

## Human Prenatal Development

### Investigation 3 Quiz

Name: \_\_\_\_\_ Date: \_\_\_\_\_

*Please use the back of this quiz if you need additional space.*

1. What is embryonic development? In your answer, describe what happens after fertilization.

2. During early embryonic development, cells divide rapidly but later begin to specialize. What is this process of specialization called?

3. Why is this process essential for the formation of tissues and organs? Explain how different cell types contribute to the structure and function of the body.

4. Which statement best describes the relationship between cell division and cell differentiation during early development? (circle one)

- A. Cells differentiate first, then divide
- B. Cell division and differentiation are unrelated
- C. Cells divide first, then gradually differentiate
- D. Cells differentiate randomly during development

5. Why must embryonic development occur in an orderly, precisely regulated sequence? Explain what could happen if early developmental steps were disrupted.