

The Human Life Cycle: An Investigation with Nova

Learning objective: To describe the changes as humans develop to old age, focusing on the stages of human growth and development.

Join Nova the owl to investigate how humans grow and change throughout their lives. Use your scientific knowledge to observe, compare, and explain the physical and behavioural shifts that occur from infancy to old age. Write your observations clearly and use the vocabulary provided.

Word bank: infancy · childhood · adolescence · adulthood · puberty · senescence · development · independence

1. The Early Years: Describe the physical characteristics and levels of independence typical during the stage of infancy compared to early childhood. (3 marks)

2. Adolescence Transitions: Explain why the period of adolescence is considered a significant phase of both physical and emotional development. (3 marks)

3. Comparing Stages: Compare and contrast the responsibilities of an adult with those of a primary school child. Justify your answer with examples. (4 marks)

4. The Later Years: Define 'senescence' (old age) and describe two ways in which the human body might change as it reaches this final stage of the life cycle. (3 marks)

5. Critical Thinking: What might happen to a human's ability to live independently if they did not progress through the developmental stages of childhood and adolescence? Explain your reasoning. (4 marks)

6. Scientific Justification: Why is it important for the human body to grow slowly over many years rather than reaching adulthood in just a few months? Provide a reasoned argument. (4 marks)

Extension challenge: Imagine you are interviewing a person from each of the four main life stages (infant, child, adult, elderly). Draft three insightful questions for each person that would help you understand how their perspective on the world changes as they age. Create a 'Life Stages Timeline' illustration to accompany your interview questions, highlighting one key milestone for each stage.