

20 The magnetic field – Part 1 —Answers

Answers

Work through these after trying the questions yourself.

20.1 A region where a moving charge or current feels a force.

20.2 From N to S.

20.3 A stronger field.

20.4 Nearly uniform (like a bar magnet).

20.5 It makes the field much stronger.

20.6 A solenoid is only magnetic while a current flows, so switching the current on and off switches the magnet on and off. Advantages over a bar magnet: it can be turned off, and its strength can be changed by changing the current (or adding more turns).

20.7 The moving needle shows the wire has a magnetic field around it. So an electric current produces a magnetic field of its own.