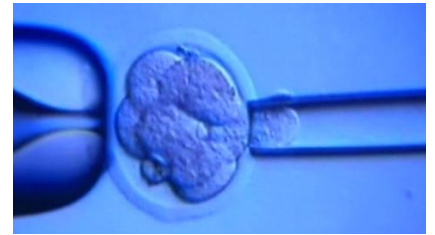


Pre-implantation Genetic Diagnosis (PGD)

1. Describe 'PGD'. *Hints: IVF, 8-cell embryo, remove one cell, screen, implant chosen embryo*



2. How is PGD used in the UK today? Please give examples of specific conditions.

3. Is it right to say that PGD can treat genetic abnormalities? Explain your answer.

4. 92% of 'Down's Syndrome pregnancies' are aborted in the UK. Some people use PGD to prevent Down's Syndrome pregnancies. Do you think this is right? Give reasons for your views.

5. UK law (in 2011) does not allow PGD to be used to choose the gender of a child (except to avoid a genetic disorder that only affects either males or females). Do you think couples should be allowed to choose the gender of their children? Give arguments on both sides before stating your conclusion.

“Designer Babies”

1. When PGD is used to prevent an inherited disorder, tabloids use the term ‘designer baby’. Is this an accurate term in such cases? Explain.



2. As well as using PGD to avoid having a child with a genetic disorder, PGD could also be used to rule out a number of other characteristics. List several examples.

3. What does ‘Eugenics’ mean? Explain, with reference to the Nazis.

4. So, what does the term ‘designer baby’ actually mean?

5. “If science can let me choose to have a child who is stronger or more intelligent, then it should be up to me whether I use the technology or not.” Do you agree? Give reasons on both sides before stating your conclusion.

Saviour Siblings

1. Describe the process of creating a 'Saviour Sibling'. *Hints: IVF, PGD, check for inherited disorder, check for donor compatibility, implant, birth, umbilical cord, possible further medical procedures.*



2. Why do people use PGD to create a donor sibling instead of just having a child the natural way?



3. Make a list of arguments for and against allowing the use of PGD to create donor siblings.

For	Against

4. "Christians should be against allowing donor siblings." Do you agree? Give reasons on both sides before stating your conclusion.

Therapeutic Cloning

1. Describe how therapeutic cloning works. *Hints: Donor egg, remove nucleus, cell removed from patient, patient's nucleus -> egg, 'shock', embryonic stem cells used*



2. How would Judson ('How to build a human') benefit from therapeutic cloning?

3. Why does Michael J Fox support embryonic stem cell research?



4. More than 100 million people could benefit from therapeutic cloning. List the types of treatment or procedure it could lead to.

5. Why do some people think that therapeutic cloning is wrong? Give at least two of their reasons.

6. "Christians should support therapeutic cloning." Do you agree? Give reasons on both sides before stating your conclusion.

Reproductive Cloning

1. How is reproductive cloning different from therapeutic cloning?



2. Which animals have been successfully cloned from an adult?

3. What problems have arisen from reproductive cloning in animals?

4. Why might people want to create human clones? Give several examples.



5. List arguments for and against allowing human reproductive cloning:

For	Against

6. "Cloning humans goes against God, is completely unnatural and wrong." Do you agree? Give reasons on both sides before stating your conclusion.
