

Practice 3:

Matching Headings Practice

Choose the correct heading (i-ix) for paragraphs A, B, C and D in the passage below.

- i. Temperatures on Earth
- ii. The Greenhouse
- iii. Creating Global Warming
- iv. Use of a Greenhouse
- v. Our Choices
- vi. Greenhouse Gases
- vii. Earth's Atmosphere
- viii. Reversing the Damage
- ix. Effects of Carbon Dioxide

The Greenhouse Effect

A. A greenhouse is a house made entirely of glass: both walls and roof are glass. One of the main purposes of a greenhouse is to grow tomatoes, flowers and other plants that might struggle to grow outside. A greenhouse stays warm inside, even during winter. Sunlight shines in and warms the plants and air inside. But the heat is trapped by the glass and cannot escape. So during the daylight hours, it gets warmer and warmer inside a greenhouse, and stays quite warm at night too.

B. The Earth experiences a similar thing to a greenhouse. Gases in the atmosphere such as carbon dioxide do what the roof of a greenhouse does. During the day, the sun shines through the atmosphere. Earth's surface warms up in the sunlight. At night, Earth's surface cools, releasing the heat back into the air. But some of the heat is trapped by the greenhouse gases in the atmosphere. That is what keeps our Earth a warm and comfortable 59 degrees Fahrenheit, on average.

C. However, gas molecules, called greenhouse gases, that absorb thermal infrared radiation, and are in significant enough quantity, can force and alter the climate system. Carbon dioxide (CO₂) and other greenhouse gases act like a blanket, absorbing IR radiation and preventing it from escaping into outer space. The greenhouse effect, combined with increasing levels of greenhouse gases, produces global warming, which is expected to have profound implications.

D. Many scientists agree that the damage to the Earth's atmosphere and climate is past the point of no return or that the damage is near the point of no return. In Josef Werne's opinion, an associate professor at the department of geology & planetary science at the University of Pittsburgh told Live Science, we have three options. Firstly to do nothing and live with the consequences. Secondly, to adapt to the changing climate (which includes things like rising sea level and related flooding). Thirdly, mitigate the impact of climate change by aggressively enacting policies that actually reduce the concentration of CO₂ in the atmosphere.

Practice 5:

Antimicrobial Resistance

A) While antibiotic resistance refers specifically to the resistance to antibiotics that occurs in common bacteria that cause infections, antimicrobial resistance is a broader term, encompassing resistance to drugs to treat infections caused by other microbes. Antimicrobial resistance (AMR) is resistance of a microorganism to an antimicrobial drug that was originally effective for treatment of infections caused by it. Resistant microorganisms (including bacteria, fungi, viruses and parasites) are able to withstand attack by antimicrobial drugs, such as antibacterial drugs (e.g., antibiotics), antifungals, antivirals, and antimalarials, so that standard treatments become ineffective and infections persist, increasing the risk of spread to others. The evolution of resistant strains is a natural phenomenon that occurs when microorganisms replicate themselves erroneously or when resistant traits are exchanged between them. The use and misuse of antimicrobial drugs accelerates the emergence of drug-resistant strains. Poor infection control practices, inadequate sanitary conditions and inappropriate food-handling encourages the further spread of AMR.

B) New resistance mechanisms emerge and spread worldwide threatening our ability to treat common infectious diseases, resulting in death and disability of individuals who until recently could continue a normal course of life. Without effective anti-infective treatment, many standard medical treatments will fail or turn into very high risk procedures. This would be a financially draining situation for wealth countries but for the poorer ones, it could have catastrophic effects.

C) Infections caused by resistant microorganisms often fail to respond to the standard treatment, resulting in prolonged illness, higher health care expenditures, and a greater risk of death. As an example, the death rate for patients with serious infections caused by common bacteria treated in hospitals can be about twice that of patients with infections caused by the same non-resistant bacteria. For example, people with MRSA (another common source of severe infections in the community

D) WHO's report on global surveillance of antimicrobial resistance reveals that antibiotic resistance is no longer a prediction for the future; it is happening right now, across the world, and is putting at risk the ability to treat common infections in the community and hospitals. Without urgent, coordinated action, the world is heading towards a post-antibiotic era, in which common infections and minor injuries, which have been treatable for decades, can once again kill.

Questions 1-4

Choose the correct heading from the list below (i-x)

Choose the correct heading for sections A-D from the list of headings below.

- i. A fatal threat
- ii. A global concern.
- iii. The evolution of resistance
- iv. MRSA in hospitals
- v. The present situation
- vi. What is antimicrobial resistance?
- vii. Protecting future generations

- 1. Section A =
- 2. Section B =
- 3. Section C =
- 4. Section D =