Current

Answers

KS3 science quick questions

This topic online

Activate 2: Electricity and magnetism | Exploring Science 7J

Q	Answer	Remember
1	charge	In a metal wire, the charge is carried by tiny electrons.
2	amps	Amps is short for amperes.
3	ammeter	Amm-eter measures amps.
4	series	The current has to flow through the ammeter to be counted.
5	electrons	Electrons are already in the wire - the cell just pushes them along.
6	series	Series: everything is in one single loop.
7	parallel	Parallel: the paths run side by side like train tracks.
8	0.4 A	In series the current is the same everywhere in the loop.
9	2 A	The branch currents add up to the main current: 1 + 2 = 3.
10	no	The same amount of charge flows back to the cell - energy is what gets transferred.
11	weaker	Like gravity and magnetism, an electric field fades the further you get from the charge.
12	goes out	With only one path, a break anywhere stops the current everywhere.
13	negatively	Electrons are negative, so gaining them makes an object negative.
14	repel	Like charges repel, opposite charges attract - just like magnet poles.
15	attract	Opposite charges pull towards each other.
16	1.5 A	Add the branches: 0.5 + 0.5 + 0.5 = 1.5 A.
17	0.6 A	The branches share 0.9 A in the ratio 2 : 1, so 0.6 A and 0.3 A.
18	decreases	Two lamps in a row add more resistance, so less current flows and both are dimmer.
19	field	Like gravity and magnetism, static forces act across a gap through a field.
20	Electrons are rubbed off the jumper onto the balloon, so the jumper is left with more positive charge than negative charge.	Only electrons move when you rub - positive charges stay put.

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