

Edexcel Biology IGCSE

5.d - Cloning

Flashcards



Describe the process of tissue culture
(Higher)



Describe the process of tissue culture (Higher)

- Small cuttings (explants) are taken from the plant that you wish to clone
- The cuttings are placed in an agar dish containing growth hormones
- Once the new plants have grown enough, they are transferred to soil



State 2 benefits of tissue culture
(micropropagation)
(Higher)



State 2 benefits of tissue culture (micropropagation)
(Higher)

- Can produce many plants quickly
- Can produce lots of plants with desirable traits



Describe how animal cell cloning can be carried out
(Higher)



Describe how animal cell cloning can be carried out (Higher)

- The nucleus is removed from an unfertilised egg cell to create an enucleated cell
- The nucleus is removed from a cell from the animal you wish to clone
- The nucleus is placed in the enucleated cell and cell division is triggered by an electric shock
- Once the embryo gets big enough, it is placed in a surrogate mother



Give one example of a human protein
made by a transgenic organism
(Higher)



Give one example of a human protein made by a transgenic organism (**Higher**)

Insulin (made by modified E. coli)

