? Write three things for each. Compare your list with your partner's.

Warm Up

- **Build background** Say *We're going to read about a place in Norway where people live in darkness for two months every year in winter. Imagine that! Does anyone know why that is?* Explain to students that this annual occurrence, called the Polar Night, happens because of the way Earth is tilted.
- In Norway and other nearby countries, winter comes around when that part of the world is facing away from the sun. At that time, the Arctic Circle is angled the farthest away from the sun. In other words, the rest of the planet blocks the sun's light. If possible, demonstrate for students the movement of Earth on its axis and the locations of both Norway and the Arctic Circle with a globe of the world.

- When students are finished, have a person from each group read their sentences to the class.

Practice 3 4 5

- 3 Pair students. Say *Think about the reading. Look at the photo again. How do the people of northern Norway experience winter? Now imagine you've been sent to live there for two months without sunlight.* Have partners read and complete Activity 3 on p. 45.
- 4 Have students turn to p. 46 and read the words and phrases in the word box aloud. Have them choose two terms and use them in a sentence. Repeat until all of the words have been used. Have students complete Activity 4 independently. Call on someone to read the completed paragraph aloud.

4 Read and write the words from the list. Make any necessary changes.

active	dark	darkness	festival	go to sleep
headlight	light up	south	sunrise	sunset

Light and darkness are two things we don't often think about. This is because we can have light any time at night. Thanks to electric lights, we're able to do what we need to at night. We go to sleep because we're tired, not just because it's dark. "Having all this energy to be able to have light at night is a really new thing for humans," says scientist David Gruber. Until the nineteenth century, people didn't have lights like we do today. The light of day came from the sun, as it does now. But at night, only the light of the moon and the stars lit up the sky. People got up at sunrise and were active all day. Then, after sunset, they went to bed.

5 Learn new words. Listen for these words. Match each word to its definition. Then listen and repeat. TR: 34 and 35

daylight	healthy	streetlight
<u>streetlight</u>		1. a light near a road
<u>healthy</u>		2. not sick
<u>daylight</u>		3. light from the sun

6 Choose an activity.

- Work independently.** Observe an animal at night. What do you notice? What is surprising? Write your findings. Share them with the class.
- Work in pairs.** Imagine you lived hundreds of years ago. How was your life at night different from your life at night now? List at least five examples.
- Work in groups.** When you don't have electric light, what can you use to help you see in the dark? List three things. Choose one thing from your list and make an advertisement for it. Present your ad to the class.



A kinkajou

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- 5 **Learn new words** Read the words in the box. Tell students they've heard and read two of these words before. Challenge partners to find the words on pp. 44–45. Then play TR: 34 as students listen. Have students pronounce each word and use it in a sentence. Then play TR: 35 and have students listen and repeat. Tell students to complete Activity 5 independently.
- Vocabulary Strategy** Write *streetlight* on the board. Draw a vertical line between *street* and *light*. Point to the board and ask *What two smaller words make up the word streetlight?* Tell students that a word made up of two smaller words is called a compound word. Say *Recognizing the words that make up a compound word can help you figure out what the compound word means.* Point to *street* and ask *What is a street?* (a road in a city or town with houses on it) Point to *light* and ask *What is a light?* (something that produces light, such as a lamp) Say *Putting those two meanings together, what do you think streetlight means?* (a lamp that lights up a street)

Vocabulary Strategy

Compound Words In English, there are three forms of compound words: closed form, where two words are joined together to make a new word with a new meaning (*daylight, keyboard*); hyphenated form, where the words are joined with a hyphen (*mother-in-law, eleven-year-old*); and open form, where the words are open but when read together, a new meaning is formed (*police officer, post office*).

Students find it fun to learn compound words and practice English vocabulary with compound word games. Students can divide words, match up parts, and make up new compound words. Learning about compound words gives students a new way of looking at words. It helps build an interest in words and prepares students to learn prefixes, suffixes, and word roots.

Teaching Tip

When possible, it's wise to keep a lively pace going throughout a lesson. Although it's important to make sure students have time to think before they respond, it's usually not a good idea to have the class wait for long periods of time while students formulate their ideas or sentences. A brisk pace allows students to get more practice in the same amount of time and makes it less likely that they will start thinking about other things. In general, students will be more engaged, more active, and more able to learn if the pace is kept reasonably fast.

Formative Assessment

- Can students
- use vocabulary related to sunlight and darkness?
 - Have students explain the difference between sunrise and sunset.
 - use new vocabulary to discuss winter without sunlight in northern Norway?
- Ask *For part of the winter, is northern Norway without darkness or sunlight? (sunlight)*

Workbook For additional practice, assign Workbook pp. 24–25.

Online Workbook Vocabulary

- Ask *What other compound words do you see on page 46?* (*daylight, headlight, sunrise, sunset*) Have pairs work together to write the meanings of the four words. Remind them to break each word into its two smaller words.

Apply 6

- 6 Have students look at Activity 6. Say *All of these activities have to do with living in the dark.* Point out the animal in the photo. Tell students it's a kinkajou, a cat-sized animal that lives in the tropical forests of Central and South America. Kinkajous are active at night and sleep in the treetops during the day.
- Think Aloud** Model thinking about an activity. *The first activity sounds interesting. I like animals, but what animal can I watch at night? Fireflies are out at night, but I'm not sure how much I'd learn by watching them. Owls and bats are not easy to observe. I know! My cat sleeps all day because he's up at night. I'll observe him. I know he can see better at night than I can.*
- Students who choose options 2 and 3 may benefit from doing some research on the Internet. Tell those thinking of option 2 to start by rereading the paragraph in Activity 4. Suggest that students considering option 3 spend some time looking at product ads in magazines or newspapers.

Extend

- Give students the option of either writing a paragraph explaining what causes the Polar Night or drawing a map of Norway. Maps should include the Norwegian mainland and the Svalbard Islands, as well as labels for Longyearbyen, the Arctic Ocean, and the Arctic Circle. Allow students time to research the Polar Night or to consult a globe or map. Then have them share their work.
- If time allows, assign **Worksheet 1.3.2**. Explain that students will use it to practice the new vocabulary words.

Wrap Up

- Write the following on the board:
Night: *dark, darkness, go to sleep, sunset*
Day: *active, daylight, festival, sunrise*
- Say *Let's play a game called Night and Day. You'll make sentences with the new vocabulary words. When I point to you. I'll say either "You're a night person" or "You're a day person." Then you choose a word from the board and say a sentence. Model by saying For example, I'm a night person, so I choose sunset. My sentence is "I love pink and orange sunsets."*

Asking for help with schoolwork

What does *nocturnal* mean?
How do you pronounce it?
How do you spell it?

Helping with schoolwork

It means *active at night*.
I'm not sure. I think you say *nock-tur-null*.
It's spelled *n-o-c-t-u-r-n-a-l*.

Objectives

- Students will
- use words and phrases to ask for help with schoolwork.
 - use words and phrases to respond to questions asking for help.

Speaking Strategy Asking for help with schoolwork; helping with schoolwork

Academic Language *pronounce, pronunciation*

Resources Online Workbook; Worksheet 1.3.3 (Teacher's Resource CD-ROM/Website); TR 36–37 (Audio CD/Website/CPT); CPT: Speaking Strategy

Materials large sticky notes (optional), note cards

7 Listen. How do the speakers ask for help and respond? Write the phrases you hear. TR: 37

8 Read and complete the dialogue.

Possible answers:

Mae: This video about carnivorous plants is really cool.

Hwan: What does carnivorous mean?

Mae: It means things that eat meat.
This one is called a *Nepenthes*.

Hwan: What? How do you spell that?

Mae: I'm not sure. Let's look it up.
N-e-p-e-n-t-h-e-s. Another name is *pitcher plant*. It eats arthropods.

Hwan: Arthro... what? How do you pronounce that?

Mae: I think you say *ar-throw-pod*. You know, insects, spiders, and things like that. Insects see the plant's light and go to it. Then they fall inside and die! That's how the plant eats them.

