Name _____

Healing Equations: How Differential Equations Shape Biology and Medicine

Multiple Choice Questions

1. How do differential equations help scientists model population dynamics?

A) By predicting weather patterns

B) By analyzing genetic mutations

C) By describing how populations change over time

D) By studying the behavior of planets

2. In which field of study are differential equations used to model biological processes within the body?

A) Geology

B) Physiology

C) Economics

D) Linguistics

3. What role do differential equations play in epidemiology?

A) Modeling disease spread

B) Designing architectural structures

C) Studying ancient civilizations

D) Analyzing musical compositions

4. How are pharmacokinetic models used in pharmacology?

A) To study animal behavior

B) To design clothing patterns

C) To analyze geological formations

D) To predict drug concentrations in the body

5. What is the primary purpose of using differential equations in biology and medicine?

A) To predict the taste of food

B) To understand and manipulate biological systems

C) To measure the length of objects

D) To study historical events