**To produce a clone of your deceased child…what do you think of that?**



**Human cloning 'within 50 years'**

**Parents who lose children in accidents may be able to clone "copies" to replace them within 50 years, a British scientist who won this year's Nobel prize for medicine has predicted.**

By [Nick Collins](http://www.telegraph.co.uk/journalists/nick-collins/), Science Correspondent

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Sir John Gurdon, whose work cloning frogs in the 1950s and 60s led to the later creation of Dolly the sheep by Edinburgh scientists in 1996, said that progression to human cloning could happen within half a century.

Although any attempt to clone an entire human would raise a host of complex ethical issues, the biologist claimed people would soon overcome their concerns if the technique became medically useful.

In-vitro fertilisation was regarded with extreme suspicion when it was first developed but became widely accepted after the birth of Louise Brown, the first "test tube baby", in 1978, he explained.

Major improvements in cloning methods would have to be made before they could be applied to humans because the vast majority of cloned animal embryos today are deformed, he added.

Speaking on BBC Radio Four's[***The Life Scientific***](http://www.bbc.co.uk/programmes/b01p9ks8), Sir John (…)said: "When my first frog experiments were done an eminent American reporter came down and said 'How long will it be before these things can be done in mammals or humans?'

"I said: 'Well, it could be anywhere between 10 years and 100 years – how about 50 years? It turned out that wasn't far off the mark as far as Dolly was concerned. Maybe the same answer is appropriate" for the step to human cloning.

Sir John added that cloning a human being effectively means making an identical twin, and doctors would therefore simply be "copying what nature has already produced". (…)

During public lectures the Cambridge University scientist said he regularly asks his audience if they would be in favour of allowing parents of deceased children, who are no longer fertile, to create another using the mother's eggs and skin cells from the first child, assuming the technique was safe and effective.

"The average vote on that is 60 per cent in favour," he said. "The reasons for 'no' are usually that the new child would feel they were some sort of a replacement for something and not valid in their own right.

"But if the mother and father, if relevant, want to follow that route, why should you or I stop them?"

Source: <http://www.telegraph.co.uk/science/science-news/9753647/Human-cloning-within-50-years.html>

**Questions :**

1. Who is the scientist this article talks about ? Write a few words about him and his work.
2. Why does he think that human reproductive cloning will be accepted and allowed in the future ?
3. What do scientists have to improve before cloning could be applied to humans ?
4. What is Sir John Gurdon view about cloning ?
5. What application of human cloning does he think people will agree with ?

**Group work :**

**What do you think of human cloning in order to replace a deceased child? In groups of 4 pupils, find some assets and drawbacks. We will list them on the board.**