

The Human Life Cycle Explorer: An Investigation with Nova

Learning objective: To identify and describe the changes in humans as they develop from birth to old age.

Welcome, young scientist! Nova the barn owl needs your help to document the various stages of the human life cycle. Use your scientific knowledge to observe the physical and emotional changes that occur throughout a human's lifetime. Fill in the sections below, using precise terminology to describe growth and development.

Word bank: Infancy · Childhood · Adolescence · Adulthood · Old Age · Puberty · Development · Independence · Physical changes

1. Identify the key characteristics of Infancy. Explain why human infants are entirely dependent on their caregivers for survival. (3 marks)

2. Compare and contrast the physical requirements of a child compared to an adult. What might happen if an adolescent does not receive adequate nutrition during a growth spurt? (4 marks)

3. Describe the process of puberty. Why is this stage considered a significant milestone in the transition from childhood to adulthood? (3 marks)

4. Justify why human development is a continuous process rather than a series of isolated events. Use examples of skills learned at different life stages. (4 marks)

5. Research and explain the natural decline in physical strength during old age. How can lifestyle choices influence this process? (3 marks)

6. Create a hypothesis: If humans stopped developing after reaching physical maturity, how would this impact our ability to adapt to new environments throughout our lives? (5 marks)

Extension challenge: Design a 'Life Cycle Timeline' poster. Beyond the basic stages, annotate your timeline to include the social and emotional responsibilities typically associated with each phase. Consider how these responsibilities shape an individual's contribution to their community.