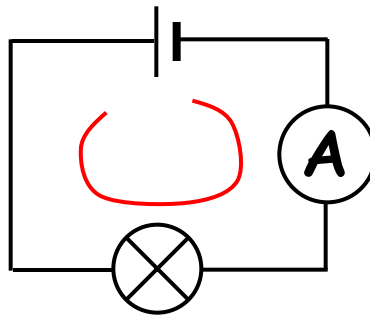


Direct Current

- D.C. stands for direct current.
- Batteries supply d.c.
- With d.c. the current is always travelling in the same direction.



direction of current

- The current flows from negative (-) to positive (+) as the electrons are negatively charged and so are attracted towards the positive terminal of the battery.

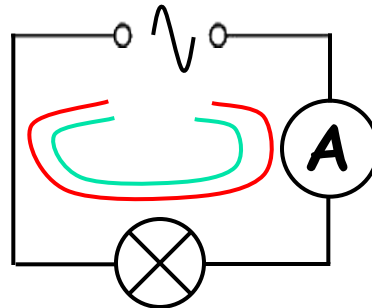


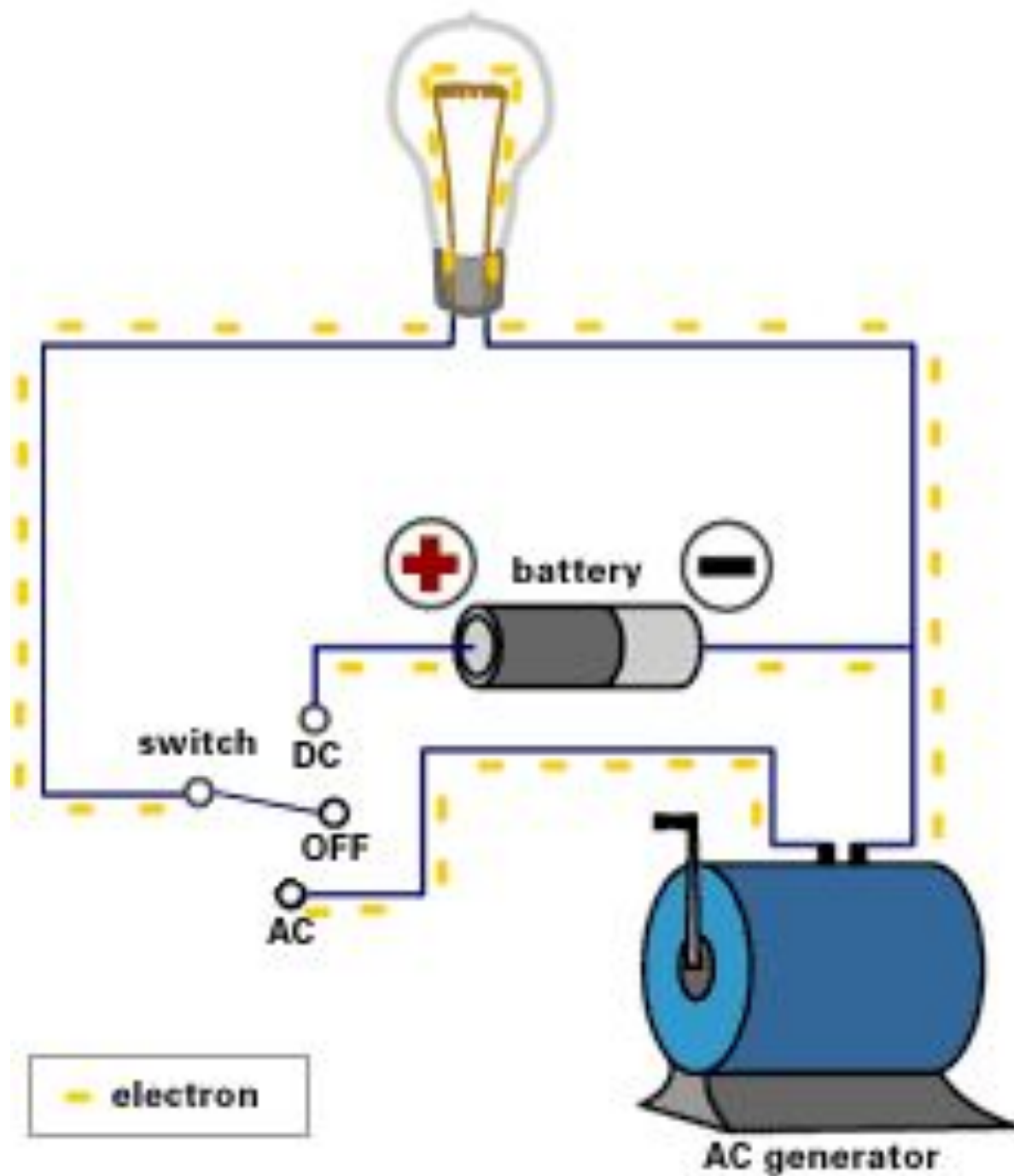
Alternating Current

- A.C. stands for alternating current.
- The mains supplies a.c.
- An a.c. current flows backwards and forwards in a circuit.
- The symbol for an a.c. power supply is



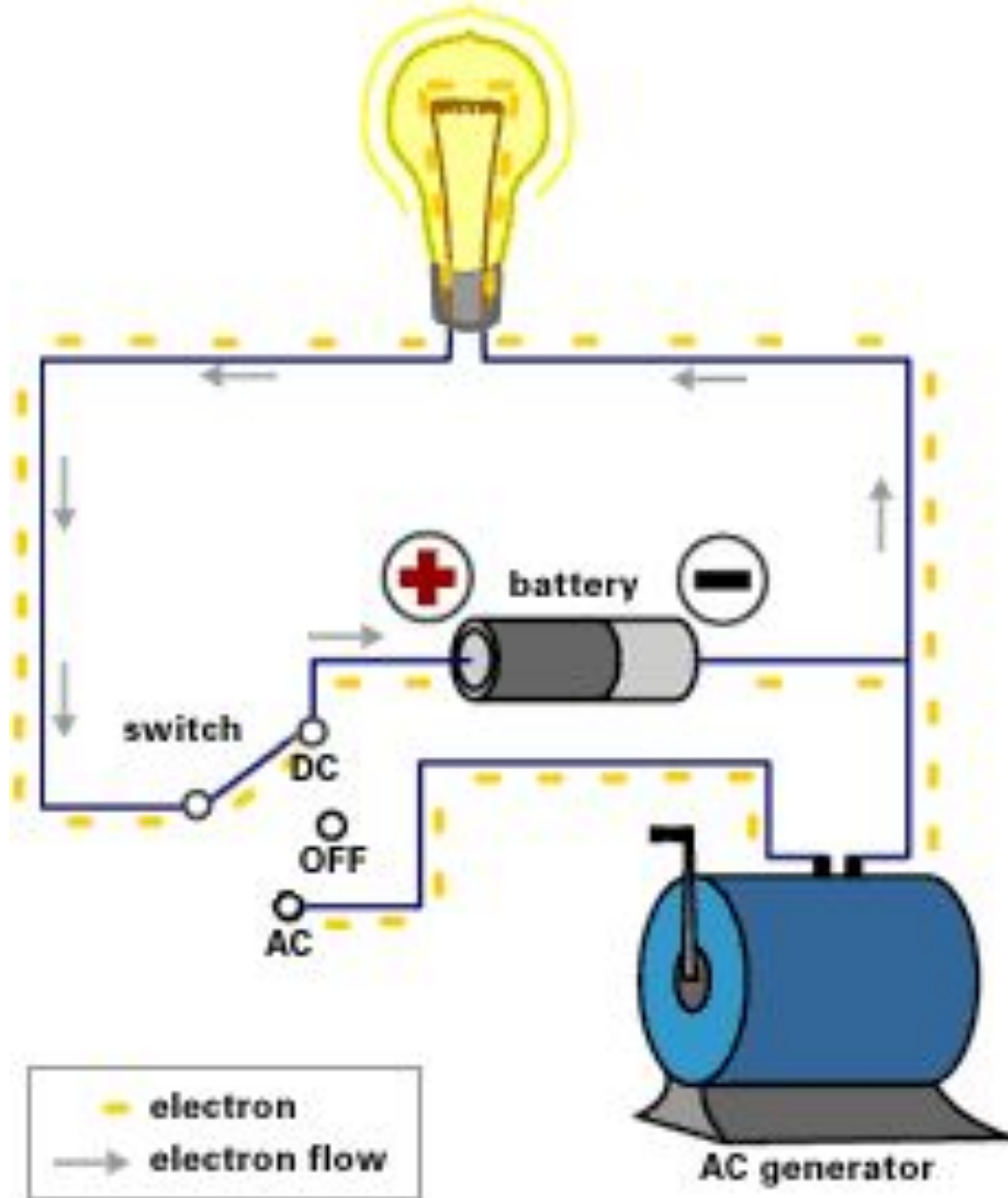
- The current in an a.c. circuit flows one way then the other alternately.

