

Edexcel Biology IGCSE

5.b-5.c - Selective Breeding and Genetic Modification

Flashcards

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Describe how selective breeding is
carried out
(Higher)



Describe how selective breeding is carried out (Higher)

- Organisms with the desired traits are selected
- These organisms are bred together
- This process is repeated until the offspring have the desired characteristics



What is genetic engineering?



What is genetic engineering?

Altering the genome of an organism.



How are new genes introduced into an organism?



How are new genes introduced into an organism?

- The organisms genes are cut using restriction enzymes to create sticky ends
- The DNA from a bacterium is also cut to produce sticky ends
- The gene is inserted into the bacterium and joined together by DNA ligase enzymes



Give 3 benefits of genetically modified crops



Give 3 benefits of genetically modified crops

- The plants are resistant to herbicides and disease
- The plants grow bigger and more quickly
- The plants can grow in harsher environments and without the need to continue to top up nutrients frequently



What is a transgenic organism?



What is a transgenic organism?

An organism that contains foreign DNA.

