

Unit 3

Unit Opener **Extend** Worksheet 1.3.1



1 Work with a partner. Read and discuss.

People have strong feelings about darkness. To some, it's scary. To others, it's beautiful. Darkness hides things, but it also reveals things. Discuss your feelings about the dark. Why do you think this unit is titled Secrets of the Dark?

2 Write some things you like about the dark.

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

3 Write some things you dislike about the dark.

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

4 Read and write. David Gruber thinks some things in science are like beautiful works of art. What else in science, besides bioluminescence, do you think he finds beautiful? Do you think anything in science is beautiful? What?

Unit 3

Vocabulary **Extend** Worksheet 1.3.2

1 Read. Then check **T** for *True* or **F** for *False*.

	T	F
1. When the sun rises, it appears above the horizon.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. In northern Norway, it's dark from November to January.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. One way humans get vitamins A and D is from the sun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Most Norwegians don't become active outdoors until spring.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. The sun returns to northern Norway in winter.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 Read. Circle all the correct letters for each item.

- What lights up?
a. a lamp **b.** a career **c.** fireflies **d.** headlights
- What are the residents of Longyearbyen surrounded by in winter?
a. sunlight **b.** mountains **c.** darkness **d.** yellow lights
- What do Norwegians do to stay active in winter?
a. go skating **b.** go to festivals **c.** go dog sledding **d.** go to sleep
- What can you find at a festival?
a. entertainment **b.** music **c.** clues **d.** movies
- What can you see on the horizon?
a. sunset **b.** colors **c.** headlights **d.** sunrise

3 Read. Write answers to the questions. Use the words in **bold** in your answers. Then compare your answers with a partner's.

1. What are some countries **north** of where you live? What are some countries **south** of where you live?

2. What could you and your family do to be more **active**?

3. Have you ever seen a beautiful **sunrise** or **sunset**? Where were you? Describe what you saw.

Unit 3

Speaking Strategy **Extend** Worksheet 1.3.3

- 1 How do you ask for help?** Fill in the blanks with a question asking for more information about each of the five words below. More than one question may work for a word. Compare your questions with a partner's.

Speaking Strategy

Asking for help with schoolwork

What is it?

What does it mean?

How do you pronounce it?

How do you spell it?

Answers will vary. Sample answers:

1. nocturnal

I know what it means, but how do you spell it?

2. horizon

I've heard that word, but what does it mean?

3. glacier

It's a mountain of ice, but how do you pronounce it?

4. firefly

It's a compound word, but how do you spell it?

5. bioluminescence

I've never heard of that. What is it?

- 2 How do you help a classmate?** Complete each response below with the word or words from the box that make the most sense. Then compare your responses with a partner's.

glay-sheer
fly
light produced by some animals in their bodies
n-o-c-t-u-r-n-a-l
fire
the line where the sky meets the land or the sea

1. It's spelled n-o-c-t-u-r-n-a-l
2. I looked it up. It's the line where the sky meets the land or the sea
or light produced by some animals in their bodies
3. I'm not sure. I think you say glay-sheer
4. It means the line where the sky meets the land or the sea or
light produced by some animals in their bodies
5. If you can spell fire and fly, just put the letters together as one word.

Unit 3

Reading Extend Worksheet 1.3.4

1 Read. Which words make sense together? Circle all the correct letters for each item.

1. dark
 - a. light
 - b. night**
 - c. cave
 - d. ocean**
2. glowing
 - a. moon**
 - b. fireflies**
 - c. jellyfish**
 - d. darkness
3. North
 - a. Sun
 - b. Pole**
 - c. America**
 - d. Star**
4. observe
 - a. the planets**
 - b. a time zone
 - c. sea animals**
 - d. behavior**
5. time zones
 - a. east**
 - b. daylight saving time**
 - c. west**
 - d. streetlight
6. dawn
 - a. daylight**
 - b. sunset
 - c. sunrise**
 - d. horizon**
7. South
 - a. Africa**
 - b. Korea**
 - c. Time Zone
 - d. America**

2 Look. When you know the meaning of one form of a word, you can increase your vocabulary by recognizing related forms. How many of these words related to the word *observe* have you seen before? Use two of the words in a sentence.

