21st Century Ethics: Key Concepts

Sanctity of Life	The belief that all life is sacred because it is given by God. (Pronounced sanct-ity of life)
Quality of Life	The degree to which an individual is healthy, comfortable, and able to participate in or enjoy life events. (Pronounced quality of life)
DNA	DNA is the material that carries all the information about how a living thing will look and function.
Gene	A section of DNA that codes for a specific attribute of an organism. For example, blue eyes. (Pronounced Gee-n)
IVF	When a egg and sperm are fertilised outside of the womb, incubated and then planted back into the woman.
Embryo Donation	When a couple have IVF treatment and donate a fertilized embryo to someone who cannot produce one. (Pronounced Em-bree-oh dor-naashon)
Organ Donation	An operation when an organ is taken out of a person and inserted into another. (Pronounced org-an dor-naashon)

What is Genetic Engineering?

There are three main types of genetic engineering. These are:

- Changing DNA of bacteria
- Changing DNA of stem cells
- Changing DNA of food and plant cells

The types of G.E. we are studying in this unit are:

Saviour Siblings - When a child is conceived with the exact same DNA as its other sibling in order to provide stem cells and or treatment for diseases.

Cloning - Making an exact genetic copy of something. This can be an animal; human; organ or bacteria.

Designer Babies -When a child is conceived with the DNA to produce the genes that have been selected or desired by the parents. For example, a certain gender or hair colour.

What are the different religious attitudes towards genetic engineering?

Catholics allow genetic engineering for the treatment of diseases and growing crops but do not allow genetic engineering on embryos. This is because Catholics believe that all life is sacred and that it starts at conception.

Catholics follow the commandment "thou shall not kill" 🕠

Church of England Christians allow most types of genetic engineering as they do not believe that life starts at conception. They also believe that Jesus healed the sick so humans can use the knowledge God gave them to do the same.

21st Century Ethics: Key Beliefs

- The ethics of genetic engineering are currently a popular topic for debate in modern society.
- Many religious (and non-religious) attitudes are generally against G.E. as the long-term effects of changing and adapting DNA are not well known as well as the destruction of embryos that G.E. can lead to.
- G.E. is generally accepted by most people for the positive impact that it has had in the medical field. For example, through G.E. medication was created to help those who are diabetic.
- Some Christians accept methods of infertility treatment but the issues in the UK lie with the cost and effectiveness of the treatments available. For example, a couple could spend their live savings on IVF. and it be unsuccessful.
 - Humanists do not believe in God. They believe that although life is not sacred it still has value. Humanists only allow Genetic engineering for the growth of organs for transplants. This is because scientists do not know the long-term effects of changing DNA.



Why types of infertility treatment are there?

AIH (Artificial Insemination by Husband) – a procedure whereby the sperm of the male is placed directly into the uterus (womb) of his female partner so that fertilisation of the **ovum** can be achieved.

AID (Artificial Insemination by Donor) - a procedure as with AIH, however the sperm is provided by a **donor** who is not the woman's partner.

IVF (In Vitro Fertilisation) – a process whereby the ovum is fertilised outside the woman's body. 'In vitro' means 'in glass', ie a petri dish or cell culture dish (not a test tube).

Alternatives to infertility treatments are surrogacy and adoption.

Why are the different religious attitudes towards infertility treatment and transplants?

Catholics do not accept any methods of infertility treatment as they require masturbation, and this is seen as sinful. This is because Catholics believe children are only to be made through the act of sex as God intended. Organ transplants are allowed because Jesus healed the sick and we are taught to follow the Golden Rule.

Church of England Christians accept some methods of IVF because in Genesis God told us to 'be fruitful and multiply'. They also accept organ transplants as again this is following the Golden Rule.