

Nombre y Apellido: .....N° de registro:.....Carrera:.....

A partir de la lectura de la lectura del texto extraído de *Encyclopedia of Biology*, resolver las siguientes actividades:

**bacteria** One of two prokaryotic (no nucleus) domains, the other being the ARCHAEA. Bacteria are microscopic, simple, single-cell organisms. Some bacteria are harmless and often beneficial, playing a major

role in the cycling of nutrients in ecosystems via aerobic and anaerobic decomposition (saprophytic), while others are pathogenic, causing disease and even death. Some species form symbiotic relationships with other organisms, such as legumes, and help them survive in the environment by fixing atmospheric nitrogen. Many different species exist as single cells or colonies, and they fall into four shapes based on the shape of their rigid cell wall: coccial (spherical), bacillary (rod-shaped), spirochetal (spiral/helical or corkscrew), and vibro (comma-shaped). Bacteria are also classified on the basis of oxygen requirement (aerobic vs. anaerobic).



Photomicrograph of *Streptococcus (Diplococcus) pneumoniae* bacteria, using Gram's stain technique. *Streptococcus pneumoniae* is one of the most common organisms causing respiratory infections such as pneumonia and sinusitis, as well as bacteremia, otitis media, meningitis, peritonitis, and arthritis. (Courtesy of Centers for Disease Control and Prevention, 1979)

In the laboratory, bacteria are classified as gram-positive (blue) or gram-negative (pink) following a laboratory procedure called a Gram's stain. Gram-negative bacteria, such as those that cause the plague, cholera, typhoid fever, and salmonella, for example, have two outer membranes, which make them more resistant to conventional treatment. They can also easily mutate and transfer these genetic changes to other strains, making them more resistant to antibiotics. Gram-positive bacteria, such as those that cause anthrax and listeriosis, are more rare and are treatable with penicillin but can cause severe damage by either releasing toxic chemicals (e.g., clostridium botulinum) or by penetrating deep into tissue (e.g., streptococci). Bacteria are often called germs.

**Actividades de reconocimiento lingüístico (45 pts.)**

1. Lea el texto y extraiga 2 palabras transparentes y/o conocidas y tradúzcalas (1 p).

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2. Busque las siguientes palabras en el texto y determinar su **significado** y **función gramatical** teniendo en cuenta el contexto en el que están siendo usadas. (6 pts)

Palabra en inglés	Interpretación al español en este contexto	Función gramatical
Major (L.4)		
Transfer (L.24)		
Strains (L.24)		

3. Traduzca las siguientes **frases nominales** que se encuentran en el texto. Para cada caso: encerrar con un círculo el núcleo, subrayar la premodificación (si hubiere) y encerrar entre paréntesis la postmodificación (si hubiere) (18 p.)

Frase nominal	Traducción
Single-cell organisms	
A major role	
The shape of their rigid cell wall	
On the basis of oxygen requirement	
Gram's stain	
Two outer membranes	
Symbiotic relationships with other organisms	
These genetic changes to other strains	
Laboratory procedure	

4. Determine la función del sufijo “-ing” en cada caso y traduzca la oración que contiene dicha palabra (10 p.)

Palabra -ing	Categoría gramatical: sustantivo, verbo o adjetivo	Traducción en español
Some bacteria are harmless and often beneficial, <i>playing</i> a major role in the <i>cycling</i> of nutrients in ecosystems via aerobic and anaerobic decomposition, while others are pathogenic, <i>causing</i> disease and even death.		
Gram-positive bacteria, such as those that cause anthrax and listeriosis, are more rare and are treatable with penicillin but can cause severe damage by either <i>releasing</i> toxic chemicals or by <i>penetrating</i> deep into tissue.		

5. Analice los afijos de las palabras “*harmless*” y “*treatable*” subrayadas en el texto (3 p.) Para ello:

- Determinar la función gramatical de la palabra en este contexto:.....
- Determinar si posee PREFIJO/S y/o SUFIJO/S y cuáles:.....
- Determinar la palabra y categoría gramatical de la que originalmente proviene el término "*harmless*" y "*treatable*".....

6. Determine la **función** que cumplen los siguientes conectores en el texto, tradúzcalos y mencione qué relación crea cada uno de ellos en el texto: And (L.4) ,while (L.6), such as (L.9), or (L.11), for example (L.21), also (L.23), but (L.28). (7 p)

### **B. Actividades de comprensión (55 pts)**

Responda las preguntas en español en forma completa, clara y legible.

- a. Escriba la definición de bacterias en manera completa.
- b. ¿Cómo se clasifican?
- c. Mencione cómo se denominan las bacterias de acuerdo a la forma que reciben.
- d. ¿Qué nombre recibe el procedimiento para clasificar las bacterias en el laboratorio?
- e. Mencione detalladamente las características y enfermedades que causan las bacterias gram negativas y gram positivas.