

Year 5 Science Assessment: Animals Including Humans

Learning objective: To demonstrate understanding of the human lifecycle, including gestation, puberty, and the ageing process.

Read each question carefully. Use scientific vocabulary where appropriate. Ensure your answers are clear and concise.

Nova the barn owl has been observing the growth of various animals in the wild. She notes that while different species have unique lifecycles, humans follow a specific pattern of growth, development, and change from infancy through to old age.

Word bank: gestation · puberty · adolescence · fetus · hormones · development · independence · lifespan

1. Nova observes that human development begins before birth. Define the term 'gestation' and explain why this period is vital for a developing fetus. (2 marks)

2. Identify two physical changes that occur in both males and females during the stage of puberty. (2 marks)

3. Max the monkey is curious about how humans change as they grow. Explain the difference between 'infancy' and 'adolescence' in terms of independence. (2 marks)

4. Compare and contrast the human lifecycle with that of a butterfly. How does the human process of 'growth' differ from 'metamorphosis'? (3 marks)

5. During old age, human bodies undergo several changes. Justify why it is important for older adults to maintain a healthy diet and regular, gentle exercise. (3 marks)

6. What might happen if a human did not go through the stage of puberty? Explain your reasoning using the concept of biological maturity. (3 marks)

7. Write a detailed reflection (approx. 100 words) on the human lifecycle. Describe the key stages from birth to old age. Include how the human body changes physically and why these stages are essential for the survival and continuation of the species. (5 marks)

8. Give one example of an environmental factor that could influence the healthy development of a human during their lifetime. (2 marks)

9. Explain why the human 'adolescent' stage is often considered a period of significant emotional and social transition, not just physical growth. (3 marks)

Draw: Draw a labelled diagram representing the main stages of the human lifecycle: Infancy, Childhood, Adolescence, Adulthood, and Old Age.



Extension challenge: Total: /25. Creative Extension: Imagine a new species that does not follow the human lifecycle. Describe how its development might differ, focusing on how it gains independence and reaches maturity. Use the scientific vocabulary from the word bank in your description.