Hwan: Amazing!



A glowing pitcher plant

9 Work in pairs. Talk about the animals on the cards. Help your partner to spell, pronounce, and learn more about each animal.



Go to p. 157.

10 Work in groups. Think of a situation where you wanted to ask for help with schoolwork but didn't. Why didn't you ask? How can knowing these phrases help you in the future?

Warm Up

- **Activate prior knowledge** Say *Science is full of interesting facts. Think of bioluminescence. It's amazing that some animals can produce their own light. But science words can be hard to say and spell.* Explain to students that a dictionary can help, but sometimes your first reaction is to ask someone for help.
- Ask *How do you ask someone for help when you see or hear a word you don't understand? How do you respond when someone asks you for help?* Discuss students' responses. Then have partners act out situations in which they make and answer requests for help. Say *Point to a classroom object or a word in a textbook and ask a classmate for help with the word. Take turns asking and answering questions.*

Present 7

- Have students open their books to p. 47. Say *We're going to hear people asking for help with schoolwork and responding.* Play TR: 36. Ask *Do you sometimes have to ask for help like that? When?* Have students describe situations in which they ask for help with words in English. Then replay TR: 36. Say *Let's listen again.*
- Call on pairs to practice reading aloud the questions and answers. Say *One partner reads the questions, the other reads the answers. Do them one at a time. Then switch roles.* Have more fluent pairs model for the class. Then call on less-fluent students to read the sentences. Tell them to do their best and that you don't expect everyone to read everything correctly.

Strategy in Depth

Here is a list of some other common sentences used to ask for help in the classroom:

I don't understand.
Can you help me, please?
Is this right / wrong?

Another strategy students should learn is asking to repeat:

Could / Can you repeat that, please?
Could / Can you say that again, please?
Pardon me? Can you repeat that?

Encourage students to learn these words and phrases and use them often.

- **7** Say *Listen as two speakers ask for help with schoolwork and respond. Write down the questions you hear and the speaker's responses. You'll hear words like the ones at the top of page 47.* Play TR: 37. Have students share what they wrote. Replay the track if necessary.

Practice 8

- **8** Once students seem comfortable with the speaking strategy, direct them to Activity 8. Ask students what they know about plants that eat insects. Tell them the dialogue is about these plants. Tell students to do the activity independently. Have several pairs read their completed dialogues aloud, taking turns as Mae and Hwan. Discuss any new words or phrases students used.

Apply 9 10

- **9** Have students cut out the cards on p. 157. Read the Activity 9 directions aloud and have partners read the speech balloons. Point to a pair. Say *(Michele), choose a card and say, "Tell me about this animal." (Jorge), read the information about the animal. (Michele), write down the information. Ask for help with spelling, meaning, and pronunciation if you need it.* Then explain that partners will change roles and continue to play until they both have all the information about all the animals.
- **10** Read the activity directions aloud. Then pair students with new partners. Say *Think about a time when you needed help. What happened as a result of not asking for help?*

Extend

- Divide the class into groups of six. Each group will use one set of animal fact cards from Activity 9. Cover the picture on each card. Attach a piece of paper with a clip or place a sticky note over it. Give each student in the group one card. Say *Take turns describing your animal, but don't read the name, and don't let the others see it. Group members will raise a hand to answer. Use the phrases you've learned. For example, If you know the animal but you're not sure of the name, say, "I think it's pronounced..." or "I think it's spelled..."*
- If time allows, assign **Worksheet 1.3.3**. Explain that students will use the worksheet to practice how to make and respond to requests for help.

Wrap up

- Write these words on cards: *arthropod, carnivorous, hemisphere, kinkajou, nocturnal, and Norwegian*. Pair students and give each partner two or three cards. Have partners use the phrases they've learned to ask and answer questions about their words.

Formative Assessment

- Can students
- use words and phrases to ask for help with schoolwork?
Say Imagine you don't know what nocturnal means or how to spell it. Ask How would you ask a classmate for help?
 - use words and phrases to respond to questions asking for help?
Ask How would you respond to a classmate who asked you what nocturnal means?

Objectives

- Students will
- identify and use non-action and action verbs.
 - use the present progressive to talk about actions.
 - use words associated with time zones.

Grammar Present progressive: Saying what is happening now

Target Vocabulary *asleep, awake, east, time zones, west*

Academic Language *action verb, non-action verb*

Pronunciation Present progressive: Stress of the verb *to be*

Resources Online Workbook/ Workbook pp. 26–27; TR 38–39, 123–125 (Audio CD/Website/CPT); Pronunciation Answer Key (Teacher’s Resource CD-ROM/Website); CPT: Grammar 1 and Pronunciation

Materials a fruit or vegetable

GRAMMAR TR: 38

Present progressive: Saying what is happening now

Non-action verbs

I **like** stories about unusual animals.
Many animals **see** well enough to hunt in the dark.
It is 2:00 a.m. in the jungle, but that doesn’t **mean** all the animals **are** asleep.

Action verbs

While I’m **reading** in bed at night in Mexico, my friend Akiko **is reading** at school in Japan!
While some animals **are hunting** in the dark, others **are hiding** or **sleeping**.
The monkeys **are sleeping** in trees, but the kinkajous **are looking** for food.

1.1 Listen. Circle the non-action verbs you hear. Underline the action verbs you hear. TR: 39

bake	be	drive	enjoy	fly	help
<u>know</u>	like	need	open	<u>search</u>	<u>sleep</u>

1.2 Read and complete the sentences. Use the -ing ending for action verbs.

1. People agree (agree) that it’s good to spend time with family.
2. This is difficult for family members who are living / live (live) in different countries.
3. It’s difficult because of different time zones. This means (mean) that it might be morning in one place and afternoon in another.
4. For example, Omar in Santiago is eating (eat) breakfast while his cousin Ali in Dubai is coming (come) home from school.
5. So when Ali is thinking (think) about calling Omar, he has (have) to consider the time in Santiago first.

1.3 Work in pairs. Write what you do at these times. Compare your answers with a partner.

If it’s Monday night, I’m studying, but Julia is making dinner.

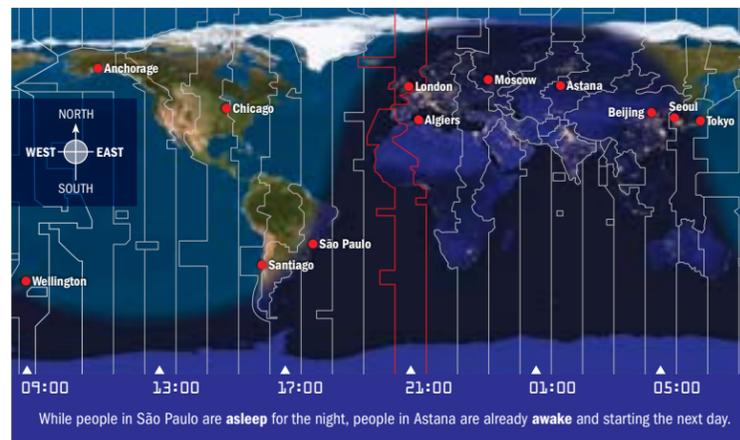
	Me	
Monday night		
Wednesday during school		
Friday evening		
Saturday afternoon		
Sunday morning		

Warm up

- **Preteach** Say *Right now I’m talking to you, and you’re listening to me. I’m also walking around the room, and maybe you’re wiggling your leg or touching something on your desk. But we’re all doing some action.* Ask a few students to tell what they did before coming to class. Write the simple-present form of the verbs students use on the board. (e.g., eat, ride, play, read, listen, practice) Say *All of these words describe actions—things you do with your body. They’re called action verbs.*
- Point to a student and say *How are you today?* Have the student respond. (I’m fine/okay/good.) Pick up a piece of fruit or a vegetable and smell it. Say *This smells (fresh, sweet, spicy).* Hand it to a student and ask *How does it feel?* Have the student respond. (It feels smooth/bumpy/soft.) Write on the board *are, am, smells* and *feels*. Ask *Do these words describe actions?* (not really) *These verbs are called non-action verbs.*

1.4 Learn new words. Listen to learn about time zones. Then listen and repeat. TR: 40 and 41

World Time Zones



1.5 Work in pairs. Find these cities and their time zones on the map. How many time zones separate them? Write a sentence about what people might be doing in each city.

