

1.1.5 Measured using a scale:

- A Gravitational acceleration
- B Gravity
- C Weight
- D Mass

1.1.6 An example of unbalanced forces is:

- A pushing against a wall
- B sitting on a chair
- C writing in your book
- D laying on the bed

(2)

1.2 Provide the correct TERM for each of the following descriptions.

1.2.1 Difference in electrical potential energy per charge between 2 different points.

1.2.2 Current that flows from positive to negative.

1.2.3 Component with variable resistance.

1.2.4 Sub-atomic particle that can be moved between objects. (4)

1.3 State whether the following statements are TRUE or FALSE AND CORRECT IT IF IT IS FALSE.

1.3.1 2 lightbulbs connected in series will shine brighter than 2 lightbulbs connect in parallel if they have the same number of cells.

1.3.2 In a parallel circuit the resistance will increase if a lightbulb is added.

1.3.3 The voltage in a series circuit over the lightbulbs add up to the voltage over the battery.

1.3.4 If an object is negatively charged, it means it lost electrons to another object.

1.3.5 During thunderstorms, electrons on the underside of clouds are repelled by protons on the earth.

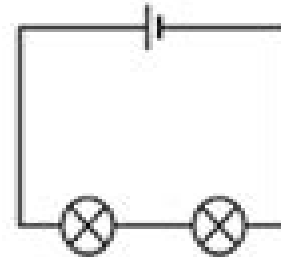
(5)

Total Section A: [18]

SECTION B

QUESTION 2

The diagram below is an electrical circuit.



2.1 What type of circuit is shown above. Give a reason for your answer. (2)

2.2 List ONE component that should be added to the circuit above AND give its symbol. (2)

2.3 Draw a circuit diagram of the above circuit if a switch and a lightbulb in parallel was added. (3)

2.4 Which lightbulb will shine the brightest and why? (2)
(9)

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