

Name _____ Number _____



A. Write a ✓ in the column that suits your ANSWER.

What should cloning be used for ?	YES	Not sure	No, only in certain situations	Never
produce high yielding crops or animals (for example, dairy cows)				
grow your own skin cells to treat burns				
grow adult stem cells or bone marrow cells to treat yourself for leukaemia or haemophilia				
save species close to extinction				
produce organs for transplant (using embryonic stem cells)				
produce human clones for spare organs				
produce a whole human e.g. using the genes of the mother or father in a donated egg when the two parents are infertile				
produce animals that have become extinct				
produce a copy of yourself to provide organs if any of yours should fail				
produce copies of certain people, for example Albert Einstein, Britney Spears, Kerry Packer, Nelson Mandela				

B. **What is the most controversial situation in this questionnaire ? Justify your opinion.**

Read the following cases and decide what should be done in each one .

1.

John and Sarah Robertson , who live in Newcastle, have two children, Ben aged 3 and Lucy aged 6. another child. They are a very happy family and are now planning to have another child. However, the family face a very difficult decision because Ben has a serious illness. He has a disease which means that he has to have painful injections each day, just to keep him alive. Scientists and doctors have now found a cure for Ben. Using the latest DNA technology, he could be given a transplant of cells from someone matching his 'tissue type'. This would mean that he could be free to live a normal, healthy life. A life for a life? The Robertsons want permission to create a baby to save Ben's life.

Do you think it is right to bring a child into the world to save another life ?

2.

Jill and Frank Smith live in Cardiff. Frank is average size, while Jill has always struggled with her weight and she is now obese. They have three children, James, Craig and Bonnie aged 5, 9, and 13. Jill worries about her children and as both her sisters are overweight, Jill thinks that a weight problem may run in the family. She is also concerned about her children getting other health problems, for example, heart disease and diabetes. Scientists have found many different types of genes that may affect our weight. Recently, Jill has heard of a company that offers to carry out a genetic test to look at these types of genes. The company will then provide advice about lifestyle and nutrition.

**Do you
think it is right to test children for what
they might develop in the future ?**

Case 1:

Case 2 :

whether there is an alternative to cloning (e.g. replacement organs can be obtained from baboons, or pigs). Is the alternative preferable?

- the costs (economic and social) of cloning versus the alternative (e.g. it might make more sense to look after your body with a healthy lifestyle so that cloned organs are not needed)

- how effective cloning would be, if at all (e.g. an individual is a product of his/her environment, as well as his/her genetic inheritance)

- that cloning is very expensive; would it be fair if only rich people are able to clone themselves?

- whether there are any associated moral or ethical issues and whether they would be different for different cultures or religious groups.

2.

Choose a spokesperson to present the findings of your discussion to the class.

3.

Write down your view on cloning. State clearly where you think cloning could be used and where it shouldn't be used. State in which areas you believe more discussion is required before you can decide.

