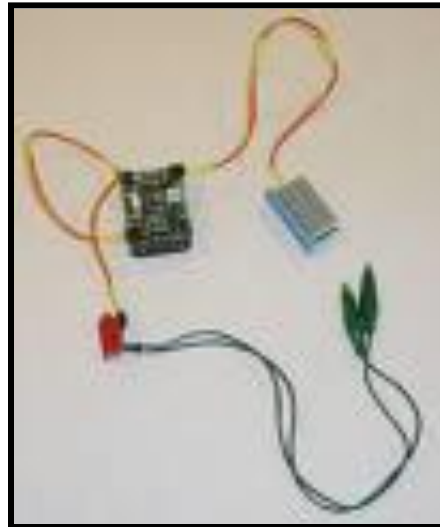
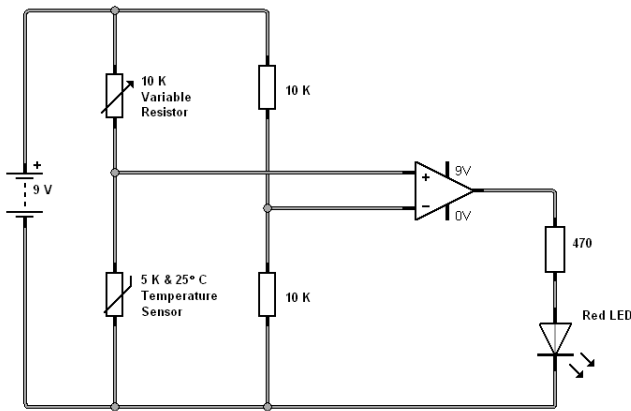


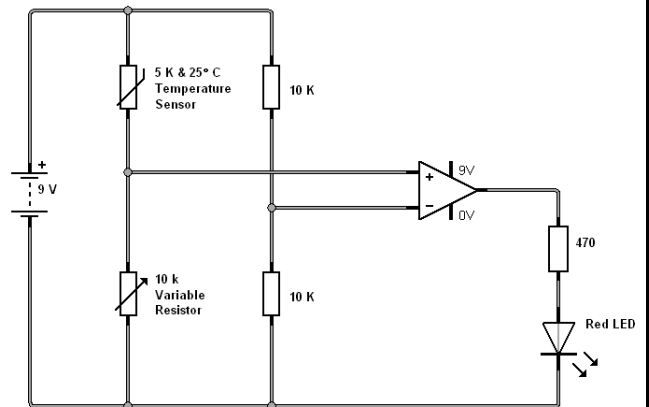
Operational Amplifier Circuits for Teaching and Learning



