

Cloning

Task 1: Rank the following scientific achievements and discoveries from 1-10 in order of importance (1= most important, 10 = least important).

- atomic bomb
- wireless technology
- computers
- cloning
- penicillin/antibiotics
- solar power
- air travel
- plastic
- electricity
- robots

Task 2: Put the text in the correct order.

- A) However, Dolly who was born in the Roslin Institute near Edinburgh, Scotland in 1996 died at only six years old.
- B) Dolly's death has sparked off further debate into the safety of cloning, and the ethics of cloning humans.
- C) Since Dolly was cloned from an adult sheep that was also six years old, investigators are researching into whether this may have had something to do with her early death.
- D) Dolly the Sheep, the first animal cloned from an adult cell, died in 2003. It had taken hundreds of attempts to produce Dolly and since many people believed that it was impossible to clone something as complex as a sheep, Dolly was a real scientific breakthrough.
- E) They believe that there is a strong possibility that the fact that Dolly's genetic material came from a six-year-old sheep may have caused her to age faster than normal.
- F) Sheep normally live between 10 to 16 years so Dolly was quite young when she died.

Task 3: Answer the questions.

1. Where was Dolly the Sheep cloned?
2. When was she born?
3. How old was Dolly when she died?
4. Why do researchers think she may have died so young?
5. What kinds of debates might there be around the ethics of cloning?

Task 4: Discuss the scenarios.

<p>Card 1</p> <p>Maria is blind and has a guide dog called Bobby. Bobby has been her guide dog for 10 years but is getting old. Bobby is Maria's best friend and she feels that she couldn't live without him.</p> <p><i>Should Jayne be allowed to clone Bobby before he dies?</i></p> <p><i>Should people be allowed to clone their pets?</i></p>	<p>Card 2</p> <p>There is only one Giant Panda left on earth. It does not have a partner to breed with so once it dies the species will be extinct.</p> <p><i>Should scientists be allowed to clone another Giant Panda to keep the species alive?</i></p> <p><i>Should scientists be allowed to clone endangered species?</i></p>	<p>Card 3</p> <p>Scientists believe that stem cells found in human embryos could be used to cure a range of diseases.</p> <p><i>Should scientists be allowed to clone human embryos to create stems cells for medical purposes?</i></p>
<p>Card 4</p> <p>Mrs. Jones eldest son Mark is ten years old and is dying with cancer.</p> <p><i>Should Mrs. Jones be allowed to clone Mark before he dies?</i></p> <p><i>Should people be allowed to clone other humans or clone themselves?</i></p>	<p>Card 5</p> <p>John Green is a farmer in Texas and he wants to clone his prize bull to sell it and make money.</p> <p><i>Should farmers be allowed to clone their best animals to make money?</i></p>	<p>Card 6</p> <p>A country with food shortages wants to clone its best food producing animals, cows, chickens, pigs etc. to try and produce more food per animal to solve their food shortages.</p> <p><i>Should countries be allowed to clone animals to increase food production?</i></p>

Task 5: Discuss the questions.

- Do you think humans should be allowed to be cloned?
- What benefits do you think cloning can have?
- What negative aspects do you think that cloning can have?
- Do you know what your country's policy on cloning is?
- Would you like to clone yourself or anyone else?
- If you could clone someone famous, who would it be and why?