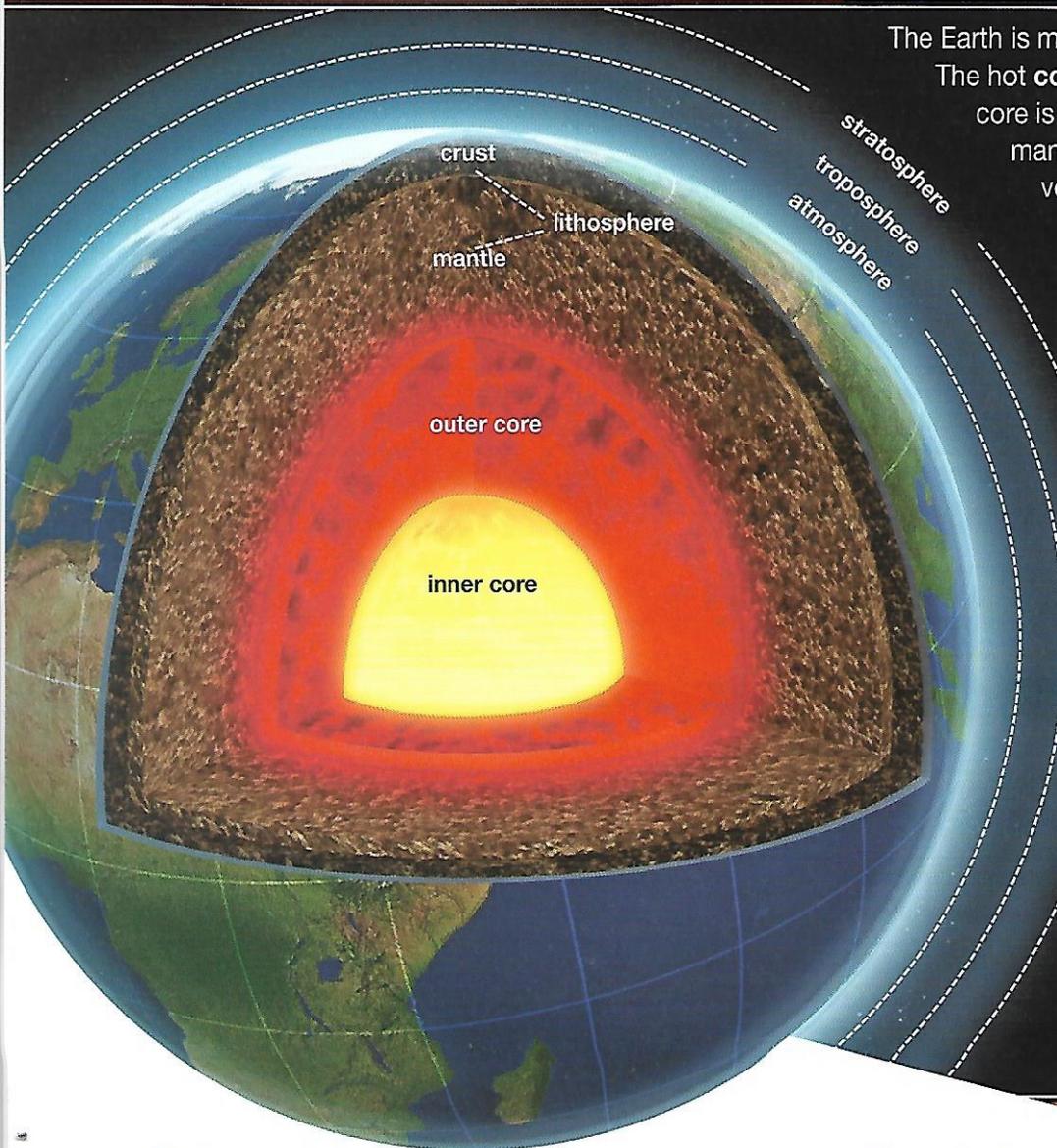


# 1 The Earth: Structure and Spheres

## The Earth's Spheres



The Earth is made of several layers, or spheres.

