Level: B1 Intermedio

Skill: Reading

Bateria Memories



Just when scientists thought they knew all there was to know about bacteria, they have unearthed something quite unexpected. They have found that bacteria have a mechanism within their single-celled forms that can store and pass on memories to future generations. The research was on the ubiquitous E. coli bacterium. This is one of Earth's most well-studied organisms. Researchers at the University of Texas wrote about how bacteria could form memories while lacking a brain: "Bacteria don't have brains, but they can gather information from their environment, and if they have encountered that environment frequently, they can store it and quickly access it later for their benefit."

Bacterial memory differs from that in humans. It may be more akin to our muscle memory. Our bodily tissue has a sense of what to do next from having done it repetitively many times before. The researchers attributed bacterial memory to levels of iron in their physical constitution. A researcher said: "Before there was oxygen in the Earth's atmosphere, early life was utilizing iron for a lot of cellular processes." He added: "Iron is not only critical in the origin of life on Earth, but also in the evolution of life. It makes sense that cells would utilize it." He said his research could aid in combating bacterial diseases, as "the more we know about bacterial behaviour, the easier it is to combat them".

Match the following synonyms from the article.

• unearthed	• similar
• unexpected	• being without
• ubiquitous	• experienced
• lacking	• development
• encountered	• unpredicted
• differs	• credited
• akin	• discovered
• attributed	• fight
• evolution	• varies
• combat	• ever-present

Decide if the following sentences are TRUE or FALSE

- Scientists actually know everything there is to know about bacteria.
- The most well-studied bacteria on Earth are E. coli.
- The researchers said some cells may have a brain.
- Bacteria can gather information about their environment.
- Bacteria memory could be similar to muscle memory in humans.
- Early bacteria relied on iron to develop and survive.
- Iron was important is the beginnings of life on Earth.
- A researcher said his research would end all diseases.

LIVEWORKSHEETS