Cloning

- **Adult cell or reproductive cloning**
  - Somatic cell nuclear transfer (SCNT)
  - Dolly the Sheep
    - Shortened telomeres
- **Artificial Twinning**
  - Stem Cells
    - Totipotent
    - Pluripotent
- **Therapeutic cloning**
  - Stem Cells
- **Case Studies**
  - Nuclear transfer to treat mitochondrial disorders (ECNT)
  - Cloning working and useful animals
  - Saving endangered species
  - Transgenic livestock
- **Issues of cloning**
  - Large offspring syndrome
  - Inefficient nuclear transfer
  - Telomere length
  - Epigenetics
    - Transcription factors
- **Ethics**
- **UK Law**