

OCR (B) Biology GCSE

Topic B6.2: How do sexual and asexual reproduction affect evolution?

(biology only)

Flashcards



What is sexual reproduction?



What is sexual reproduction?

- Type of reproduction
- Involves the production of gametes by meiosis
- A gamete from each parent fuses to form a zygote
- Genetic information from each gamete is mixed so the resulting zygote is genetically different from each parent



What is asexual reproduction?



What is asexual reproduction?

- Type of reproduction
- Involves mitosis
- Produces genetically identical offspring known as daughter cells



What is the advantage of sexual reproduction?



What is the advantage of sexual reproduction?

Sexual reproduction creates genetic variation, increasing the probability of a species adapting to and surviving environmental changes.



Describe the disadvantages of sexual reproduction (2)



Describe the disadvantages of sexual reproduction (2)

- Two parents are required. This makes reproduction difficult in endangered populations or in species which exhibit solitary lifestyles
- More time and energy is required so fewer offspring are produced



Describe the advantages of asexual reproduction (3)



Describe the advantages of asexual reproduction (3)

- Only one parent is required
- Lots of offspring can be produced in a short period of time, enabling the rapid colonisation of an area and reducing competition from other species
- Requires less energy



What is the disadvantage of asexual reproduction?



What is the disadvantage of asexual reproduction?

No genetic variation (except from spontaneous mutations) reducing the probability of a species being able to adapt to environmental change

