Transistors

Apparatus

transistor, power supply, voltmeter, ammeter, resistors

The components are wired up in a simple circuit, for example as an amplifier.

Action

The students examine the circuit and investigate the effect of varying the supply voltage using the voltmeter and ammeter.

The Physics

The transistor amplifier works by a small change in the current in the base producing a large change in current in the collector, which gives a large signal across the load resistor.

Accompanying sheet:

Transistors

Examine the circuit.
What does the transistor do?

Investigate the behaviour of the transistor by varying the voltage supplied.

What happens when you increase or decrease the voltage?