Name: _____ Date: _____



Carl Woese

The Scientist behind a New Domain of Life

Small microbes. A big discovery.



Different life forms. One amazing planet!



1 Warm-up

Answer the questions. Discuss with your partner or in class.

1 What do you know about Carl Woese? _____

_____

2 Have you ever heard about bacteria or archaea? What are they? _____

_____

3 Why do you think it is important to discover new forms of life? _____

_____

4 What are some other famous discoveries that changed the world? _____

_____

2 Vocabulary

Match the words (1–8) with their definitions (A–H).

1	microorganism	☐	A a very small living thing that can only be seen with a microscope
2	organism	☐	B a living thing
3	cell	☐	C the basic unit of life
4	genetic information	☐	D the information that determines the traits of an organism
5	nucleus	☐	E the control centre of a cell
6	bacteria	☐	F one of the three main groups of life (along with bacteria and archaea)
7	archaea	☐	G single-celled organisms with simple structure
8	domain	☐	H a large category in biology used to group organisms

Word Bank

microorganism organism cell genetic information nucleus bacteria archaea domain

3 Reading

Read the text again and fill in the gaps.

1 Carl Woese studied _____ at the University of Illinois.

2 His research showed that _____ are more diverse than we thought.

3 He discovered a new domain called _____.

4 Woese's work proved that all life on Earth is based on _____.

5 Today, the three domains of life are _____, _____ and _____.

4 Reading

Read the text about Carl Woese and answer the questions.

Carl Woese was an American scientist, born in 1928 in New York. He became a microbiologist and a biologist and made a discovery that changed our understanding of life on Earth. While studying bacteria, he found that there were organisms that did not fit into the known categories. These organisms, called archaea, were similar to bacteria, but different in many ways.

In the 1970s, Woese developed a new method of studying genetic information. He compared the RNA of different organisms and discovered that life is divided into three domains: Bacteria, Archaea and Eukarya. This idea showed that archaea are a separate domain and that they are not just a type of bacteria.

Woese's work was groundbreaking. It changed the way scientists think about the tree of life. His research has helped us understand evolution, the diversity of life, and the connections between all living things.

Carl Woese passed away in 2012, but his discovery continues to inspire scientists around the world.



Three domains. One tree of life.



Answer the questions.

1 Where was Carl Woese born? _____

2 What was his profession? _____

3 What did he discover in the 1970s? _____

4 How many domains of life are there? What are they? _____

_____

5 Why is his work important? _____

_____

5 Grammar

Put the verbs in brackets into the correct tense.

1 Carl Woese (study) _____ at the University of Illinois in the 1950s.

2 He (discover) _____ the new domain in the 1970s.

3 His research (change) _____ the way scientists think about life.

4 The discovery (help) _____ us understand evolution better.

5 He (pass away) _____ in 2012.

Past Simple & Past Continuous

6 Writing

Imagine you are Carl Woese. Write a short paragraph (80–100 words) about your discovery and why it was important. Use the words below (if you need them).

discovery research life important future scientist

_____

_____

_____

Your turn!

7 Speaking / Pair Work

Work in pairs. Discuss the questions.

1 What do you think was the most important part of Carl Woese's work?

2 How do you think his discovery affects our lives today?

3 Would you like to be a scientist? Why or why not?

Share your ideas!

8 Self-Assessment

How well did you do? Tick the box.

☐ I can understand the main idea of the text.

☐ I can use new vocabulary in context.

☐ I can talk about scientific discoveries.

☐ I can write a short text about a topic.

Great job!

LIVEWORKSHEETS