



GOVERNMENT DEGREE COLLEGE (MEN)

ACCREDITED BY NAAC WITH B++ (CGPA 2.90)

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Department of Physics

Brainstorming Session

Date and Time	24.11.2023
Class	III B.Sc (MPCS)
No.of students participated	25
Name of the Activity	Brainstorming Session
Title	Wouldn't it make more sense to call electrons positively charged because when they move they make electricity? "
Objective	Brainstorming session focused on the topic of "Why were electrons chosen to be negatively charged? Wouldn't it make more sense to call electrons positively charged because when they move they make electricity? " could be to explore, discuss, and generate ideas and hypotheses related to this question. It promotes Critical Thinking,Engage Curiosity,Highlight Scientific Method,and Promote Further Study.
Teacher Activity in this session	1. Asking Questions during this session like below - What is Electricity in Common words? - What are the objects in a material to pass electricity? - What are the charge carriers that transport electricity in an animal? - What are the charge carriers in an ionosphere ? - What are the charge carriers in the discharge tube? - What are the charge carriers in lighting? - What are the charge carriers in a Semiconductor?


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Time :- 12:30 PM to 1:20 PM

24-11-2023

Class :- III MPCs

Semester :- V.

Brainstorming Session

1Q) What is electricity in common words.

Ans Electricity is a form of energy. In general it resembles the flow of electrons in a material.

2Q) What are the objects to pass electricity.

Ans For the passage of electricity in a object there should be flow of electrons when force is applied with possessing minimum quantity of conductivity.

3Q) What are the charge carriers that transport electricity in an animal.

Ans Animals contain positively charged particles for the passage or transport of electricity [Na^+ , K^+ , Ca^{2+}]

4Q) What are the charge carriers in ionosphere.

So The ionosphere consists of negatively charged particles which undergo neutralization with positive ions, resembling neutral charge carriers.

5Q) What are the charge carriers in discharge tube.

Any Discharge tube contains both positive and negative ions which help in charge carrying. eg: Hydrogen discharge tube

Q8 what are the charge carriers in lightning

So The charge carriers in lightning are electrons in the fourth state of matter

Q8 what are the charge carriers in semi conductor

So Electrons and holes [vacant place] are charge carriers in semi conductor.

Q8 What are the charge carriers in solar wind.

So In solar wind. the charged particles i.e electrons and protons are the charge carriers.

Q8 what are the charge carriers in metal wire.

So Free electrons of the metal conductor are the charge carriers in metal wire.

(1) S. Dhillewari [2122001050038]

2) B. Sirisha 2122001050003

3. N. Sandhyarani 2122001050028

4. Ch. Sri Rajya Lakshmi 2122001050008

5. K. Maheswari [2122001050017]

6. Paidi Devika [2122001050031]

Time - 12:30 PM to 1:00 PM.

(2)

04-11-2023.

Class : III MPES

Semester : V.

Q Why the charge of an electron is considered Negative

A Benjamin Franklin performed various experiments and first named ^(electron) it as negatively charged, and other as positive (Proton).

Even if they are reversed there is no change.

Q Who decided electrons are negative

A Benjamin Franklin decided electrons are negative

CONCLUSION.

This Brainstorming session was a very interactive and knowledge improving session with which unknown facts are known.

Interaction with students of the group. This even includes various concept related questions with one core topic.

-At last all of us are interested in these sort of activities.

P. Devika	2122001050031	III BSC MPC
Ch. Sri Rajya Lakshmi	2122001050008	III BSC MPC
B. Swisha	2122001050003	III BSC MPC
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me 12:30 to 1:20 PM

24.11.2023

class: ITMPS

Semester I & II

Brain storming

① what is electricity in common words.
Ans flow of electrons (or) electrical charge (or) power.

② what are the objects to pass electricity?
Ans electrons, conductors, ions, wires
metals like, copper, Iron, gold, silver etc. . . .

③ What are the charge carriers to transport electric current in an animal?

Ans Positive ions, water, Electrical energy, and power
Source, Electrical potential, Calcium, Sodium ions, H₂O.

④ What are the charge carriers in ionosphere?

Ans Gases, potential difference, positively charged cations.

⑤ what are the charge carriers in a discharge tube?

