

Compact Discs

Apparatus

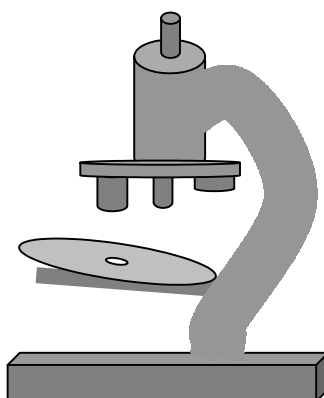
CD, reasonably high powered optical microscope

Action

The students observe the CD under the microscope.

The Physics

The students will observe pits, which are spaced to be resolvable by a laser. They should identify that this is how information is encoded on the CD, and the spacing between the pits must be great enough to be resolvable by the CD player. This is digital encoding, unlike magnetic tapes and vinyl records which use analog encoding.



Accompanying sheet:

Compact Discs

Examine the CD under the microscope.

Can you see the pattern of pits which digitally stores the information?

How is this different to the way information was stored on vinyl records?

How is this different to the way information is stored on magnetic tape?