

1. Answer the following questions.**i. What is electric current?**

Ans. An electric current is a flow of charged particles, such as electrons or ions, moving through an electrical conductor or space.




ii. Define static electricity.

Ans. Static electricity is a phenomenon in which charged particles are transferred from one body to another.

iii. What do you know about atom?

Ans. An atom is the basic unit of matter that forms all elements.

It is made up of three subatomic particles:

-  Protons
-  Neutrons
-  Electrons






iv. Name one conductor and one insulator you can see in your home.

Ans. Aluminum can is a conductor.

Wooden ruler is an insulator.

v. Write down the components of electric circuit.

Ans. The components of the electric circuit are:

-  Electric Bulb
-  Battery
-  Switch
-  Fuse
-  Wires

2. Long Answer Questions.

i. Write a note on electric charge.

Ans. An Electric Charge is a fundamental property of matter and never found free. There are two kinds of electric charges, namely positive and negative charges. Two objects with opposite charges will attract each other. Two objects with the same charge will repel each other.

ii. What do you know about electricity? Explain.

Ans. Electricity is a form of energy that is caused by the movement of electrons. Electrons are tiny particles that are found in all atoms. The electrons are free to move. This movement creates electricity.

3. Tick the right option.

1. Which of these correctly defines electric current?

- | | | | |
|-------------------------------------|------------------------------------|---|---------------------------------------|
| I. the flow of protons in an object | II. the flow of atoms in an object | III. the flow of electrons in an object | IV. the flow of neutrons in an object |
|-------------------------------------|------------------------------------|---|---------------------------------------|

2. When an object gains electrons, it:

- | | | | |
|--------------------------|---------------------------|----------------------|-----------------------|
| I. is positively charged | II. is negatively charged | III. remains neutral | IV. none of the these |
|--------------------------|---------------------------|----------------------|-----------------------|

3. An object becomes charged when:

- | | | | |
|--------------------------------|---|--------------------|------------------------|
| I. it loses or gains electrons | II. electrons number is equal to protons number | III. it is raining | IV. it remains neutral |
|--------------------------------|---|--------------------|------------------------|

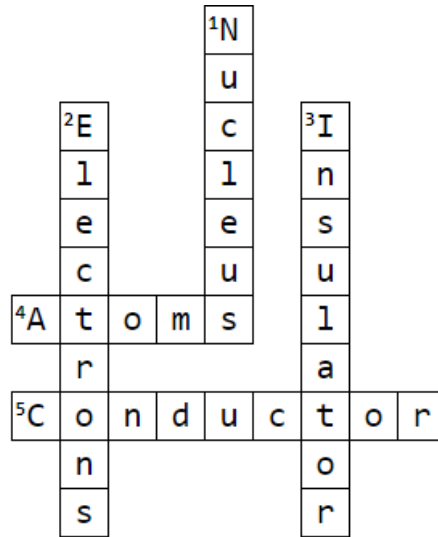
4. If a material is negatively charged, it will:

- | | | | |
|--|---|--|-------------------|
| I. attract a negatively charged object | II. attract a positively charged object | III. repel a positively charged object | IV. None of these |
|--|---|--|-------------------|

5. Lightning is an example of:

- | | | | |
|---------------------|------------------------|-------------------|-------------------|
| I. electric current | II. static electricity | III. sound energy | IV. None of these |
|---------------------|------------------------|-------------------|-------------------|

4. Crosswords



Across

Down

- 4. Tiny particles in matter
- 5. Current cannot pass

- 1. Center of atom
- 2. Negatively charged
- 3. Current can pass

5. Words Search

Find the following word in the words search.

