

Name _____

The Battle of Antibiotics: How Bacteria Develop Resistance

Multiple Choice Questions

1. How do bacteria develop resistance to antibiotics through genetic mutation?
 - A) By forming biofilms
 - B) By sharing genetic material
 - C) By altering bacterial proteins
 - D) By increasing antibiotic use

2. What is horizontal gene transfer in bacteria?
 - A) Formation of biofilms
 - B) Sharing of genetic material
 - C) Use of efflux pumps
 - D) Overuse of antibiotics

3. How does overuse and misuse of antibiotics contribute to antibiotic resistance?
 - A) By forming biofilms
 - B) By sharing genetic material
 - C) By accelerating genetic mutations
 - D) By preventing efflux pump activity

4. What is the role of biofilm formation in antibiotic resistance?
 - A) Protecting bacteria from antibiotics
 - B) Sharing genetic material
 - C) Increasing antibiotic susceptibility
 - D) Preventing genetic mutations

5. How do efflux pumps contribute to antibiotic resistance in bacteria?
 - A) By forming biofilms
 - B) By increasing antibiotic use
 - C) By preventing genetic mutations
 - D) By pumping antibiotics out of bacterial cells

