

19. At the end of December, Sarah would have saved \$1208. If she saves the same amount of money over the next 6 weeks, her total savings would be \$1880. How much does she save in a week?

Ans: \$ _____

20. Henry and Sarah had \$180. When Henry gave \$15 to Sarah, they had the same amount of money. How much does Henry have at first?

Ans: \$ _____

SECTION C:

For each question, write the answer in the space provided.

21. A boat is full when it carries 10 children or 7 adults on board.
The boat never carries children and adults at the same time.
One day, the boat made 9 trips across the river and was full on each trip.
It carried a total of 78 children and adults across the river that day.
How many children and how many adults did the boat carry on the 9 trips?

Ans: _____

22. Some balloons are shared among some children.
If each child gets 25 balloons, there will be 20 balloons extra.
If each child gets 35 balloons, there will be 20 balloons short.
How many balloons are there?

Ans: _____

Answer Key

19. At the end of December, Sarah would have saved \$1208. If she saves the same amount of money over the next 6 weeks, her total savings would be \$1880. How much does she save in a week?

$$1880 - 1208 = 672$$

$$672 \div 6 = 112$$

Ans: \$ 112

20. Henry and Sarah had \$180. When Henry gave \$15 to Sarah, they had the same amount of money. How much does Henry have at first?

Before
and
after/
Working
backwards

After

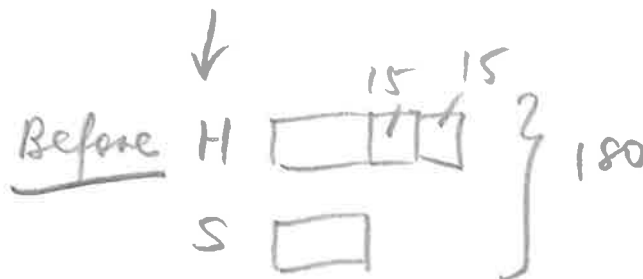
H

S \$15

OR

$$180 \div 2 = 90$$

$$90 + 15 = \underline{105}$$



$$180 - 30 = 150$$

$$150 \div 2 = 75$$

$$75 + 30 = \underline{105}$$

Ans: \$ 105

SECTION C:

For each question, write the answer in the space provided.

Guess & check / Make a list / Make an assumption

21. A boat is full when it carries 10 children or 7 adults on board.

The boat never carries children and adults at the same time.

One day, the boat made 9 trips across the river and was full on each trip.

It carried a total of 78 children and adults across the river that day.

How many children and how many adults did the boat carry on the 9 trips?

	Child	adult	total
List / Guess			
1	$1 \times 10 = 10$	$8 \times 7 = 56$	66
2	$2 \times 10 = 20$	$7 \times 7 = 49$	69
3	$3 \times 10 = 30$	$6 \times 7 = 42$	72
4	$4 \times 10 = 40$	$5 \times 7 = 35$	75
5	$5 \times 10 = 50$	$4 \times 7 = 28$	78

OR

Assume all are adults

$$9 \times 7 = 63 \text{ (too few)}$$

$$78 - 63 = 15$$

$$10 - 7 = 3 \text{ (1 get 3 more if 1 exchanged)}$$

$$15 \div 3 = 5 \text{ (I need 5 child trips! 1 adult trip for 1 child trip)}$$

$$5 \times 10 = 50, 4 \times 7 = 28$$

Ans: 50 children
28 adults

22. Some balloons are shared among some children.

If each child gets 25 balloons, there will be 20 balloons extra.

If each child gets 35 balloons, there will be 20 balloons short.

How many balloons are there?

over & lack

$$\begin{array}{ccccccc} 25 & & 25 & & 25 & & \\ \uparrow & & \uparrow & & \uparrow & & \\ \text{child} & + & \text{child} & + & \text{child} & + & \dots \\ \downarrow & & \downarrow & & \downarrow & & \\ 35 & & 35 & & 35 & & \end{array} \quad \begin{array}{l} \boxed{+20} \text{ (over)} \\ \boxed{-20} \text{ (lack)} \end{array}$$

$$\text{Big diff} = 20 + 20 = 40 \longrightarrow \text{For over \& over OR lack \& lack, subtract instead of adding the boxed numbers}$$

$$\text{Small diff} = 35 - 25 = 10$$

$$40 \div 10 = 4 \text{ children}$$

Ans: 120

$$4 \times 25 + 20 = 120$$

$$6 \quad 4 \times 35 - 20 = 140 - 20 = 120$$

Name : _____ () Class : 6 _____ Date : _____

Section A: 10 Multiple Choice Questions (10 x 1 marks)

Choose the correct answer and write its number within the brackets provided.