1. Seoul / Santiago There are 12 time zones between Seoul and Santiago. While people in Santiago are coming home from school and work, people in Seoul are asleep.
2. Beijing / London Time zones apart: 7
3. Astana / Algiers Time zones apart: 5
4. Chicago / Moscow Time zones apart: 8

1.6 Work in groups. Find the place where you live on the map. Note the time now. Choose three other cities. Say if they are to your east or west, and what time it is there. Take turns comparing what you’re doing with what people in those cities are probably doing.

- Explain to students that they’re called non-action verbs because they describe a state of being or a situation, as in *I am a teacher, You are a boy, You look sleepy, The desk feels hard.* If students suggest that *feels* or *smells* involves action, point out the difference between *touch*, which describes an action you perform, and *feels*, which describes the “state” of the thing you’re touching.

Present

- Have students open their books to p. 48 and look at the chart at the top of the page. Say *Let’s listen to some sentences with non-action verbs and action verbs.* Play TR: 38 as students listen. Then read aloud each sentence on the left side of the chart.
- Explain that although most verbs that relate to the senses, such as see, taste, and feel, are non-action verbs, they can sometimes be used as action verbs.

Grammar in Depth

Non-action verbs are used primarily to describe a state of being or situation as opposed to an action or process. Examples include *be, like, seem, prefer, understand, doubt,* and *know.* They do not describe actions and typically are not used in the present-progressive form, that is, with the -ing ending. For example, you wouldn’t say *He’s seeming to be nervous* or *I’m knowing your name.*

Pronunciation

Go to Student Book p. 145. Use audio TR: 123–125.

Present progressive: Stress of the verb to be

The verb *to be* is used both as a main verb (*The cat is cute*) and as an auxiliary verb in the present progressive (*I am working*) and other tenses. Affirmative forms of *to be* are unstressed except when at the end of a short answer (Yes, *I am*) or in other less-common situations, such as clarifying an answer (*I said I am coming*).

Negative forms, such as in a negative statement (*We aren’t leaving*) or a negative question (*Aren’t you hungry?*) are stressed.

Teaching Tip

Students who feel valued and supported in class are likely to take an active role in the learning process. Create a classroom atmosphere in which students do not need to be overly concerned about making mistakes. At the beginning of class, explain to students that they’re learning new things and that making mistakes is a natural and expected part of learning.

- Say *If I said, "See the tree over there," what I really mean is "Look at the tree over there," which describes an action. So, in that case, see would be an action verb.* Explain that, similarly, *hear* is a non-action verb, but *listen* is an action verb because listening is something you have to actively do. Display a list of common non-action verbs:

Non-action verbs		
agree	like	sound
be	believe	taste
feel	mean	want
has	need	wish

- Call on students to model using a non-action verb in a sentence. (*Do you agree with me? Do you like the darkness? That sounds really loud.*)
- Now read aloud the sentences on the right side of the chart on p. 48. Point out that each verb includes a form of *to be* and *-ing*. Explain that this is the present progressive and is used to show a continuing action. Have pairs of students read all of the sentences in the chart to each other. Say *Read a sentence to a partner. Then ask, "Is the verb an action or a non-action verb?" Take turns.*

Practice 11 12 13

- 11 Say *Now we'll listen to some sentences with non-action and action verbs.* Play **TR: 39** once and have students listen. Play the track again and have students complete the activity. Say *Pay attention to each verb you hear. Does it describe an action or state of being that is going on right now? Does it end in -ing?* Review the answers as a class.

- 12 Read the Activity 12 directions aloud. Say *Let's do the first one together.* Read item 1. Say *I have to fill in the blank with the correct form of the verb agree. Agree is a non-action verb, so I won't add a form of to be and -ing.* Have students complete the activity.

- 13 Have a student read aloud the activity directions and the text in the speech balloon. Say *Fill in the "Me" column of the chart with the activity you're usually doing at each time of day shown in the first column.* Explain that students should then write their partner's name at the top of the third column, and add his or her information in each row. When they're finished, ask *How do your activities compare?* Call on students to read their completed charts.

Apply 14 15 16

- 14 **Learn new words** Say *Look at the map on page 49. It shows the 24 time zones the world is divided into.* Have students count the zones on the map. Explain that moving from left to right, each zone advances the time by one hour. Read aloud the caption. Say *When it's 18:00 in the evening (6 p.m.) in São Paulo, it's 02:00 in the morning in Astana.* Play **TR: 40** and have students listen. Then play **TR: 41**. Have students listen and repeat.
- 15 Read aloud the activity directions. Pair students. Read the answer to item 1 and have students count the time zones on the map between the two cities. Explain that if there are 12 time zones between the two cities, then Seoul is 13 hours ahead of Santiago.
- Circulate as pairs work and provide assistance as necessary. When students have finished, confirm the number of time zones for each item. Call on different students to read their sentences to the class.
- 16 Put students into small groups. Read the directions aloud. Ask *What time is it now? Write it down. Now find our time zone on the map.* Make sure everyone agrees where it is. Appoint a note-taker for each group and tell them to write down their group's three cities and the time in each one. Then have groups do the activity. Say *Use the vocabulary words as you discuss what the people in your cities are doing.* Circulate to make sure everyone gets a chance to talk.

Extend

- Have groups make a chart showing their cities, times, directions, and activities. Display the chart below as a model. Have groups present their charts to the class.

	Your City	Chicago	Algiers	Beijing
Time				
Direction	/			
Activity				

Wrap Up

- Choose vocabulary words from the following list to write on note cards, one to a card: *active, awake, dark, darkness, daylight, east, festival, headlight, healthy, horizon, north, south, streetlight, and west.* Give each student a card. Take one yourself. Display the following list on the board:

Non-active verbs		Active verbs	
to agree	to like	to get	to read
to be	to mean	to go to sleep	to rise
to feel	to need	to light up	to set
has	to seem	to live	to shine

- Divide the class into teams of equal numbers of students. Say *Use the word on your card and a verb from the board to make a sentence.* Tell students they'll get one point for a correct sentence, another point for using an active verb with a form of *to be* and ending in *-ing*, and a third point for using both an active and non-active verb in their sentence.
- Model. Say *My word is streetlight. I choose the verb to light up. My sentence is "The streetlights are lighting up now that it is dark." I earned three points—one for a correct sentence, one for using the -ing form of an active verb, and one for using a non-active verb.* Call on one student at a time. Alternate groups. Say *Let's see which team gets the most points!*

Our World in Context

China is the largest country with only one time zone. It should really have five! It's as if New York, Chicago, Denver, and Los Angeles (each in a different time zone in the United States) were all in the same zone. India is the second largest country with only one time zone.

Teaching Tip

Be mindful of the different ways that students learn. Some students learn best when they hear information. Others learn best when they write things down. Still others find that using their bodies by pointing, acting out, or walking and talking helps them learn best. Provide a variety of activities and use different ways of explaining. A mix of activities gives different learners different ways to be involved with the lesson.

Formative Assessment

- Can students
- identify and use non-action and action verbs?
Ask students to identify the action and non-action verbs in this sentence: *Do you agree that many kids are spending too much time on indoor activities?*
 - use the present progressive to talk about actions?
Have students complete this sentence with the correct *-ing* form of the verb in parentheses: *It's not as if we _____ in darkness for 20 hours a day.* (live)
 - use words associated with time zones?
Have students fill in the blanks: *When the sun rises in the _____, it's time to be _____ and active!*

Workbook For additional practice, assign Workbook pp. 26–27

Online Workbook Grammar 1

Objectives

- Students will
- read about and discuss life in the deep ocean.
 - use new words from the reading.
 - discuss the ocean and ocean research.