Ans Electrons, positive hydrogen ions, protons

⑥ what are the charge carriers in a lightning?

Ans EMF, plasma (or) electrons in a plasma, waves

⑦ what are the charge carriers in a semiconductor?

Ans Electrons, holes

⑧ What are the charge carriers in a solar wind

Ans) H_2 , Li , N_2 , O_2 , UV-rays, ions, IR-rays, holes, Visible rays.

⑨ What are the charge carriers in a metal wire?

Ans) free electrons.

10) Why the charge of an electron is $-ve$.

① it attracts $+ve$ charge, so it is $-ve$.

② who decided the electrons are $-ve$

③ Benjamin Franklin.

④

Conclusion: I know similar words have different meaning.

① it is very useful.

② I is a good group discussion.

③ we know the different types of water flows.

④ B. Thamsi

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⑤ B. Bhumiika

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prasanna.

Time 12:30pm to 1:20pm

class : III MPes

Semester : V

Brain storming session

1. what is electricity in common words?

A:- Flow of current (i)

Q. What are the objects to pass electricity.

A:- Conductors - ex: Iron, copper, silver

Electrons with charge

3. What are the charge carriers to transport electric in an animal.

A:- Nerves, blood

4. What are the charge carriers in atmosphere?

A:- Positve Atmosphere contains free electrons (e⁻) carriers some magnitude of negative charge which on neutralization with positive charge ions.

5. What are the charge carriers in a discharge tube?

A charge carriers in discharge tube are electrons and positive ions.

6. What are the charge carriers in a lightning?

A:- The charge carriers in a lightning is electrons in plasma.

7) What are the charge carriers in a semiconductor?

A:- Electrons and holes are the charge carriers in semiconductors.

8) What are the charge carriers in solar wind?

A:- Solar wind is a stream of charged particles, ions and electrons, which are continuously escaping from the sun.

9) What are the charge carriers in a metal wire?

A:- Electric current is flow of electric charge. In electric circuits this charge is often carried by

moving electrons in a wire.

10) Why the charge of an electron is negative?

A:- Electron is a sub atomic particle that is negatively charged.

11) Which scientist named electrons as negative?

A:- Benjamin Franklin

Conclusion:-

1) This session makes more useful to us. To know the small different variation between the words similar words.

2) This session helps to improving your thinking, knowledge, etc. We got some concepts of charge carriers behaviours in our daily life.

3) This session helps in improving way of thinking, group discussion ^{with} ~~between~~ friends makes very fun.

N. Mamatha

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N. Mamatha

P. Marasa

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Mara
☺

P. Neeraja

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J. Sravani

Brain Storming Session

Time: 12:30 pm to 1:20 pm

Class: III MPCS

Semester: V

Date: 24/11/2023

1) what is electricity in common words?

Ans:- Transporting the current.

2) what are the objects to ~~pass~~ transport electricity?

Ans:- Conductors, which passes the charge of electrons

3) what are the charge carriers to transport electric current in an animal?

Ans:- neurons, (minerals)

4) what are the charge carriers of ionosphere?

Ans:- electrons in ionosphere gases

5) what are the charge carriers in a discharge tube?

Ans:- Holes (ions)

6) what are the charge carriers in a lightning?

Ans:- electrons in transparent material ~~in the~~ (plasma).

7) what are the charge carriers in a semiconductors?

Ans:- Holes, electrons

8) what are the charge carriers in solar wind?

Ans:- charged particles of gas in wind

9) what are the charge carriers in a metal wire?

Ans:- electrons (Flow of electrons)

- 1) P. Dileep (P. Dileep)
- 2 K. Mohan (K. Mohan)
- 3) G. Sudeep (G. Sudeep)
- 4) N. Neelachalam

10) why the charge of electron is negative?

Ans! - ~~the~~ where is positive there is negative,
Benzmin frank give negative charge to electron

(11)

(12)

* Conclusions:-

* This session is useful to us

* We know new things about charge carriers

* How to do group discussion

* This experience is good for us.