1. Which of the following component(s) would be needed to build a torch?



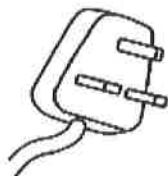
A : battery



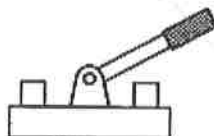
B : copper wire



C : pencil Lead



D : electric plug



E : switch



F : light bulb

- (1) B and F only
(2) A, B, E and F only
(3) A, C, E and F only
(4) A, B, C, D, E and F

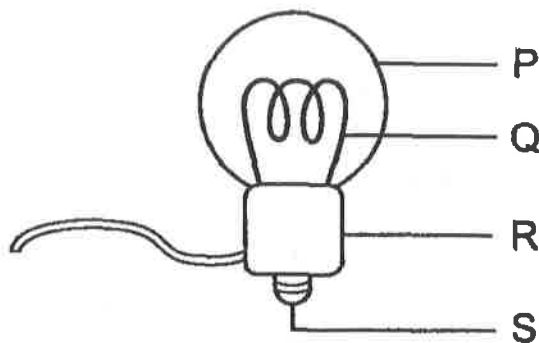
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2. An electric circuit is made up of electrical components through which _____ flows when the circuit is closed.

- (1) heat
(2) light
(3) energy
(4) current

()

Study the diagram below and answer questions 3 and 4.



3. Which of the following statements about the part labelled 'Q' are correct?

A: It is usually made of tungsten.

B: It melts when too much current flows through it.

C: It glows when connected to a closed electric circuit.

(1) A and B only

(2) A and C only

(3) B and C only

(4) A, B and C

()

4. Which two parts (P, Q, R or S) have to be connected to an electric circuit so that the bulb will light up.

(1) P and Q only

(2) Q and R only

(3) Q and S only

(4) R and S only

()

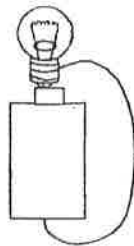
5. Which of the following is used to control the flow of electric current in a circuit?

- (1) bulb
- (2) wire
- (3) switch
- (4) battery

()

6. In which of the following circuit(s) would the bulb light up?

(A)



(B)



(C)



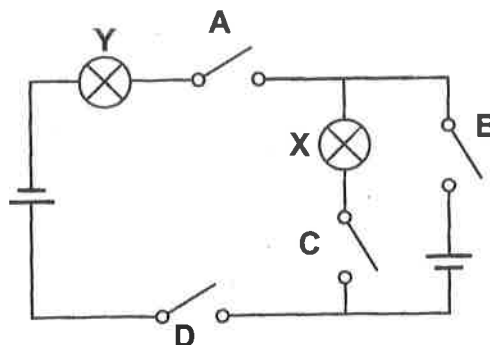
(D)



- (1) A only
- (2) A and D only
- (3) A, C and D only
- (4) B, C and D only

()

7. Study the circuit below.

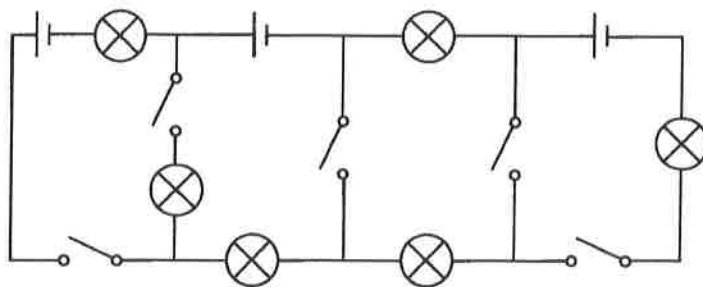


Which of the following correctly shows the switches that should be closed or opened so that only bulb X in the circuit will light up?

	Switch A	Switch B	Switch C	Switch D
(1)	opened	closed	closed	opened
(2)	closed	closed	opened	closed
(3)	closed	opened	closed	closed
(4)	closed	closed	opened	opened

()

8. The circuit diagram below is made up of 5 switches and 6 light bulbs.



In order for all the bulbs to light up, what is the minimum number of switches that need to be closed?