Reading Strategy Describing words

Target Vocabulary *dawn, to fascinate, to glow, to observe, pattern*

Content Vocabulary *disco, marine, neon, to recognize*

Vocabulary Strategy Using a dictionary

Resources Online Workbook/Workbook pp. 28–29; TR 42–43 (Audio CD/Website/CPT); Worksheet 1.3.4 (Teacher’s Resource CD-ROM/Website); CPT: Reading

Materials set of classroom dictionaries; drawing materials, including neon-colored crayons or markers

17 Before you read, discuss in pairs. What do you know about the ocean and life in the ocean? What do you want to learn?

18 Look at the text and photos quickly. Then answer the questions.

1. Who is this reading about?
2. What sea animal has really big eyes?

19 Learn new words. Find the words in the text. Guess their meaning. Then look at the first meaning given for each word in the dictionary. Compare those meanings with your guesses. Then listen and repeat. **TR: 42**

dawn to fascinate to glow to observe pattern

20 While you read, think about what makes animals in the deep ocean different. **TR: 43**

21 After you read, work in pairs. Check *T* for true or *F* for false.

1. David observes life in the ocean when it’s dark. **T** **F**
2. We know a lot about everything that lives in the ocean. **T** **F**
3. We can see all the glowing colors in the ocean with our eyes. **T** **F**
4. Only one type of animal glows in the dark through the lens of David’s camera. **T** **F**
5. A lot of animals at the bottom of the ocean make their own light. **T** **F**
6. The vampire squid has very large eyes to help it see in the dark. **T** **F**

22 Review. Look at your answers from Activity 18. Were they correct? What else did you learn about the person and the sea animal?

50

IN THE DARK OF THE OCEAN

A shark glows bright green through the filters of David’s camera.



There are incredible creatures living in the darkness.

In the darkness before dawn, marine biologist David Gruber dives into the ocean to observe the amazing creatures that live there. “Seventy-one percent of Earth is ocean, and much of it is dark, with tons of life down there that we don’t know about,” he says.

David discovered that many sea animals can see colors in the water that we cannot. So he designed a camera that allows him to see the colors just as a fish does. His camera shows a secret world of neon green, red, and orange colors on ocean life that glows in the dark.

In this fascinating world, David discovered a special kind of shark that glows bright with green spots. “When you see all these little bright spots and patterns, it’s like flowers and butterflies. Why do they make patterns? It’s to attract each other. It’s to recognize each other,” he says.

At the bottom of the ocean where there is no light at all, many animals produce their own light. The unusual vampire squid is an example. It can turn itself on or off, just like a lamp. It also has very big eyes to help it see in the dark. In fact, compared to its body size, the vampire squid has the largest eyes of any animal in the world. And this is just one

animal: ninety percent of the animals that live at the bottom of the ocean produce their own light.

It’s easy to see why the darkness of the sea fascinates David. “Marine animals in the dark ocean produce lights to communicate with each other,” says David. “It’s an underwater disco party. We human beings are the last ones to join in!”



A vampire squid

23 Discuss in groups.

1. What things about the ocean fascinate you? Why do they fascinate you?
2. It’s difficult to study the ocean at night because of the darkness. What are some other difficulties David might have when studying the ocean at night?
3. Do you think it’s important to learn about what lives in the ocean? Why or why not?

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Reading Strategy

Describing words Describing words make writing clear and help readers visualize what they read. Many of the words used to describe in English are adjectives. Precise, vivid adjectives that appeal to the senses add detail and clarity to writing. For example, have students compare the following two sentences, which have the describing words underlined. Ask which one gives them a clearer picture in their minds of the undersea world David Gruber’s camera captures.

His camera shows a world of colors on ocean life that gives off light.

His camera shows an exciting, secret world of neon green, red, and orange colors on ocean life that glows in the dark.

Vocabulary Strategy

Using a dictionary When students find more than one entry for a word in the dictionary, tell them to check the part of speech in each entry. For example, *glow* can be a noun or a verb, and there’s a separate entry for each one. The parts of speech are often abbreviated as *n.* (noun), *v.* (verb), *adj.* (adjective), and *adv.* (adverb), to name a few.

Teaching Tip

Don’t let limited vocabulary restrict students when they brainstorm ideas or participate in discussions. If students have an idea but don’t know or can’t remember the words to express it, ask them to act it out, draw a picture, or use other words to describe it. Then help them remember or learn the English words to describe their ideas.

Warm Up

- **Activate prior knowledge** Ask *What’s the title of this unit?* (Secrets of the Dark) Write the unit title on the board. Ask *What are things we’ve learned about that can only been seen in the dark or at night?* (bioluminescence, nocturnal animals) Write the terms under the unit title. Call on students to explain what *bioluminescence* and *nocturnal* mean.
- Discuss how being able to produce their own light and having large eyes to see better are special characteristics, or features, that certain animals have developed over millions of years. These special features allow the animals to live successfully in the dark.

Before You Read **17** **18** **19**

- **17** Ask *What do you know about the ocean? What do you know about things that live in the ocean?* Pair students and have them discuss the ocean and ocean life. Ask *What secrets might be hiding there? What do you want to learn about the ocean?*

- **18** Have students open their books to pp. 50–51. Read the Activity 18 directions aloud. Say *Read the title. Look at the photos and read the captions. Take a minute to look over the text.* Explain to students that there are strategies they can use when they need to find specific information in a text quickly. Say *One strategy is called scanning. When you scan a text, you look for words that will help you find what you need.*
- Say *The first question asks who the reading is about, so look for a name.* When students are ready to move on, ask *What words might help you answer the second question?* (the name of an animal, the words *big eyes*) Tell students to write down their answers and set them aside to use later.
- **19** **Learn new words** Say *Now you’re going to learn some new words.* Read aloud the first two sentences of the directions. Have students find the word *dawn* in the reading (the first line). Say *What context clue do you see that might help you figure out what dawn means?* Guide students to see that “the darkness before dawn” suggests that after dawn it’s not dark. Have students write what they think *dawn* means.



- When students finish comparing definitions, say *Now that you've looked up the words, do you want to change any of your definitions?* Finally, play **TR: 42**. Have students listen and repeat.

While You Read 20

- **20** Say *Now we're going to listen to In the Dark of the Ocean and learn about some of the animals that live in it.* Play **TR: 43** and have students follow along.
- Say *Now read again. Look for the words the writer uses to describe animals that live in the deep ocean. Can you picture the animals in your mind? How does the writer help you do this?* Play **TR: 43** again or allow students to read in silence.

After You Read 21 22 23

- **21** Pair students. Have partners read the activity directions. If necessary, do the first item with the class. If partners disagree on an answer, tell them to read the text again and find information that supports their answers. Have partners complete the activity. Review the answers as a class.
- **22** Say *Now that you've read In the Dark of the Ocean, look at the answers you wrote to the Activity 18 questions. Ask Were your answers correct? Say We already knew that David Gruber is a scientist who's interested in light and darkness. What else did you learn about him? Did anyone think the green shark would be the animal with the really big eyes?* Call on students to share the answers they wrote and the new information they learned.
- **23** Have students form small groups and read the activity questions. Have a group member act as secretary and write down notes from the discussion about each question. Provide ideas (such as the discussion prompts on the next page) if students are struggling with their discussions.

- Pair students and have partners work together to find the rest of the words in the reading and guess their meanings. Tell them to write down what they think each word means.
- **Vocabulary strategy** Remind students that they can always check or look up an unfamiliar word's meaning in a dictionary. Use the word *pattern* to point out that many words have more than one meaning and that the first meaning listed in the dictionary is not always the meaning they're looking for.
- Say *The word pattern has many meanings.* Write the first couple of definitions on the board and read them for students.

pattern: 1. a model that can be used as an example to be imitated
 2. something used as a model for making things, such as clothing
 3. an arrangement of lines, shapes, or colors

- Guide students to see that the third definition makes the most sense in the reading. Say *Now, look up each of the new words in the dictionary and compare the first definition with the meaning you wrote down. If that definition doesn't seem right, look at the other meanings. Is there another one that better matches the context from the reading?*

Discussion prompts

What fascinates you about the ocean?

