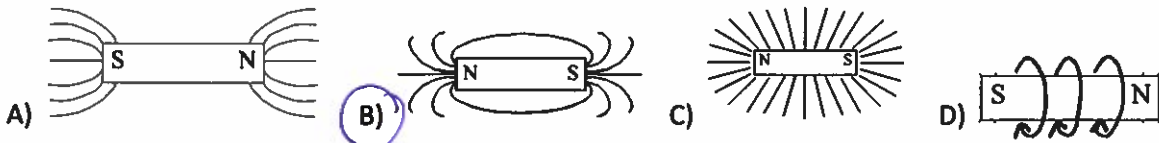


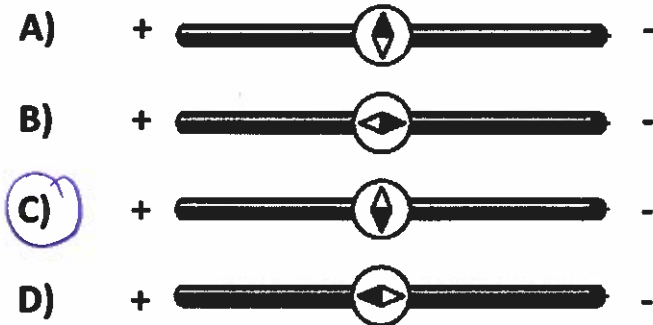
1. Maria sprinkles iron filings on a piece of cardboard placed on top of a bar magnet. Which configuration will the iron filings take? (1)



Answer #1

B

2. Which wire has the compass direction correctly depicted? (1)

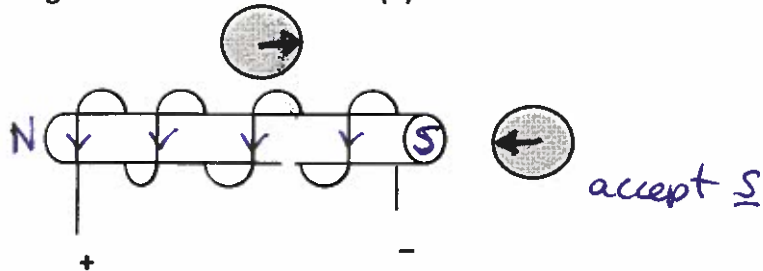


Answer #2

C

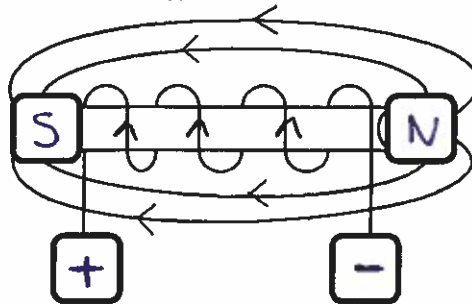
Left hand

3. Determine the north (N) and south (S) ends of the core, and then draw the arrow onto the compasses indicating the direction of the magnetic field. (2)



accept S

4. Use the left-hand rule and the indicated magnetic field to label North, South, positive (+) & negative (-) on the solenoid below. (2)



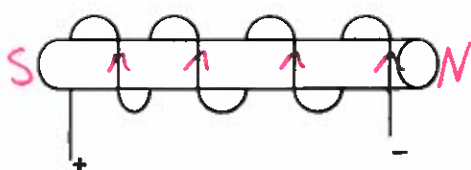
5. Using the table below, find the resistance of a resistor that has the following colours. (2)

Digit	0	1	2	3	4	5	6	7	8	9		
Colour	Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Grey	White	Gold	Silver
Tolerance											±5%	±10%

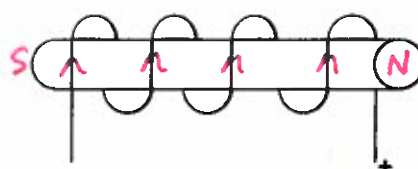
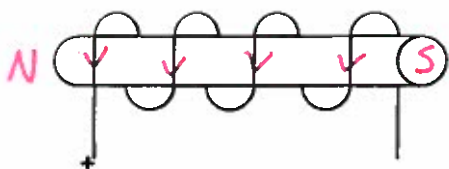
a) GREEN, BLUE, RED, GOLD = 5600Ω ±5%
5 6 2 5%

b) Calculate the range of a 6 200Ω ± 10% 5580 Ω TO 6820 Ω
6200 - 620 6200 + 620

6. State whether the following will attract or repel. (Determine the north end of the solenoid first.) (2)



Attract or Repel



Attract or Repel