Noun	Verb	Adjective	Adverb
observation	to observe	observable	observantly
observatory		observant	observingly
observer			

3 Fill in the chart. Add as many forms of each word as you can without using a dictionary. Compare your chart with a partner's. Then use a dictionary to find additional forms and add them to the chart. Note that some of the boxes will remain blank.

Noun	Verb	Adjective	Adverb
action	to act	active	actively
fascination	to fascinate	fascinating	fascinatingly
glow	to glow	glowing	glowingly
sleep	to sleep	sleepy	sleepily

Unit 3

Grammar 2 Extend Worksheet 1.3.5

1 Read. Choose the correct phrase in parentheses to complete some rules for using *at*, *in*, and *on* to say when things happen.

1. You can use *at* with exact times, with specific meals, and to say what happens during the night. (during the night / during the afternoon)
with certain times of the day
2. You can use *in* with months, years, seasons, and of the day. (with certain times of the day / with certain days of the week)
3. You can use *on* with specific dates, the days of the week, and to say what happens during the weekend. (during the afternoon / during the weekend)

2 Read. Complete each sentence by drawing a line to connect the sentence part in the left column with the best phrase in the right column.

- | | |
|---|---------------------------------|
| 1. It's best to observe bioluminescent animals | a. at 8 o'clock in the morning. |
| 2. In North America people celebrate New Year's Day | b. in the evening. |
| 3. We eat dinner | c. at night. |
| 4. You eat breakfast | d. on January 1 st |
| 5. Some places have 20 hours of darkness a day | e. in winter. |

3 Fill in the blank spaces with *at*, *in*, or *on*.

1. In the summer, I love to swim in the ocean.
2. I swim in the morning and in the afternoon, but not in the evening.
That's when the bugs start biting!
3. David Gruber does a lot of his research in the ocean at night.
4. I'm interested in his work. On July 9th, there's a program on TV about his research on sea animals.
5. It starts at 10 o'clock on Sunday night. I hope I don't fall asleep before it's over!

Unit 3

Values **Extend** Worksheet 1.3.6

- 1** What are three interesting things you learned about David Gruber and his research on sea animals?

1. _____

2. _____

3. _____

- 2** Point out three things you learned in this unit about how to protect the things you care about.

1. _____

2. _____

3. _____

- 3** What things in the natural world of land, sea, air, plants, and animals do you care about? How do you protect them?

Unit 3

Unit Review Worksheet 1.3.7

1 Complete the sentences with the correct form of words from the box.

time zone	east	fascinate	west	pattern
light up	healthy	awake	headlight	streetlight

- Outdoor activities in northern Norway are lit up by hundreds of yellow streetlights.
- The lights create lovely patterns against the dark blue of the sky.
- The people stay healthy by eating the right foods, skiing, and skating.
- If you go sledding in the dark, you'd better have headlights on the sled.
- It might be hard for me to stay awake when it's always dark.
- I'd miss the sun rising in the east every morning.
- Is Norway in the same time zone as London or Moscow?
- The idea of one long Polar Night really fascinates me!

2 Rewrite each sentence. Use the correct present form of the non-action or action verb in parentheses. Use the -ing ending for action verbs.

- David Gruber wants people to understand and protect sea creatures. (to want)
- Today he is studying animals, such as sharks and vampire squid, that glow in the dark. (to study)
- For these few weeks, an unusually large group of the creatures are living in the deepest part of the ocean. (to live)
- David believes that there are many more amazing creatures at the bottom of the ocean that haven't been discovered yet. (to believe)

3**Read.** Fill in the blanks to tell when things happen. Use *at*, *in*, or *on*.

1. in (name of season) , my town has a festival to honor the people who first lived there.
(season)
2. The parade starts at (exact time) when the town fire trucks blast their sirens.
(exact time)
3. Later in the (morning/afternoon/evening) , people gather in the park to play sports and games. (time of day)
4. This year, the festival begins on (date) . I can't wait. It's a lot of fun!
(specific date)