What is difficult about being in the ocean at night?

Is it important to study the ocean?

- the unusual sea life
- the strange environment water creates for humans (can't walk, breathe, talk)
- How might the darkness affect your sense of direction?
- Is it more dangerous to dive into the ocean in the dark?
- How might learning how creatures survive in the dark help us?

Extend

- Say *David Gruber says there's "tons of life" in the ocean we don't know about.* Have students review the words in the reading used to describe the unusual features of some creatures that live at the bottom of the ocean. Then say *Draw a picture of what you think one creature that hasn't been discovered yet might look like.*
- If time allows, you may want to assign **Worksheet 1.3.4** so students can practice the new vocabulary words.

Wrap Up

- Write the following words on the board: *active, dark, darkness, to light up, asleep, awake, to fascinate, to glow, and pattern.* Say *Now present your picture of an undiscovered creature to the class. First, name your creature and write a sentence or two about it. Try to use some of the words on the board.* When students have finished displaying their pictures and reading their sentences, have the class vote for their favorite creature. Then call on students to tell why it's their favorite. You might want to display students' drawings in a *Secrets of the Dark* classroom display.

Teaching Tip

Make sure students use new vocabulary words when they work in groups. Sometimes, it's possible to answer a question without using a new vocabulary word. In those cases, write sentence starters or frames on the board to remind students to use the new words. Walk around the room to check that students are using new vocabulary words.

Formative Assessment

- Can students
- recall information about life in the deep ocean?
 Ask students to describe the animals they read about in *In the Dark of the Ocean*.
 - use new words from the reading?
 Ask students to use *to fascinate, to glow, or to observe* to tell something about David Gruber or his work.
 - discuss the ocean and ocean research?
 Ask students to tell one thing about the ocean they would like to know more about.

Workbook For additional practice, assign Workbook pp. 28–29.

Online Workbook Reading

Objectives

Students will

- discuss David Gruber and his underwater research.
- apply the message of the video to their personal lives.

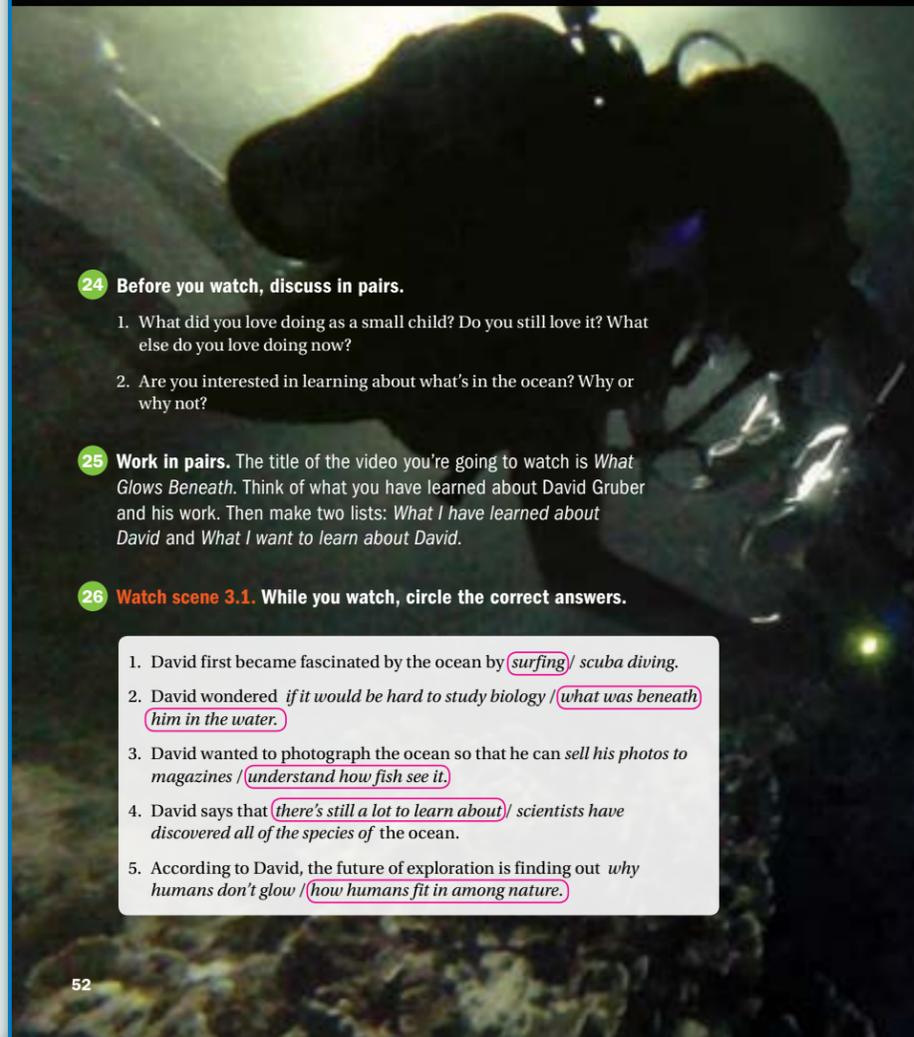
Content Vocabulary coral, coral reefs, fluorescence, scuba diving

Resources Video scene 3.1 (DVD/Website/CPT); Online Workbook; CPT: Video

Materials drawing materials, large note cards

Answer Key 27

1. surfing
2. They both take place in the water.
3. He studies in places where there is no natural light.
4. They allow him to see the ocean the same way the fish see it.



24 Before you watch, discuss in pairs.

1. What did you love doing as a small child? Do you still love it? What else do you love doing now?
2. Are you interested in learning about what's in the ocean? Why or why not?

25 Work in pairs. The title of the video you're going to watch is *What Glows Beneath*. Think of what you have learned about David Gruber and his work. Then make two lists: *What I have learned about David* and *What I want to learn about David*.

26 Watch scene 3.1. While you watch, circle the correct answers.

1. David first became fascinated by the ocean by surfing / scuba diving.
2. David wondered if it would be hard to study biology / what was beneath him in the water.
3. David wanted to photograph the ocean so that he can sell his photos to magazines / understand how fish see it.
4. David says that there's still a lot to learn about / scientists have discovered all of the species of the ocean.
5. According to David, the future of exploration is finding out why humans don't glow / how humans fit in among nature.

52

Before You Watch 24 25

- **24** Ask *What did you like to do when you were very young? Did you build things? Did you like to explore? What did you like reading about? Animals? Dinosaurs? Outer space? Do you still like any of these? What's your favorite thing to do now?* Have students open their books to pp. 52–53. Assign partners to discuss the Activity 24 questions.
- After pairs have talked for several minutes, ask *Did anyone spend time at the ocean when they were young? What did you like about it? Did you ever think about what creatures were in the water with you?* Have partners talk about what they'd like to learn about the ocean.
- **25** Say *Look at the photo.* Read the caption aloud. Then read Activity 25. Ask *What are some things we've learned about David Gruber so far?* (He's a marine

biologist, he works in the dark at the bottom of the ocean, he studies bioluminescence and sea creatures that glow.) Write students' responses on the board. Then have partners work together to make their lists.

While You Watch 26

- **26** Say *Now we're going to watch What Glows Beneath.* Draw students' attention to Activity 26. Say *As you watch and listen, circle the correct answers.* Read aloud item 1. Say *David first became fascinated by the ocean by surfing, or scuba diving. Now listen and circle.* Play **Video scene 3.1**. Have students work independently. Tell them to write down other interesting information. Say *Keep in mind the lists you made for Activity 25.*
- If students have trouble following the video or understanding the text, pause the video and allow them to ask questions or reread the text. Try replaying

Teaching Tip

It's often better to assign partners than to let students choose their own, especially when students are new to a class. Listen to partners as they work together, and help them treat each other with respect. Keep partner work interesting by having students change partners once or twice during lessons.

