

Nova's Life Cycles and Development Flashcards

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

Read the term or question on the front of the card. Use your scientific knowledge to recall the definition or answer before checking the 'Answer' section. Challenge yourself to explain the processes involved in each stage.

What is the first stage of the human life cycle, typically lasting from birth to two years old?

Infancy.

Define 'Adolescence'.

The transitional stage of development between childhood and adulthood, characterised by significant physical and emotional changes.

What is the term for the process during adolescence where the body begins to change physically, becoming capable of reproduction?

Puberty.

Compare and contrast the needs of an infant versus an adult.

Infants are entirely dependent on caregivers for nutrition, protection, and mobility, whereas adults are typically independent and responsible for their own needs and the care of others.

Explain why humans require a long period of childhood compared to many other mammals.

Humans have complex brains that require a long period of time to learn social behaviours, language, and skills necessary for survival in a complex society.

Justify why old age is considered the final stage of the human life cycle.

It is the stage where the body's systems gradually become less efficient, marking the conclusion of the natural biological growth and development cycle.

What are the primary physical changes that occur during adulthood?

Growth typically stops, the body maintains its systems, and eventually, the body begins to show signs of ageing as cells regenerate more slowly.

Describe the transition from childhood to adolescence.

This transition involves a growth spurt, the onset of puberty, and a shift towards increased independence and more complex emotional maturity.

What might happen if a human skipped the childhood stage of development?

They would likely lack the social, cognitive, and physical skills required to function independently as an adult, as childhood is essential for 'learning' how to live.

Define 'Gestation' in the context of human development.

The period of time between conception and birth, during which the foetus develops inside the mother's womb.

How does an individual's level of independence change throughout the human life cycle?

It begins at zero in infancy, increases steadily throughout childhood and adolescence, peaks in adulthood, and may fluctuate in old age.

Nova the Owl asks: Why is it important for humans to continue learning even after they reach adulthood?

Because the world is constantly changing, and continued learning allows humans to adapt to new environments, technologies, and social structures.