ULTRASOUND USES IN MEDICINE

KIDNEY STONES
- hard masses that can block the urinary tract
- ultrasound turns them into sand-like particles
- which then pass out the body in urine

PRE-NATAL SCANNING
- fluid in the womb and skin of the fetus
- waves partially reflected at boundary between two media
- the echoes analysed by a computer
- to give an image of the fetus

ULTRASOUND V X-RAYS
- Safety
  - ultrasound: non-ionising
  - considered safe
  - X-Rays can cause cancer
  - CT scans use X-Rays
  - but use an increased radiation dose
- Image Quality
  - fuzzy images with ultrasound
  - difficult to diagnose illnesses
  - X-rays provide a clear image
  - of bones and metal
  - CT scans use greater doses of X-Rays
  - but give a much clearer image
  - easier to diagnose more complicated illnesses