Formative Assessment

Can students

- discuss David Gruber and his underwater research?

Ask *How might understanding how sea creatures glow help humans? What dark places might people be able to explore using bioluminescent substances?*

Online Workbook Video

27 After you watch, work in pairs to answer the questions.

1. What was David's hobby when he was a teenager?
2. How does this hobby connect to his job?
3. What is special about how David studies the ocean?
4. What do the filters in David's camera allow him to do?

28 Work in pairs. List three of the sea animals you saw in the video. Describe what they look like. Now think of three sea animals you know about or have seen photos of. How are they different from the animals in the video?

David uses a camera with special filters to explore the dark ocean.

29 Choose an activity.

1. **Work independently.** Imagine that you went scuba diving and saw some of the animals in the video. Write a postcard to a friend or family member, describing what you saw. In your postcard, explain how you were able to see the animals glow.
2. **Work in pairs.** Role-play a conversation between David and a reporter who's asking him about his work. Share your dialogue with the class.
3. **Work in groups.** Prepare a glow-in-the-dark presentation. Each person finds out about a different sea animal that glows in the dark. Draw it or find a photo of it. Write three pieces of information about it. Present your group of animals to the class.

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the video with and without sound, and have students describe and comment on what they see. When they've completed Activity 26, review the answers as a class.

After You Watch 27 28 29

- **27** Pair students. Remind them to use information from the video to answer the questions. Tell them to review their answers to Activity 26 before they begin.
- **28** Read aloud the activity directions. Think about pairing less-fluent students who would benefit by helping each other with the language. Say *Talk about the animals in the video. Then talk about other sea creatures you've seen.* Tell students they can draw pictures if it helps them describe the animals.
- Say *You may want to use a Venn diagram to help you discuss similarities and differences between how the animals look and act and where they live.* If necessary,

begin one on the board. Circulate as students talk to provide assistance.

- **29** Make sure students know what scuba diving is. Explain that's how David does his exploring. Have students describe the special suits and equipment divers use and why they use them.
- Pair students who choose the second option. Say *Remember the information you wanted to learn about David. Use what you wrote in your list and information from the video to write interview questions and answers.*
- Put students who choose the third option into small groups. Tell them to discuss who will research which animal. If students choose the same animal, you could replay the video to remind them of different creatures. You could ask someone to list the name of each animal as they watch.

Objectives

- Students will
 - use *at, on, and in* to say when things happen.
 - differentiate between *at, on, and in*.

Content Vocabulary *market stalls, regularly*

Resources Online Workbook/ Workbook pp. 30–31; Worksheet 1.3.5 (Teacher’s Resource CD-ROM/ Website); TR 44; (Audio CD/Website/ CPT); CPT: Grammar 2

Materials tape or glue, large note cards

GRAMMAR TR: 44

At, on, and in: Saying when things happen
 at eight o'clock / at night / at dinner
 on Monday(s) / on June 1 / on the weekend
 in the winter / in the morning / in 2017 / in May



The Jemaa el Fna market

30 Read. Complete the paragraph with *at, on, or in*.

My family and I visited Marrakesh, Morocco, in 2015. We went in December. The weather is warm there in the winter. On Monday, our first day, we spent a lot of time in the Jemaa el Fna, the old city square. At lunchtime, we ate at a rooftop café, and in the afternoon, we watched some dancers. At five o'clock in the evening, we watched the day market stalls leave and the night market stalls arrive. At night we enjoyed the storytellers, magicians, musicians, and acrobats, as well as the food from the many food stalls. The Jemaa el Fna is incredible both day and night!

31 Work in pairs. Talk about places you go to regularly. Use *at, on, and in*.

- Tuesdays On Tuesdays, I go to the park after school.
- night _____
- afternoon _____
- March _____
- weekend _____
- 8:00 a.m. _____

32 Work in pairs. Take turns tossing the cube. Talk about things that happen at different times.

In the summer, we go to the beach often.



Go to p. 159.

Warm Up

- Activate prior knowledge** Say *I got up this morning at 6:30*. Ask several students *What time did you get up?* Write *at 6:30* on the board. Underline *at*. Say *On Saturday, I usually do the laundry*. Write *on Saturday*. Underline *on*. Say *My birthday's in (May)*. Write *in (May)*. Underline *in*. Ask several students *What month is your birthday in?*
- Say *In Unit 1, we learned to use in and on to talk about location: in Guatemala, in the ocean, on an island*. Point to the board and say *We also use in and on, as well as at, to tell when things happen*.

Present

- Have students open their books to p. 54. Play **TR: 44**. Have students listen and read along silently. Then replay **TR: 44** while students read aloud along with the audio.

- Say *There are rules for using at, in, and on when we talk about times*. Using the examples at the top of p. 54, say *We use at with exact times and certain times of the day. We use on with the days of the week and specific dates. We use in with months, years, seasons, and certain times of the day. We say in the morning, in the afternoon, and in the evening. But, there is one exception—we say at night.*

Write these sentence frames on the board:

I get home from school _____. (exact time)
 I do my homework _____. (time of day)
 I practice / hang out with my friends _____. (day of the week)
 I like to swim / go snowboarding _____. (month or season)

Grammar in Depth

Other rules for using the prepositions *in* and *on* include the following:

- in**
 - Use for decades or centuries: *in the 80s, in the nineteenth century*
 - Use with a period of time in the future to tell what will happen after that period of time: *in a few weeks, in a couple of months*
- on**
 - Use for specific days and holidays: *on Tuesday, on Christmas Day, on the first day of Diwali*.

Teaching Tip

When the class begins an activity, listen for students who are doing the activity correctly. The first time you hear a correct sentence, have the class pause the activity. Call on the student to share his or her example or say that student’s sentence aloud. Hearing a correct example will help other students who are struggling to begin an activity.

Formative Assessment

- Can students
- use *at, on, and in* to tell when things happen?
 - differentiate between *at, on, and in*?
- Ask students to tell what they regularly do after school and when they do it. They can use exact times or times of the day.
- Have students complete this sentence with *at, on, or in*: *David Gruber does most of his ocean research _____ night.*

Workbook For additional practice, assign Workbook pp. 30–31.

Online Workbook Grammar 2

- Point to the board. Say *Talk to a partner about when things happen. Take turns. Use at, in, and on*. Tell students that, for the third sentence, they should say any activity they do regularly, or usually, on a specific day of the week. For the last sentence, they should name something they do in a particular month or season.

Practice 30 31

- 30** Say *Now you're going to read a paragraph about a family trip. You'll fill in each blank with at, in, or on. Let's do the first one together*. Read the sentence aloud: *My family and I visited Marrakesh, Morocco, at? in? or on? 2015*. Say *2015 is a year. Look at the chart. What's the correct word?* (in) Have students work independently. Review the answers as a class.
- 31** Pair students and have them read the directions and sample answer. Say *Write complete sentences Then take turns reading your sentences to your partner*. Write some prompts, such as the following: *go to the market, go to the library, practice or play an instrument, visit a relative, and feed the dog*. Circulate and listen. Call on partners to read their sentences to the class.

Apply 32

- 32** Pair students with a new partner. Have them cut out and assemble the cube on p. 159. Read the directions and the speech balloon. Say *Roll the cube. Then say a sentence that is true for you, using the word at the top of the cube. You get one point for each correct sentence. Keep track of the time words you both use, such as evening, summer, December, and so on. If you repeat a word, you lose a point. Remember to be polite. The person with the most points at the end wins*.

Extend

- Pair students again to play a new version of the game. Demonstrate with a partner. Roll the cube. Say *The word is (at). I'll ask, "What did you do last night at 8:00?"* Prompt your partner to answer with a complete sentence, including the phrase *at 8:00*. Say *Now it's my partner's turn to roll and ask me a question*. Have partners play until they've each asked and answered questions with all three prepositions.
- Distribute **Worksheet 1.3.5** for further practice with prepositions you use to tell when things happen.

