

# Electromagnets

# 4. Magnets

## CONCEPT 1

## TEST YOURSELF

### MAGNETIC FORCE AND MAGNETIC FIELDS

#### KNOW

- Q1 Name four magnetic materials.
- Q2 What do we call each end of a permanent magnet?
- Q3 A permanent magnet is brought close to a steel pin. Describe what will happen.

#### APPLY

- Q4 Sketch a bar magnet like the one shown, and draw the magnetic field around it.



- Q5 Describe two ways in which we can show the shape of a magnetic field.

#### EXTEND

- Q6 The permanent magnet in Q4 above is being used to find a small iron tack that has been dropped on the floor. Describe how the magnet should be used for best results and explain why.
- Q7 The small tack has been found! Whilst one end of the tack is 'stuck' to the magnet the other end of the iron tack can be used to pick up objects made from magnetic materials. Could you suggest why this might be happening?