

Name \_\_\_\_\_

## The Dynamic Duo: Differential vs. Integral Calculus

### Multiple Choice Questions

1. What is the main difference between differential calculus and integral calculus?
  - A) Differential calculus focuses on total change, while integral calculus focuses on rates of change.
  - B) Differential calculus studies the past, while integral calculus predicts the future.
  - C) Differential calculus uses addition, while integral calculus uses subtraction.
  - D) Differential calculus deals with instantaneous rates of change, while integral calculus deals with the accumulation of changes over time.
  
2. How is differential calculus compared to a microscope?
  - A) It helps us zoom in on tiny changes.
  - B) It helps us see the bigger picture.
  - C) It helps us travel through time.
  - D) It helps us solve puzzles.
  
3. What analogy is used to describe integral calculus?
  - A) A treasure hunt
  - B) A microscope
  - C) A telescope
  - D) A roller coaster
  
4. What concept is used in differential calculus to measure rates of change?
  - A) Derivatives
  - B) Integrals
  - C) Functions
  - D) Equations
  
5. How does integral calculus differ from differential calculus in terms of what it calculates?
  - A) It focuses on instantaneous rates of change.
  - B) It deals with the accumulation of changes over time.
  - C) It uses addition to find total change.
  - D) It studies the past instead of predicting the future.

