

# Modes of Reproduction - Asexual

Chapter 7: How do Organisms Reproduce? · Topic 1

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## Key Concept

Because asexual reproduction produces genetically identical offspring (clones), it allows rapid population growth in favourable conditions but offers no genetic variation, making a population more vulnerable to being wiped out entirely by a single disease or environmental change that all individuals are equally susceptible to. This is why many organisms that reproduce asexually can also, under certain conditions, switch to sexual reproduction, which introduces genetic diversity through the combination of genes from two parents.

## Quick Revision Notes

- Asexual reproduction methods: binary fission, budding, fragmentation, vegetative propagation.
- Asexual reproduction produces genetically identical offspring (clones) from a single parent.
- It allows rapid population growth but offers no genetic variation.
- Lack of genetic variation makes an asexual population vulnerable to disease or environmental change.

## Practice Questions

- 1 Name two methods of asexual reproduction.
- 2 Explain why lack of genetic variation can be a disadvantage for an asexually reproducing population.
- 3 Give an example of an organism that reproduces through budding.