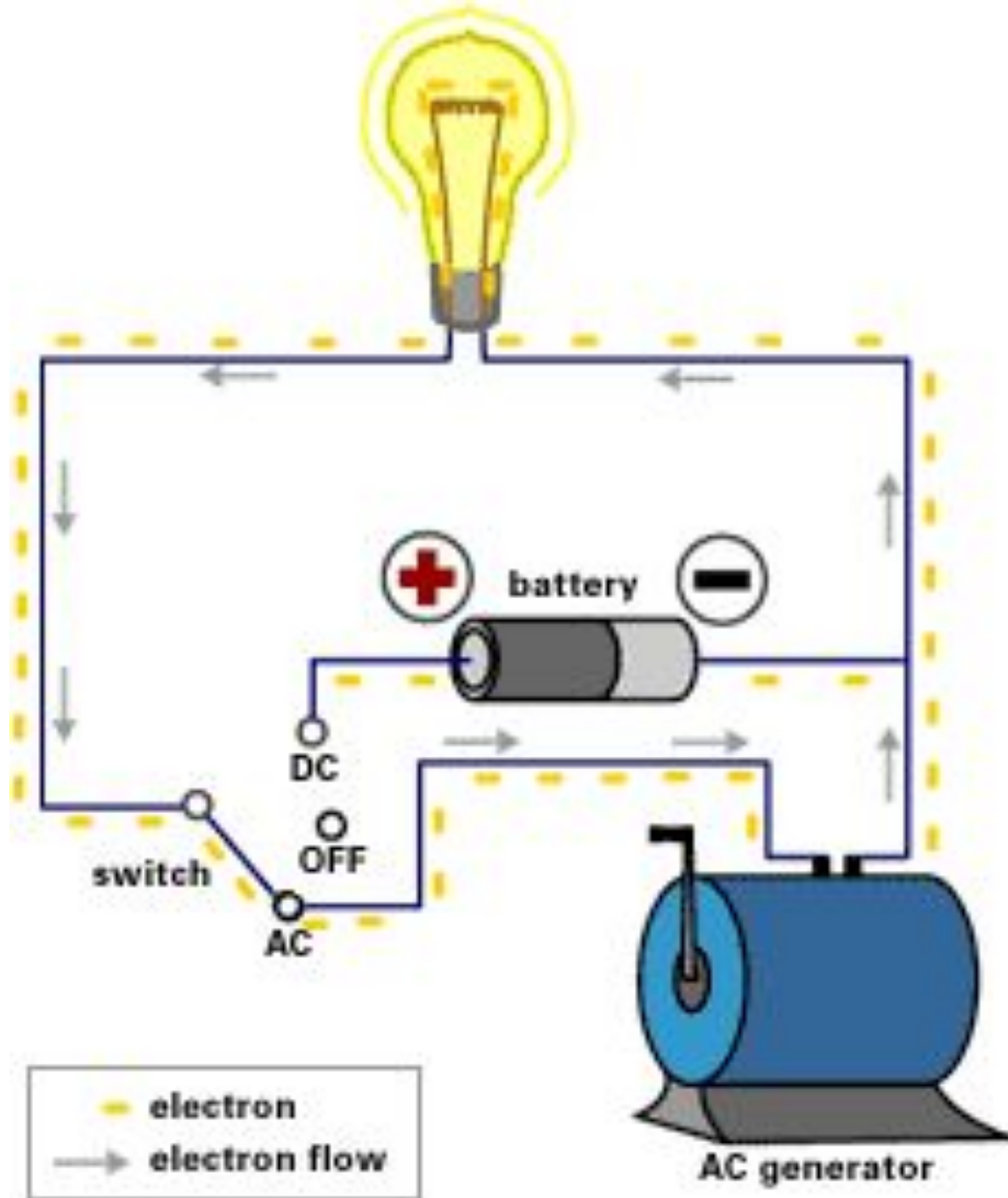




— electron

AC generator

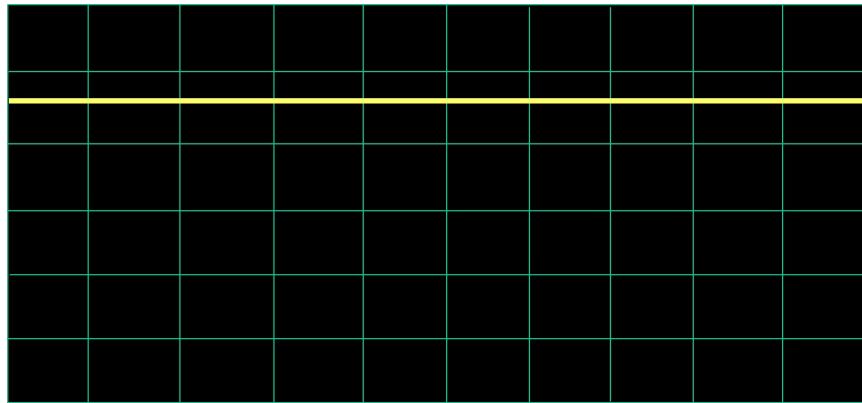






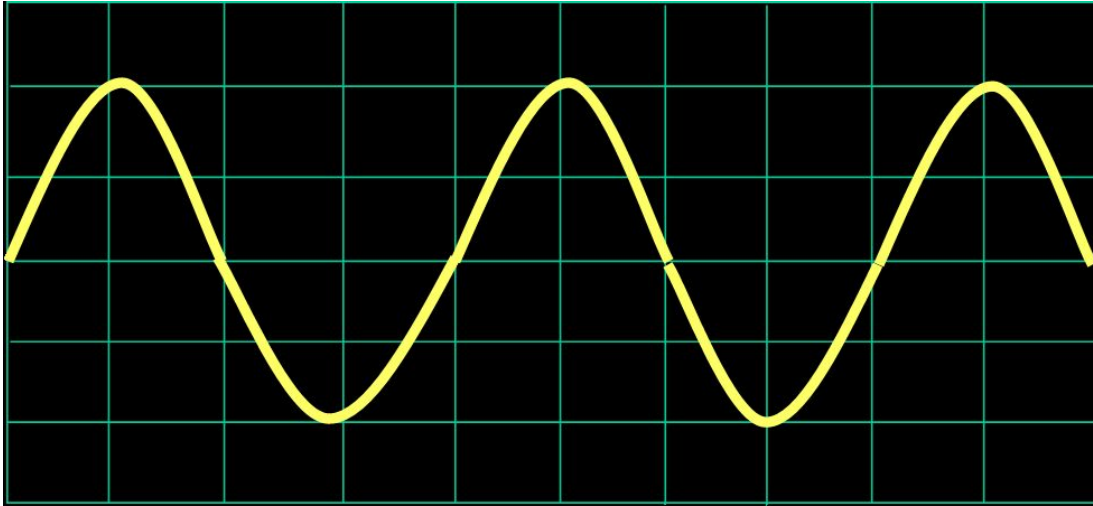
AC and DC on an Oscilloscope

- A d.c. current on an oscilloscope



- A direct current
 1. is always the same size
 2. travels in only one direction

An alternating current on an oscilloscope

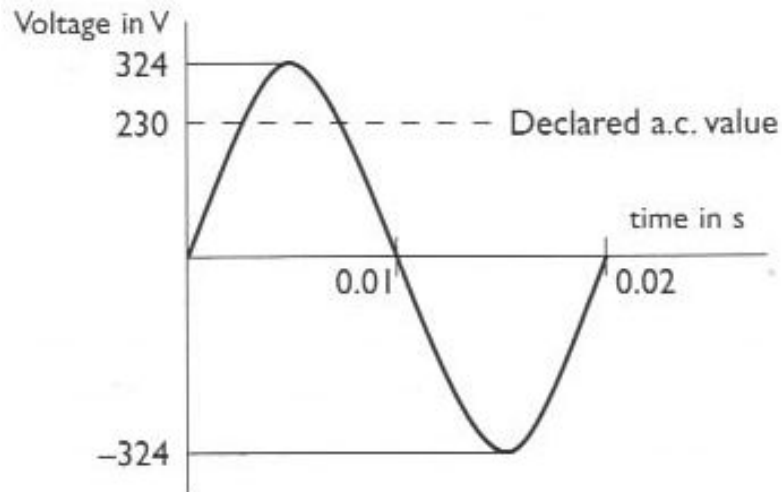


An alternating current:

1. is always changing size
2. travels one way then the other alternately

The Mains Supply

- The mains supply is an a.c. source.
- An alternating current is a wave.
- The mains frequency is 50 Hz and the size of the mains voltage is quoted as 230 V.



- The declared value is a sort of average value and is **always less** than the peak value.