



# K Education Centre

## KS3 Year 8 Science

Physics – Circuits

Assignment Questions

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## Circuits

Q1 : What is current ?

Q2: Draw a simple circuit diagram with two bulbs connecting with each other in series with one cell.

Q3: What is Voltage or Potential Difference?

Q4: What is the difference between conductor and insulator?

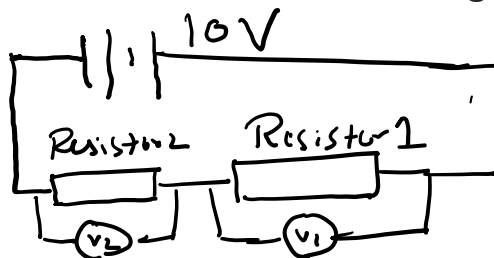
Q5: Calculate the current flowing in a circuit when 100 Coulomb of charge flow through it for 2 mins.

Q6: What is resistance? What is the relationship between resistance, current and voltage.

Q7: Calculate the missing values in following cases:

Current (A)	Voltage (V)	Resistance ( $\Omega$ )
10 A	6 V	
	6 V	6 $\Omega$
5 A		2 $\Omega$
0.58	4 V	
4 A	12 V	
	6 V	3 $\Omega$

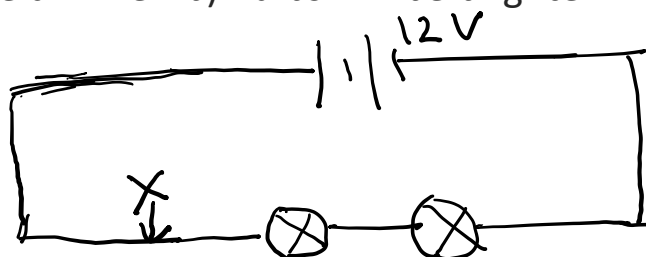
Q 8: Calculate the readings on Volt meter V2 in following circuit if V1 reads 4 V



Q9: What is the difference between series and parallel circuits in terms of current and potential difference.

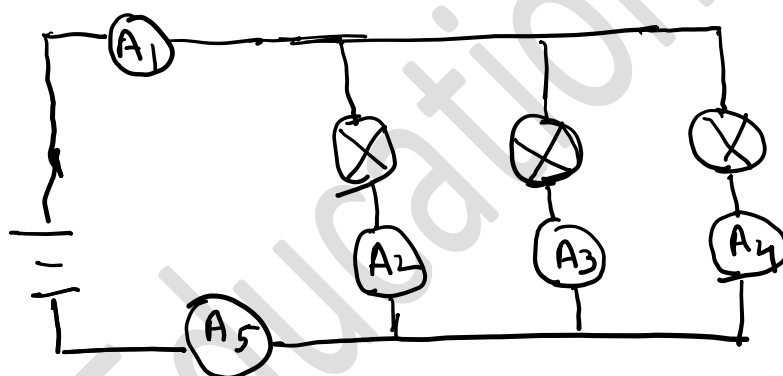
Q10: If a third bulb is added to position X in the following circuit diagram, what will happen to the light of the bulbs

- a) Bulbs will be dimmer b) Bulbs will be brighter.



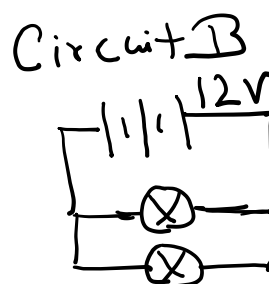
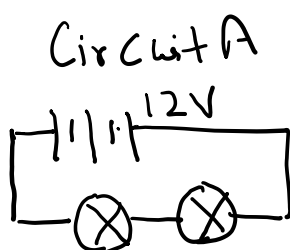
Give reason for your answer.

Q11: For the circuit below give readings for



Ammeter	Current(A)
A <sub>1</sub>	10
A <sub>2</sub>	2
A <sub>3</sub>	3
A <sub>4</sub>	
A <sub>5</sub>	

Q12: Below circuits contains identical bulbs.



- a) Which circuit have large potential difference. Explain.  
 b) If an extra loop is added to circuit B and bulb is added on that loop. What will be the effect on the brightness of the bulb.