## Common electronic components



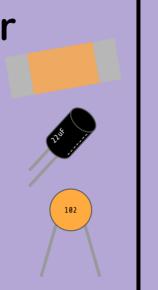


Resistors limit the flow of electrons in a circuit. They they usually look like either small black rectangles with tiny numbers on, or blue or orange barrels with coloured bands. The numbers or colours tell you how much the resistor limits the electrons.



0R2

Capacitors store electrical energy, like a tiny battery. They are usually either a black cylinder, an orange rectangle or an orange circle with two legs. Sometimes they'll have numbers on them which tell you their capacitance values.



## IC / Chip

ICs (Integrated Circuits) are lots of electronics all squeezed onto a tiny bit of silicon, and covered in plastic. They do all sorts of different things, and are either a matte black rectangle or a shiny black blob of plastic glued on the circuit board.

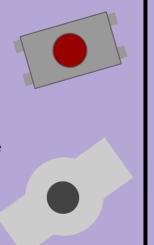


## **LED**

LEDs do two really important things: they make light that we can see, and they only let electrons flow one way through them. They're either a small transparent rectangle, or a little hemisphere poking out of the circuit board with legs soldered underneath.



Buttons allow us to interact with electronic circuits. When pushed, they allow a short burst of electricity to pass through. They may be a rubber blob on top of the PCB, a clicky rectangular button with a dot on it, or some piece of metal that touch.



## Speaker

Speakers make some noise - they convert electrical energy into vibrations in the air which reach your ear as sound waves. They are usually either a black disc or a shiny gold disc attached with wires to the PCB.