Wrap Up

- Divide the class into teams of three. Give each team three cards: an *at*, an *in*, and an *on* card. Give one to each student on the team. Say *I'll call out an expression of time. You hold up the card with the right word to use with that expression. I'll call the first student who holds up a card. If it's the right one, that team gets a point*. Explain that if students prompt one another, their team loses a point. The team with the most points wins.

Objectives

- Students will
- apply elements of descriptive writing.
 - use describing words.
 - analyze a model of sensory writing.
 - produce a paragraph of descriptive writing, including sensory words.

Writing Description of an event

Academic Language *sensory writing*

Content Vocabulary *dragons, dumplings, nighttime*

Resources Online Workbook/Workbook p. 32; Process Writing Worksheets 1–5, Genre Writing Worksheet: Description (Teacher’s Resource CD-ROM/Website); CPT: Writing

WRITING

In sensory writing, we choose a topic such as an event or a place. We use adjectives, or describing words, to explain what we see, hear, taste, smell, and feel. Describing something using senses helps our reader imagine that he or she is at that event or place.

33 Read the model. Work in pairs to identify and underline the words that describe what people see, hear, taste, smell, and feel.

When thousands of glowing lanterns light up the city at night on the fifteenth day of the Chinese New Year, I know the Chinese Lantern Festival has arrived. All kinds of lanterns shine brightly against the dark night sky. Some of the lanterns are small, and others are really big. Some look like beautiful flowers and dragons. The silk lanterns feel soft. The plastic lanterns feel smooth and warm. Families walk happily in the crowded streets, looking at the many kinds of amazing lanterns. While some people are enjoying the colorful lanterns, others are watching exciting parades and traditional Chinese lion dance performances. The loud, popping sounds of firecrackers fill the air. People prepare tasty rice dumplings in the morning for their families and friends to enjoy in the evening. The sweet smell makes me hungry for my favorite food. I love everything about this nighttime festival.



A Lantern Festival celebration in Shanghai, China

34 Work in pairs. Can you imagine how it feels to be at the Chinese Lantern Festival? Why or why not?

35 Write. Describe a fun nighttime event. Use sensory words to say what you see, hear, taste, smell, and feel at this event.

Warm Up

- **Activate prior knowledge** Say *In Unit 1, you wrote a paragraph about a beautiful place. We talked a lot about using describing words to help your readers experience the place in their minds—how the place looked, how it sounded, how it smelled. Sight, sound, smell.* Ask *What do these words have to do with? (the senses) Who can name all five senses? (sight, sound, smell, taste, touch).*
- Say *Talk to the person next to you. Describe something you’re wearing—your shirt, skirt, shoes, a piece of jewelry. Tell the color, the design, how the material feels. Does it make a sound? Is it shiny? Is it rubbery? Take turns.* When students have finished, ask *Did your partner describe the article well? Could you see it in your mind? Are there other words your partner could have used?*

Present

- Say *Open your books to page 55.* Have a student read the text in the green box. Then write the words for the five senses. Say *Let’s write some describing words for each sense.* Begin the chart below and have students help you fill it in.

sight	colorful, dark, shiny
sound	loud, whispery, screechy
taste	yummy, sweet, sour
touch	soft, rough, smooth
smell	fresh and clean, like flowers, like burnt toast

Read the Model 33 34

- Say *Now we’re going to look at a model of sensory writing. First, look at the photo and read the caption.* Have students predict what they think the text will be about. Ask *What do you think the text will be about?*
- **33** Have students read the text silently. Say *Read through the text once. Try to imagine being at the festival. What do you see, hear, taste, and smell?*
- **Model** When partners have finished underlining words, model analyzing one of the descriptions. Say *Right away, I read the words thousands of glowing lanterns. That’s a good description.* Ask *Which of the five senses does it relate to?* (sight)
- Ask *Would the phrase lots of lanterns work as well?* Guide students to see that the words *thousands* and *glowing* help readers to see in their minds a scene of so many lanterns they would be difficult to count, filling the night sky with a beautiful light. Have all of the pairs review what they underlined and discuss how well they think the descriptions worked.
- **34** When students have finished reading, assign partners. Have them read the text again and do Activity 34 together.
- **Worksheet** If your students need a reminder of the elements of the Descriptive Writing genre, you may want to hand out **Genre Writing Worksheet 7 (Description)** and review it together before proceeding to Activity 35.

Plan 35

- **35** Say *It’s time to plan your own writing. Read the Activity 35 directions. Your topic is describing a fun nighttime event.* Ask *What are some events that occur at night?* Write some helpful student responses on the board. Suggest others, such as family or cultural nighttime celebrations, New Year’s Eve events, Carnival, the Thai lantern festival of Yi Peng, or Christmas Eve.
- Say *Your next step is Prewriting. Let’s review. What are some ways we do prewriting?* (brainstorm, freewrite, make lists, use a graphic organizer, use sentence starters) Say *Now decide what you want to use.* If you have time in class, allow students to work on this step. If not, assign it as homework. If students have workbooks, remind them to use Workbook p. 32 for writing support.

Writing Support

Describing an event Describing an event is different from describing a person or place. There’s usually a lot going on during an event that you want the reader to experience. You need to convey a sense of movement and unfolding action by using exact, vivid verbs such as *feasted* instead of *ate*, *battled* instead of *played*, *charged* instead of *ran*, *gawked* instead of *looked at*.

Good organization will help, too. Students may want to consider rank order—either describing their favorite part of the event first and progressing to their least favorite, or starting with their least favorite part and progressing to their favorite.

Teaching Tip

Create a display of descriptive words for each of the five senses. Add new sensory adjectives to it from the Target Vocabulary in each unit. For example, sensory words based on the Unit 3 vocabulary include *dark, glowing, patterned* and *sleepy*. Encourage students to practice using the words in their descriptive writing.

Related Vocabulary

pagoda

Workbook For scaffolded Writing support, assign Workbook p. 32.

Online Workbook Writing

WRITING
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35 Write. Describe a fun nighttime event. Use sensory words to say what you see, hear, taste, smell, and feel at this event.

A Lantern Festival celebration in Shanghai, China

55

Write 35

- **35** After students have finished their Prewriting, have them work on their first drafts.

Revise

- After students have finished their first drafts, have them review their writing and think about their ideas and organization. Have them quietly read their drafts aloud to themselves. Have each student consider the following: *Is the subject of the description easily identifiable? Does the description develop in a logical way? What seems good? What needs more work?*

Edit and Proofread

- Have students consider elements of style, such as sentence variety, parallelism, and word choice. Then have them proofread for mistakes in grammar, punctuation, capitalization, and spelling.

Publish

- Publishing includes handing in writing pieces to the teacher, sharing work with classmates, adding pieces to a class book, displaying pieces on a classroom wall or in a hallway, and posting on the Internet.

- **Worksheets** If your students need a reminder of any of the steps of process writing, you may want to hand out **Process Writing Worksheets 1–5** and review them together.

- **Workbook** Refer students to Workbook p. 32 to help them organize and plan their writing.

		1	2	3	4
Writing Rubric Use this rubric to assess students' writing. You can add other aspects of their writing you'd like to assess at the bottom of the rubric. 4 = Excellent 3 = Good 2 = Needs improvement 1 = Redo	Writing Student organizes the description in a way that makes sense and uses a variety of describing words and phrases that appeal to all the senses.				
	Grammar Student uses non-action and action verbs correctly; student uses <i>at</i> , <i>in</i> , and <i>on</i> correctly.				
	Vocabulary Student uses a variety of word choices, including words taught in this unit.				



Understand and Protect

“People want to protect things they love and understand. The more I can share about the amazing animals I get to explore, the more people may want to help protect them.”

—David Gruber

National Geographic Explorer, Marine Biologist

1. **Watch scene 3.2.**
2. David cares deeply about the ocean and ocean life. Why is it important to protect animals in the ocean? How does David's work help protect them?
3. What do you want to protect? Why? How can you get others to care about this?

