

STUDENT'S

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

COURSE/GRADE: \_\_\_\_\_ SUBJECT: \_\_\_\_\_

TOPIC: \_\_\_\_\_

INSTRUCTION: \_\_\_\_\_

### 1.- READ AND SELECT THE CORRECT OPTION.

#### How do bacteria Exchange DNA?

How do bacteria get new genes? There are three ways that bacteria can acquire new genetic information. One way, called transformation, occurs when bacteria take up DNA from the environment. Another way, transduction, happens when a virus injects DNA into a bacterium. Sometimes the DNA is incorporated into the cell and may be useful. The third way is called conjugation. Some bacteria have a second loop of DNA, smaller than the main chromosome, called a plasmid. During conjugation, a plasmid is transferred from one bacterium to another when the two bacteria temporarily join together. The bacterium that gets the plasmid now has new genes that it can use. An example of a trait found on plasmid DNA is antibiotic resistance.

1.- Which are the three ways that bacteria can acquire new genetic information?

- A) atoms and molecules
- B) transformation, transduction and conjugation
- C) neutrons and protons
- D) DNA and AIDS

2.- When does transformation occur?

- A) when bacteria take up DNA from the environment.
- B) when a virus injects DNA into a bacterium.
- C) a plasmid is transferred from one bacterium to another.
- D) when it injects a cell with its DNA

3.- What does DNA mean?

- A) Acquired immunodeficiency syndrome
- B) Deoxyribonucleic acid
- C) water
- D) Ribonucleic acid

4.- In Which of the ways some bacteria have a second loop of DNA smaller than the main chromosome called a plasmid?

- A) transformation
- B) transduction
- C) conjugation

5.- What happens with the bacterium that gets the plasmid?

- A) form the environment
- B) injects DNA
- C) have a second loop
- D) has new genes that it can use

2.- MATCH EACH WORD WITH ITS CORRESPONDING DESCRIPTION.

- |                |   |
|----------------|---|
| 1.- Bacteria   | A) a microscopic particle that cannot replicate on its own. |
| 2.- Prokaryote | B) second loop of DNA, smaller than the main chromosome.    |
| 3.- Virus      | C) do not have a nucleus.                                   |
| 4.- Eukaryote  | D) small, single celled organism.                           |
| 5.- plasmid    | E) made up of one or many cells.                            |