

Electromagnets

4. Magnets

CONCEPT 2

TEST YOURSELF

USING FIELDS

KNOW

Q1 Complete the following table to show what happens when 2 poles are brought together:

Pole A	Pole B	Effect
South		Attract
North	North	
		Repel

Q2 What can a permanent magnet do that a magnetic material cannot?

Q3 State what the Earth has that makes it good for navigation with a map and compass.

APPLY

Q4 James thinks that if he suspends a permanent magnet on a piece of cotton it will spin as he moves around the room. Alisha thinks it will stay pointing in the same direction. Who is right and why?



Q5 Where is the Earth's magnetic field the strongest? Explain why.

EXTEND

Q6 Draw the magnetic field pattern for 2 permanent magnets when they are attracting and when they are repelling. Show on your diagram where the force of attraction or repulsion is strongest and describe how you can tell.

Q7 Design a game of skill that uses magnets. Write a list of instructions for how to play the game using keywords from this topic and sketch a picture of the game and how it will work.