- (1) 5
- (2) 2
- (3) 3
- (4) 4

()

Name : Answer key () Class : 6 _____ Date : _____

Section A: 10 Multiple Choice Questions (10 x 1 marks)

Choose the correct answer and write its number within the brackets provided.

1. Which of the following component(s) would be needed to build a torch?



A : battery



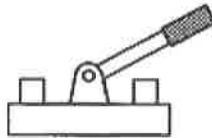
B : copper wire



C : pencil Lead



D : electric plug



E : switch



F : light bulb

- (1) B and F only
- (2) A, B, E and F only
- (3) A, C, E and F only
- (4) A, B, C, D, E and F

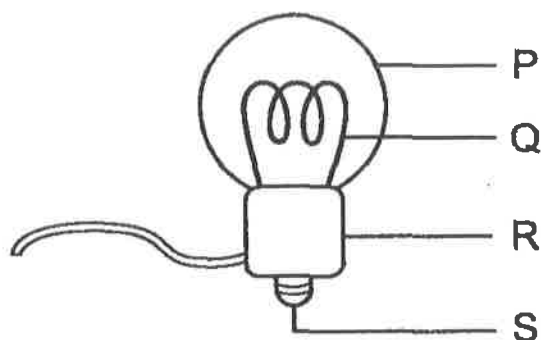
(2)

2. An electric circuit is made up of electrical components through which _____ flows when the circuit is closed.

- (1) heat
- (2) light
- (3) energy
- (4) current

(4)

Study the diagram below and answer questions 3 and 4.



3. Which of the following statements about the part labelled 'Q' are correct?

- A: It is usually made of tungsten.
- B: It melts when too much current flows through it.
- C: It glows when connected to a closed electric circuit.

- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

(4)

4. Which two parts (P, Q, R or S) have to be connected to an electric circuit so that the bulb will light up.

- (1) P and Q only
- (2) Q and R only
- (3) Q and S only
- (4) R and S only

(4)

5. Which of the following is used to control the flow of electric current in a circuit?

- (1) bulb
- (2) wire
- (3) switch
- (4) battery

(3)

6. In which of the following circuit(s) would the bulb light up?

(A)



(B)



(C)



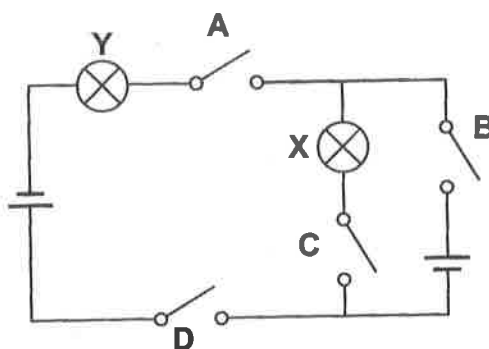
(D)



- (1) A only
- (2) A and D only
- (3) A, C and D only
- (4) B, C and D only

(1)

7. Study the circuit below.

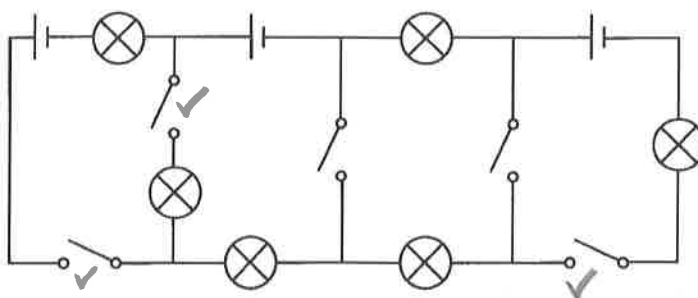


Which of the following correctly shows the switches that should be closed or opened so that only bulb X in the circuit will light up?

	Switch A	Switch B	Switch C	Switch D
(1)	opened	closed	closed	opened
(2)	closed	closed	opened	closed
(3)	closed	opened	closed	closed
(4)	closed	closed	opened	opened

(1)

8. The circuit diagram below is made up of 5 switches and 6 light bulbs.



In order for all the bulbs to light up, what is the minimum number of switches that need to be closed?

- (1) 5
- (2) 2
- (3) 3
- (4) 4

(3)