Nova’s Science Flashcards: Understanding Reproduction

Learning objective: To identify and understand the processes of sexual and asexual reproduction in plants and animals.

Read the front of the card, think of the answer, and then flip to check the definition provided by Nova the owl.

What is sexual reproduction?

A process involving two parents where genetic information from both is combined to create unique offspring.

What is asexual reproduction?

A process involving only one parent, resulting in offspring that are genetically identical to the parent, often called clones.

What is fertilisation in animals?

The process where a male gamete (sperm) joins with a female gamete (egg) to create a new life.

What is pollination?

The transfer of pollen from the male part of a flower (stamen) to the female part of a flower (carpel), often aided by bees like Bea.

What is the role of an embryo?

The early stage of development of a living organism after fertilisation has occurred.

What is germination?

The process by which a seed begins to grow into a new plant under the right conditions of water, warmth, and oxygen.

Define 'offspring'.

The young or new organisms produced by living things through the process of reproduction.

What are gametes?

The reproductive cells; in animals, these are the sperm and the egg.

Which part of the flower produces pollen?

The stamen, which is the male reproductive organ of the plant.

What is the female reproductive part of a flower called?

The carpel (or pistil), which contains the ovary where seeds develop.

Name one example of asexual reproduction in plants.

Runners (like those on a strawberry plant) or potato tubers.

Why is sexual reproduction beneficial for a species?

It creates genetic variation, which helps a population adapt to changes in their environment.