

## Warm-up

Before class, find a video, an image, or an app that shows the night sky. Then, show what you have discovered in class and ask students to discuss what they see with a classmate. While students share, write down the words you heard on the board. Finally, encourage students to elaborate on what they said.

## Teaching Tip

**For Exercise 2**  
Before reading, tell students to predict the answers to the exercise. Then, ask students to read the text and check their answers. Afterward, tell students to compare their answers with a classmate, justifying them with key words and phrases from the text. Finally, ask students to quiz one another verbally on the celestial bodies. They can do this by having one student close their book, and the other provide the definition, eliciting the name of the heavenly body. Alternatively, the questions from Exercise 2 can be turned into a game on a digital platform such as Quizlet for students to quiz themselves.

## Differentiation Strategy

**For Exercise 3**  
Go to the Differentiation Strategies Bank and adapt this exercise using Strategy 4a.

## Flexi Exercises

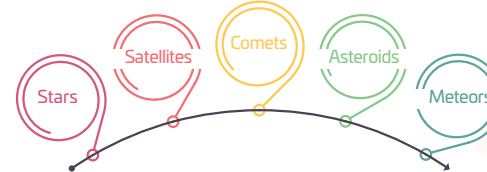
(To adjust to students' needs, you can either use or not the activities below)

### Exercise 4



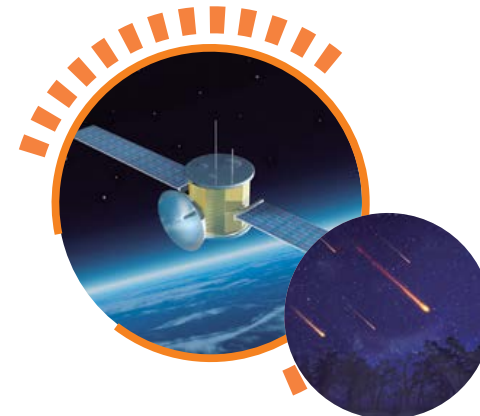
## What can you see at night?

**01** With a classmate, discuss what you know about the celestial bodies below.



**02** Read "A Star Is Born." Match the celestial object to its description.

- |               |  |
|---------------|--|
| 1. stars      | a. glowing balls of gas conducting fusion                        |
| 2. satellites | b. burn when they enter the atmosphere                           |
| 3. comets     | c. can be seen with the untrained eye when they approach the Sun |
| 4. asteroids  | d. can be natural or artificial                                  |
| 5. meteors    | e. come together to form a belt                                  |



### A Star Is Born

If you used your **naked** eye, you would probably say all celestial bodies look alike. However, learning about them can help you better identify them.

Stars are hot, dense, spinning balls of hydrogen and helium that glow due to their continuous **fusion** reactions. They are classified based on many factors, such as **magnitude** or brightness. They can also be classified by color, ranging from yellowish to blue. A star's color is determined by its surface temperature, varying from 2,500 Kelvin (K) in red stars to 50,000 K in blue stars. Another element of star **classification** is size; the smallest stars, called dwarfs, are 12,000 kilometers in diameter, while supergiants are 1,000 times larger than our Sun.

Other celestial bodies are also visible in the night sky. Satellites revolve around planets and can be natural, like our Moon, or **artificial**, like communication satellites. Satellites like our Moon are seen regularly, while other objects, such as comets, asteroids, and meteors, are only occasionally visible. Comets are pieces of ice and rock that form at the outer edge of our Solar System. They heat up when they come closer to the Sun, creating a beautiful vapor tail. Asteroids are irregularly shaped rocks grouped in space. The most oversized asteroid belt in our Solar System is between Mars and Jupiter. Finally, meteors are space objects pulled toward the Earth by its gravitational pull and burn when entering the **atmosphere**. When this happens, they are called shooting stars.

**03** Read the text again. Write the word next to its definition.

- |   |                       |
|---|-----------------------|
| 1. without optical support                  | <u>naked</u>          |
| 2. join together and release energy         | <u>fusion</u>         |
| 3. measure of brightness                    | <u>magnitude</u>      |
| 4. to categorize                            | <u>classification</u> |
| 5. not occurring naturally                  | <u>artificial</u>     |
| 6. the layer of gases surrounding the Earth | <u>atmosphere</u>     |

**04** With a classmate, discuss the questions below.

- Have you ever seen any of these heavenly objects?
- If so, which ones? What were they like? If not, which ones would you like to see? Why?

## Teaching Tip

### For Exercise 5

After completing it, divide students into small groups and give each group a dice. Then, tell students that they will modify the conditionals in the sentences in Exercise 5 depending on the number they roll. If they roll 1-2, they must change the conditional into the Second Conditional. A 3-4 means third conditional, and a 5-6 means a Mixed Conditional. If students roll a one and have sentence one already in the Second Conditional, they are safe. Students get one point per correct transformation. Finally, the student with the most points at the end wins. For example: Sentence 1 (roll 3- change to Third conditional)- *If I had gone to space when I was younger, I would have visited the Moon.*

## Language Structures and Functions Tip

### For Exercise 8

Before class, write the names of the celestial bodies on cards to ensure a variety of ideas. Then, divide students into groups in class and provide one set to each group. While thinking of ideas, students must choose a card and provide a fact about that type of celestial body. Also, allow students to provide the first half of a sentence for a classmate to finish. Then, ask volunteers to share their sentences with the rest of the class. Finally, if time allows and you deem necessary, review the grammar point in more detail.

## Differentiation Strategy

### For Exercise 7

Go to the Differentiation Strategies Bank and adapt this exercise using Strategy 2d.

## Wrap-up

First, ask the students to stand in a circle. Then, play Hot Potato, throwing a ball around until the song ends. Name a celestial body; the person left with the ball must tell you one thing about the heavenly body. Play as much as time allows.

## Flexi Exercises

(To adjust to students' needs, you can either use or not the activities below)

### Exercise 5

05 Write "2" for Second Conditional, "3" for Third Conditional, and "M" for Mixed Conditional.

- 2 1. If I could go to space, I would visit the Moon.
- 3 2. Astronomers wouldn't have developed spectrographs if Newton hadn't done investigations with color and light.
- M 3. I would be passing physics if I had studied harder.
- 3 4. Nancy would have gotten the job if she had done the summer internship.
- 2 5. Valeria would go to the planetarium more often if she had more time.
- M 6. I would read the astronomy book if Jenny had returned it to me when she promised.

07 Research one of the heavenly bodies from the text in more detail. Write a fact file about it.

Answers will vary.

06 Unscramble the sentences below.

1. I / more / If / money / had / I / tourism / do / would / space  
If I had more money, I would do space tourism.
2. Sean / have / museum / gone / would / to / the / with / his / school / if / sick / he / been / hadn't  
Sean would have gone to the museum with his school if he hadn't been sick.
3. Viola / telescope / still / have / would / her / if / broken / hadn't / Henry / it  
Viola would still have her telescope if Henry hadn't broken it.
4. If / Missy / in / Italy / lived / study / she / able / would / be / to / at / Cern  
If Missy lived in Italy, she would be able to study at Cern.
5. If / more / had / Mike / had / time / he / would / investigated / have / galaxy / the / more  
If Mike had had more time, he would have investigated the galaxy more.

08 Work in groups and share what you have learned about celestial bodies. Express your opinions about them. Use the language below to guide you.