

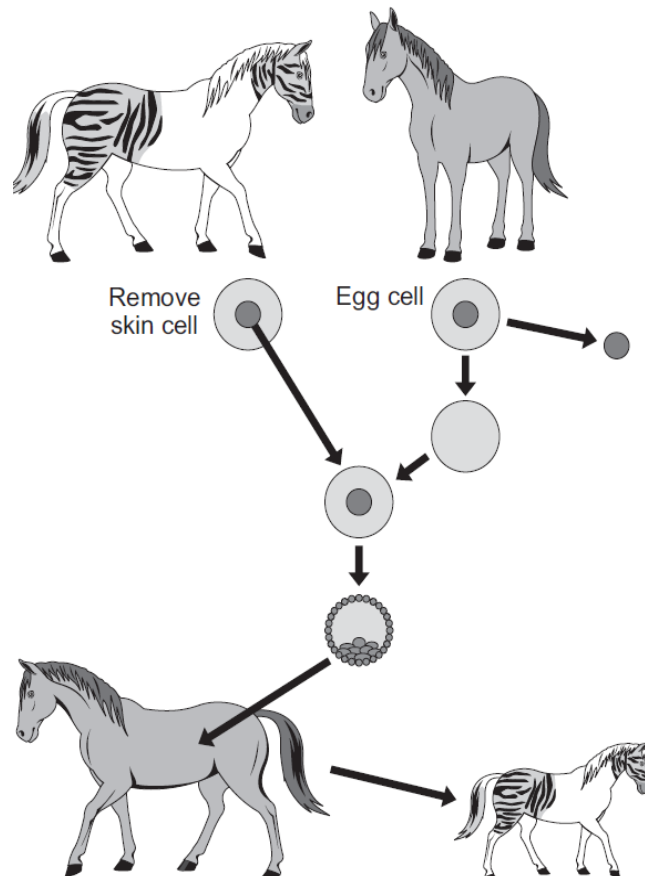
Q1.

In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

Zorses are **not** able to breed.

Scientists could produce more zorses from this zorse by adult cell cloning.

The diagram shows how the scientists might clone a zorse.

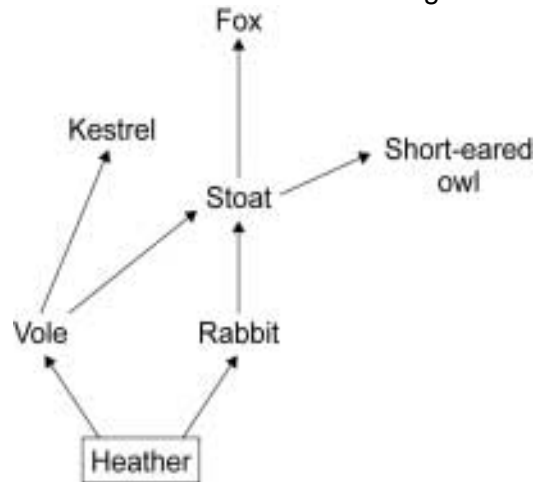


Use information from the diagram and your own knowledge to describe how adult cell cloning could be used to clone a zorse.

(6 marks)

Q2. In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

The diagram below shows a food web for some of the organisms that live on moorland.



Only a small percentage of the Sun's energy captured by the heather is eventually incorporated into the body tissues of the fox.

Explain, as fully as you can, what happens to the rest of the energy captured by the heather. (6 marks)

Q3. In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

Limestone contains calcium carbonate.

There is a large deposit of limestone under an area of natural beauty.

A company wants to quarry this limestone and build a kiln near to the quarry to make cement.

Area of natural beauty



A quarry



Quarrying limestone and making cement will have an impact on everything near the area. Describe the positive and the negative impacts of quarrying limestone and making cement. (6 marks)

Q4. In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

There are millions of plastic bags in use. After use most of these plastic bags are buried in landfill sites. The amount sent to landfill could be reduced if the plastic bags:

- could be reused
- could be recycled by melting and making them into new plastic products
- could be burned to release energy.

Use the information above and your knowledge and understanding to give the positive and negative environmental impacts of using these methods to reduce the amount of plastic bags sent to landfill.

Q5. In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

Over the next 10 years, more than 300 kilometres of new high voltage transmission cables are to be added to the National Grid. Most of the new cables will be suspended from pylons and run overhead while the rest will be buried underground.

Outline the advantages and disadvantages of both overhead transmission cables and underground transmission cables.

(6 marks)

Q6. In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.

The water in the tank could be heated by using an electric immersion heater.

Outline the advantages and the disadvantages of using solar energy to heat the water rather than using an electric immersion heater.

(6 marks)