<u>Name</u>	<u>H.T. No</u>	<u>group</u>	<u>Signature</u>
P. Dileep	21220010050035	mpcs	<u>P. Dileep</u>
N. Neelachalam	2122001050027	mpcs	<u>N. Neela</u>
G. Sudeep Kuman.	2122001050012	mpcs	<u>G. Sudeep</u>
K. Mohan	2122001050019	mpcs	<u>K. Mohan</u>
K. Ganesh	2122001050020	mpcs.	K. Ganesh

8. What are the charge carriers in Solar wind?

Answer:- Electrons, Protons and alpha particles are the charge carriers in Solar wind.

9. What are the charge carriers in metal wire?

Answer:- Free electrons of the metal conductor.

10. Why the charge of electron is negative?

Answer:- The atom contains proton positive charge to neutralized electron considered as negative.

6.

Conclusion:-

- I learn about concept view of electricity.
- I know about the different type of charge carriers.
- In this Brainstorming Session mainly I learn about electron negative charge.
- I learn charge carriers of electricity
Ionosphere
Discharge tube
Lighting
Semiconductors.

* Signatures:-

<u>Name</u>	<u>Group</u>	<u>H.T NO</u>	<u>Signature</u>
1. S. Pavan Kumar	- III MPCs	- 2122001050037	S. Pavan Kumar
2. H. Purushottam	- III MPCs	- 2122001050015	H. Purushottam
3) Torgi Yatheesh	- III MPCs	- 2122001050044	T. Yatheesh
4) K. Aditya	- III MPCs	- 2122001050018	K. Aditya

Time : 12:30pm to 1:20pm

24.11.2023

Class : III MPCs

Semester : V

Brain Storming Session

1. What is electricity in common words?

Answer:- Electricity is a form of energy and it is a flow of electrons.

2. What are objects to transport electricity?

Answer:- The object which allows to pass electricity are called conductors and semi conductors.
Conductors contain electrons which are used for flow of electricity.

3. What are charge carriers to transport electric current in animals.

Answer:- Neurons to pass the signals in animals.
Neurons are the charge carriers to transport electric current in animals.

4. What are the charge carriers in Ionosphere?

Answer:- Positive charge carriers in Ionosphere.
Positively charged cations are the charge carriers.

5. What are the charge carriers in discharge tube?

Answer:- Charge carriers in discharge tube are electrons.

6. What are the charge carriers in a lightning?

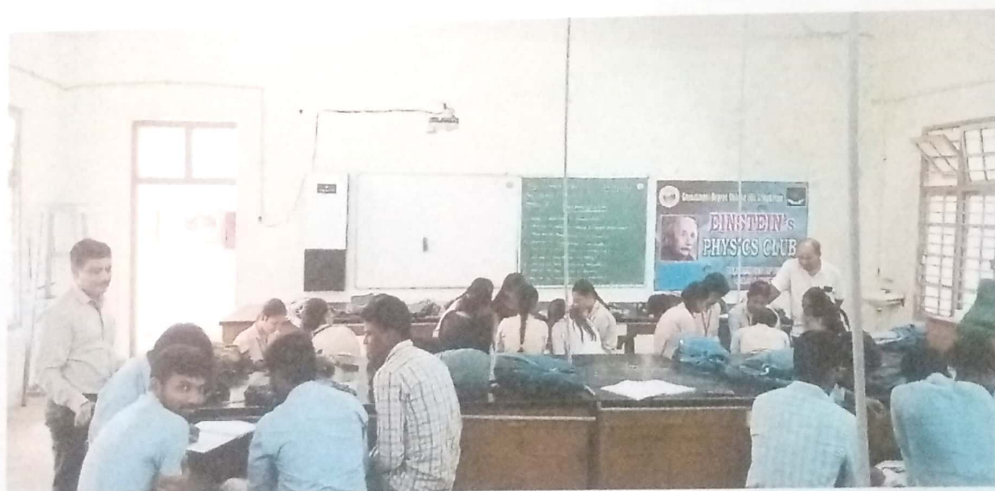
Answer:- Charge carriers in a lightning are ~~Posn~~ Collision of Ions and electrons.

7. What are the charge carriers in Semiconductors?

Answer:- Electrons and holes are the charge carriers in Semiconductors.

Name of the Lecturers who planned & conducted the activity	Sri.M.V.Satyanarayana Sri R.Ravi kumar Sri B.Mohana Rao Dr.GVS Jayapala Rao
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Photo Gallery :



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