The hot **core** is at the center. Around the core is the **mantle** and the **crust**. The mantle makes up most of the Earth's volume. We see rocks and soil at the crust. The Earth's

**lithosphere** is the rigid outer layer that is made up of the crust and the part of the mantle just below it. The core, mantle, and crust are the **geosphere**. Everything above the crust is part of the **biosphere** that supports life. Many living things exist underwater in the **hydrosphere**. The hydrosphere includes water vapor above the Earth, too. All around the Earth is the **atmosphere**. Most of the air is in the inner part, the **troposphere**. The outer part, the **stratosphere**, protects us from the sun.

### Get ready!

1 Before you read the passage, talk about these questions.

- 1 What layers make up the lithosphere?
- 2 What is the thin layer of air around the Earth?

### Reading

2 Read the textbook chapter. Then, mark the following statements as true (T) or false (F).

- 1 \_\_\_ The lithosphere is part of the geosphere.
- 2 \_\_\_ The biosphere is below the Earth's surface.
- 3 \_\_\_ Many living things exist in the geosphere.

### Vocabulary

3 Match the words (1-5) with the definitions (A-E).

- |                 |                  |
|-----------------|------------------|
| 1 ___ crust     | 4 ___ geosphere  |
| 2 ___ mantle    | 5 ___ atmosphere |
| 3 ___ biosphere |                  |

- A the layer of air around the Earth  
B the layer on the Earth that supports life  
C the Earth's surface and interior  
D the layer at the Earth's surface  
E the layer that makes up most of the Earth's volume

- 4 Fill in the blanks with the correct words from the word bank.

### Word BANK

stratosphere lithosphere  
core troposphere hydrosphere

- The \_\_\_\_\_ is at the center of the Earth.
- Most of the Earth's air is in the \_\_\_\_\_.
- The \_\_\_\_\_ includes rivers and oceans.
- Life on Earth is protected from the sun by the \_\_\_\_\_.
- The crust and the upper mantle make up the \_\_\_\_\_.

- 5 Listen and read the textbook chapter again. What are the parts of the atmosphere?

### Listening

- 6 Listen to a conversation between an instructor and a student. Check (✓) the spheres that the man identifies.

- |   |                                       |
|---|---------------------------------------|
| 1 <input type="checkbox"/> biosphere    | 4 <input type="checkbox"/> geosphere  |
| 2 <input type="checkbox"/> troposphere  | 5 <input type="checkbox"/> atmosphere |
| 3 <input type="checkbox"/> stratosphere |                                       |

- 7 Listen again and complete the conversation.

**Instructor:** Leon, are you pretty comfortable with the spheres?

**Student:** I think so. I'll give it a try.

**Instructor:** Okay. What layer contains most of the 1 \_\_\_\_\_?

**Student:** Let's see. That's the 2 \_\_\_\_\_, right?

**Instructor:** You got it. And what larger sphere is it 3 \_\_\_\_\_?

**Student:** It's part of the 4 \_\_\_\_\_. No, wait, that's a separate layer.

**Instructor:** That's right. And they 5 \_\_\_\_\_ to which sphere?

**Student:** They're both part of the 6 \_\_\_\_\_.

### Speaking

- 8 With a partner, act out the roles below based on Task 7. Then, switch roles.

#### USE LANGUAGE SUCH AS:

*What layer contains ...?*

*That's the ... right?*

*No, wait, that's ...*

**Student A:** You are an instructor. Talk to Student B about:

- the Earth's spheres
- which layers belong to each sphere

**Student B:** You are a student. Talk to Student A about the Earth's spheres.

### Writing

- 9 Use the textbook chapter and the conversation from Task 8 to fill out the student's exam.



Exam 2

## The Earth's Spheres

Name: \_\_\_\_\_

Describe a sphere of the Earth's surface:

\_\_\_\_\_

Describe a sphere on the Earth's surface:

\_\_\_\_\_

Describe a sphere above the Earth's surface:

\_\_\_\_\_