Proton	Static	Current	Fuse	Negative
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P	R	O	T	O	N	F	S	O	A
M	L	I	Q	U	E	D	P	N	L
V	N	F	Y	E	G	E	E	V	H
O	I	U	T	G	A	N	E	R	G
L	A	S	T	A	T	I	C	R	E
U	M	E	R	E	I	I	A	Z	T
M	V	F	L	O	V	T	N	P	U
E	C	U	R	R	E	N	T	D	S
G	F	O	R	C	E	B	R	L	Q

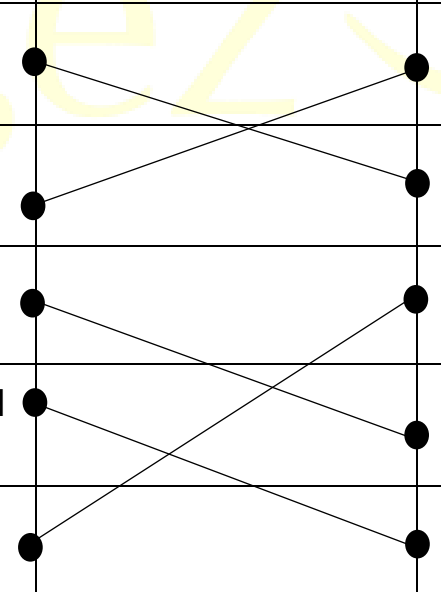
6. Jumbled Words

- | | |
|-----------------|-------------|
| i. CUITCIR | CIRCUIT |
| ii. EELTYRICCIT | ELECTRICITY |
| iii. LIGINGHTN | LIGHTNING |
| iv. REYBATT | BATTERY |
| v. IVEPOSIT | POSITIVE |

7. Columns

Match Column A with Column B.

Column A		Column B
The flow of electrons	●	Charged object
Object gains electrons	●	Electric current
Particle having no charge	●	Proton
Negatively charged particle	●	Neutron
Positively charged particle	●	Electron



8. Fill in the blanks using the given words.

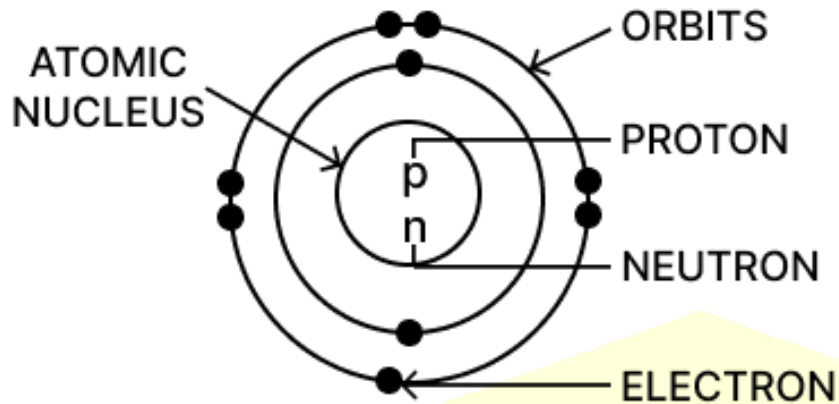
atoms	static	battery	negatively	positively
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- i. In an electric circuit, the current flows from the **battery** to the terminal.
- ii. When an atom gains electrons it becomes **negatively** charged.
- iii. All matter is made up of tiny particles called **atoms**.
- iv. Lightning is caused by **static** electricity.
- v. When an atom loses electrons it becomes **positively** charged.

9. Write “T” for the true and “F” for the false statement.




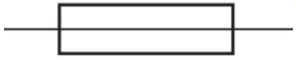
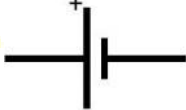
i. A material that does not conduct electricity is called an insulator.	T
ii. A positively charged object will attract another positively charged object.	F
iii. An atom is said to be neutral if it has more protons than electrons.	F
iv. If some electrons are removed from an object, the object becomes negatively charged.	F
v. A spark is an example of electric current.	F

10. Label the diagram.



11. Drag and Drop

Look at the pictures and write the names in the relevant column.

				
Bulb	Connecting wire	Switch	Fuse	Battery

12. Comprehension

Answer the following questions after reading the paragraph.

The electric circuits are closed-loop or paths, forming a network of electrical components where electrons can flow. An electric fuse is a safety device that operates to provide protection against the overflow of current in an electrical circuit. The components of the electric circuit are: electric bulb, battery, switch, fuse and wires.

i. What is electric circuit?

Ans: The electric circuit is closed path, where electrons can flow.

ii. Write down components of electric circuit?

Ans: Electric bulb, battery, switch, fuse and wires.

iii. What is electric fuse?

Ans: An electric fuse is a safety device that provides protection against current flow.