Temperature Sensing Circuits

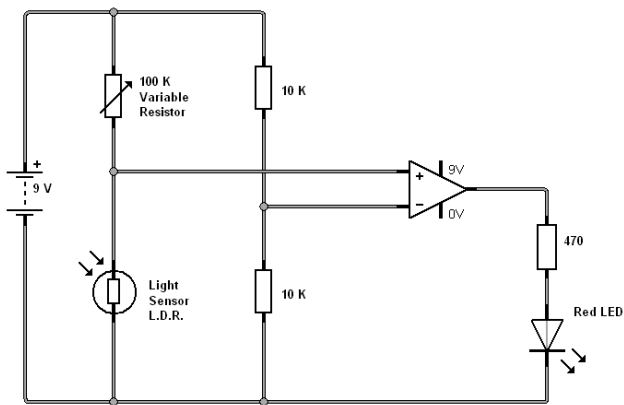


Cold conditions:
Will turn on the output when
the temperature falls

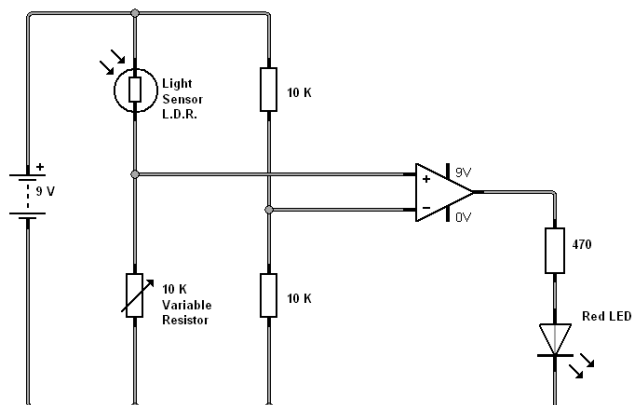


Hot conditions:
Will turn on the output when
the temperature rises

Light Sensing Circuits

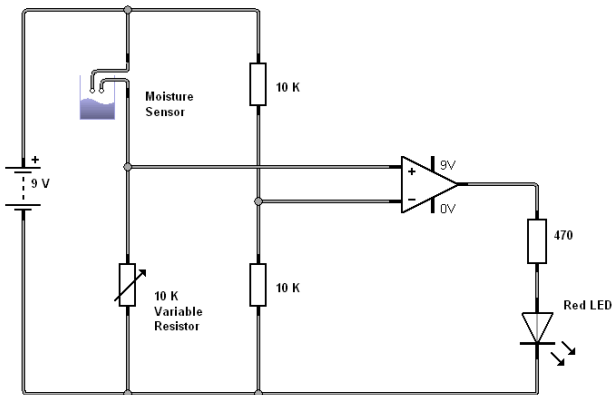


Dark conditions:
Will turn on the output when
light levels decrease

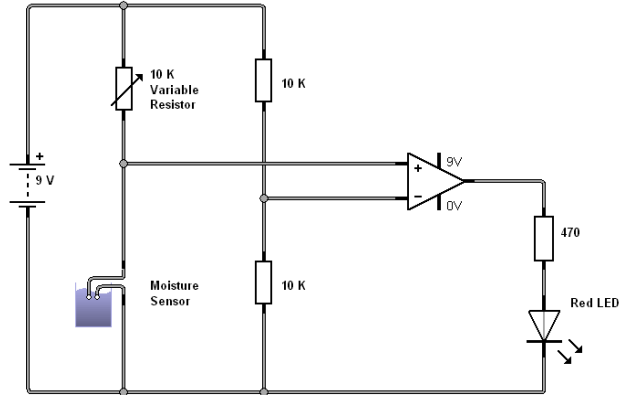


Bright conditions:
Will turn on the output when
light levels increase

Moisture Sensing Circuits



Wet conditions:
Will turn on the output when moisture levels increase

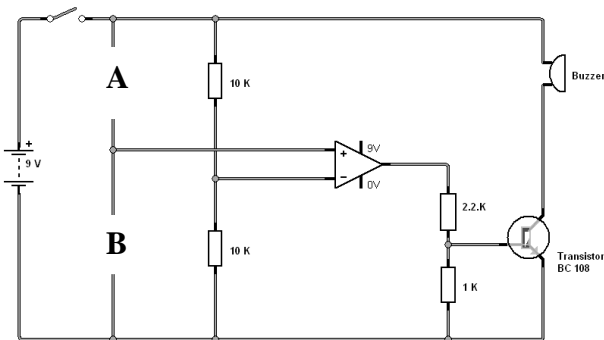


Dry conditions:
Will turn on the output when moisture levels drop

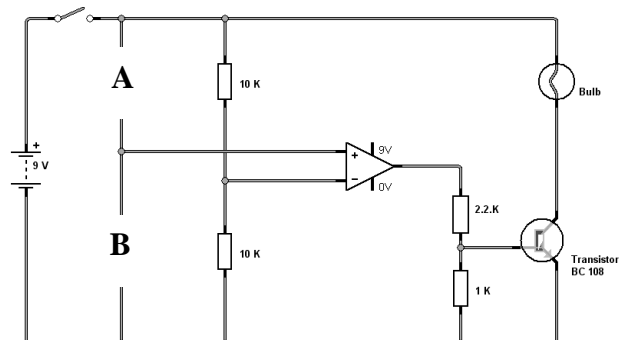
Key points - Potential dividers:

- (i) Potential dividers are made from two resistors in series with a battery supply.
- (ii) The input to many electronic circuits is from a potential divider arrangement.
- (iii) Sensors such as LDRs and Thermistors are used as part of a potential divider to control the sensitivity at which the switching action takes place.

Alternative outputs



Sound



Light

Input sensors A & B can be selected as required