Mission

Objective

- Students will
- discuss the importance of learning about and protecting the world's resources.

Resources Video scene 3.2 (DVD/Website/CPT); Worksheet 1.3.6 (Teacher's Resource CD-ROM/Website); Online Workbook: Meet the Explorer; CPT: Mission

Be the Expert

Teaching Tip

It's easy for students to become overwhelmed when listening to long sentences and paragraphs in English. Try to keep listening activities brief so students have time to process and ask questions about what they've heard. Pause longer audio recordings whenever necessary to check for comprehension.

Online Workbook Meet the Explorer

Mission

- Say *Turn to page 56*. Read aloud the Mission. Then call on a student to read aloud the quote from David Gruber. Ask *What does David mean when he says people want to protect things they love and understand?* Discuss with students how people sometimes think the things they don't know much about or understand are dangerous, so they don't care about protecting them. Ask *What amazing animals do you think David wants to protect?* (the unusual bioluminescent creatures at the bottom of the ocean)
- **Activity 1** Say *Now let's watch a video about David Gruber*. Have students watch **Video scene 3.2**. Tell them to pay attention to David's research at the bottom of the ocean.

- **Activity 2** Pair students. Remind them of David's discoveries about unusual marine animals and how they use bioluminescence in their dark world. Tell them to review the reading on p. 51. Ask *Does learning about these animals make you want to protect them? What might yet be discovered at the bottom of the ocean?*
- **Activity 3** Have students consider the things they care about. Ask *Perhaps there's some animal or habitat you want to protect? Is there something in the world that's endangering the people or things you care about? How can you protect them? Do you have some knowledge or information that might help?*
- **Worksheet** Assign **Worksheet 1.3.6**. Explain that students will use the worksheet to think and write about David Gruber and his ideas about protecting marine environments.

Make an Impact

Objective

- Students will
- choose and complete a project related to the extremes of light and darkness.

Content Vocabulary *blog entry, organisms*

Resources Assessment: Unit 3 Quiz; Workbook p. 33 and p. 92; Worksheet 1.3.7 (Teacher's Resource CD-ROM/Website); CPT: Make an Impact and Review Games

Materials art supplies, camera with video capability

A Design a poster.

- Research animals or plants that glow in the dark. Find out how and why they glow.
- Make a poster to describe three of the glow-in-the-dark organisms you researched. Include photos.
- Present your poster to the class.

B Write a blog entry.

- Research a place that is light for more than two months a year.
- Pretend that you visit during the light season. Write a blog about your visit. Include photos.
- Publish your blog. Answer questions and respond to your classmates' comments.

C Make a "day-and-night" video.

- Choose an interesting place in your region.
- Make a video of that place during the day and during the night. Mention what is the same and what is different.
- Share your video with the class.

Bioluminescent fungi glowing on a tree trunk

Assessment Go to p. 256.

Unit Review Worksheet 1.3.7

Workbook Assign pp. 33 and 92.

Online Workbook Now I Can

Prepare

- Activity A** Have students research bioluminescence and biofluorescence. Tell them that, along with photos and descriptions of creatures, objects, or products they read about, they should include scientific information they discover in their research. Tell them to title their posters and include a message about the importance of marine research.
- Activity B** Explain that just as places on Earth, like northern Norway, are dark for a long time in the winter, they are also light for a similar amount of time in the summer. The Polar Night in winter is balanced by a time called the Midnight Sun in summer.
- Have students research various blogs in order to identify the elements you usually find in a blog. Explain that their blog entries can be done on paper to be shared with classmates or shared online via a school website.

- Activity C** Help students brainstorm locations that might provide an interesting day and night contrast (e.g., a local pond or someplace that is brightly lit up at night).

Share

- Schedule time for students to present their final products to the class. Allow time for students to ask questions, provide feedback on the posters and videos, or otherwise comment on their classmates' research.
- Modify** Help students simplify a project by eliminating one of the options or steps. For example, search for appropriate websites for students to use for their research. Help them locate and print pictures of sea creatures that glow and scenes from places that have midnight sun in summer. Arrange for adult supervision for those students wishing to video a place at night.

TR: 32 Listen and Read 2 See Student Book pp. 44–45.

TR: 33 3 **Learn new words.**

active	Most people are active during the day.
dark	We turn on the lights when it gets dark.
darkness	We couldn't see anything in the darkness of the night.
festival	Many places celebrate winter with festivals and music.
go to sleep	It's easy to go to sleep when you're tired.
headlight	A car's headlights help the driver to see at night.
horizon	The sun sets on the horizon.
light up	The sun lights up the sky during the day.
north	People who live in the far north often have cold winters.
south	Many birds fly south for the winter.
sunrise	There was a beautiful sunrise early this morning.
sunset	The sunset was beautiful this evening.

TR: 34 5 In central Greenland there is no sunset for nearly eight weeks a year, from the end of May until the end of July. There's daylight 24 hours a day. During this time, people can enjoy their favorite outdoor activities in the middle of the night, without even turning on the streetlights! Some people find it difficult to sleep during this time, and losing sleep isn't healthy. However, most people prefer summer to winter, when there are 24 hours of darkness.

TR: 35 5 **Learn new words.**

daylight	There is daylight between sunrise and sunset.
healthy	To be healthy, you should eat well and exercise.
streetlight	The streetlights shine brightly at night.

TR: 36 Speaking Strategy See Student Book p. 47.

TR: 37 7 **S1:** What are you doing? **S2:** I'm doing research on nocturnal animals. **S1:** Really? What does *nocturnal* mean? **S2:** It means something that sleeps during the day and is active at night. Actually a lot of animals are nocturnal. Look at this kinkajou. **S1:** A kinka – what? How do you pronounce it? **S2:** I think you say *kin-ka-jou*. **S1:** OK, and how do you spell that? **S2:** It's spelled k-i-n-k-a-j-o-u. Kinkajous are nocturnal animals. They live in the forests in Central and South America. They spend most of their time in trees. **S1:** I've never seen one. Have you? **S2:** No. That's probably because we're not nocturnal, and we don't live in trees!

TR: 38 Grammar See Student Book p. 48.

TR: 39 11 Do you enjoy sleeping? People need sleep, but many people also need to work. Some people are working at night when many of us are sleeping. Think about this. It's 4 a.m. While you're sleeping, doctors are helping patients, news reporters are driving to work, and bakers are baking bread.

A lot is happening at night in the natural world too. We know that many animals and flowers are busy at night. Think about this. It's 11 p.m. While owls are flying around and are searching for food, flowers are opening and are filling the air with sweet smells. Insects that like to eat at night are attracted to the smell and go to the flowers to eat.

You may be asleep at night, but much of the world around you is awake!

TR: 40 14 Time zones exist because the world is so big. While the sun is rising on one side of the world, it's setting on the other side. There are 24 time zones across the world. One time zone is usually one hour of time difference. The cities of Anchorage, Alaska, in the United States, and Wellington, in New Zealand, have 21 time zones between them. Anchorage is west of Wellington so it's earlier there. Wellington is east of Anchorage, so it's later there. When it's 11:00 p.m. on Sunday in Anchorage, it's 8:00 p.m. on Monday in Wellington. People in Anchorage are asleep, getting ready for Monday. But, at that same moment, people in Wellington have almost finished Monday.

TR: 41 14 **Learn new words.**

asleep	Most people are asleep at midnight.
awake	Most people are awake at 10 o'clock in the morning.
east	The sun rises in the east.
time zone	The world has 24 time zones.
west	The sun sets in the west.

TR: 42 19 **Learn new words.**

dawn	Dawn is when the day begins.
fascinate	Fish that make their own light fascinate me.
glow	We can easily see animals and plants that glow in the dark.
observe	Scientists observe ocean life with special equipment.
pattern	Some fish have interesting patterns on their bodies.

TR: 43 While you read. 20 See Student Book pp. 50–51.

TR: 44 Grammar See Student Book p. 54.