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ELECTRIC CHARGE. COULON'S LAW. ELECTROSCOPE. ELECTRIC FIELD. ELECTRIC FIELD LINES OF FORCE

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Abstract: An explanation of a general electrical topic and its wide application. Use of different methods during the lesson.

Key words: Electricity, electric field strength, lines of force, positive and negative charges, method.

Introduction:

Physics is the environment around a person. Today, physics is one of the most important subjects for every person. This science attracts people with its attractiveness and wealth of mystery. It is clear to all of us that physics contributes to the development of many fields. Therefore, today I would like to inform you about the topic of "Electricity", an important field of physics. We will also briefly touch on how to use different methods in the lesson to interest the students in the lesson.

Charge is the main property of matter that shows electrostatic attraction or repulsion with other charged matter. Electric charges can be positive or negative. An ebonite stick rubbed against wool becomes negatively charged. A glass rod rubbed against wool becomes

positively charged. When the glass rod is rubbed against the silk, the positive silk of the glass becomes negatively charged.

Charges of the same sign repel each other, charges of different signs attract each other. Thus, electric charges interact with each other. All objects have a quantity, just as they have a size. This quantity was introduced and studied by the French physicist Charles Coulomb (1736-1896) in the 1780s.

F=(k*Q*q)/r2**

Based on Coulomb's experiments, he came to the following conclusion: charged Q and q are directly proportional to the product of charges and inversely proportional to the square of the distance between them. Here k is the coefficient of proportionality. Its value in the International System of Units is k=8.988*10^9(N*m^2)/c^2. If we round this expression, it becomes k=9*10^9(N*m^2)C^2.

An electroscope is used to measure electric charge. An electroscope consists of the following: metal, insulator, gold leaf, glass.

An electric field is a field created by electric charges or a changing magnetic field. The electric field formed by stationary charges is called electrostatic field. The concept of electric field was first introduced to science by Michael Faraday (1791 - 1867) in the 30s of the 19th century.

The electric field is the field of matter. The effect of electrified bodies on each other, their movement occurs directly due to electric fields.

Lines of force.

Since the electric field is a vector quantity, it can be depicted in this way with arrows at different points.

Methods:

To make the lesson process more interesting, it is very useful to use the "Say it fast" method. 6 people will be released. The teacher gives the ball to the 1st student and asks him to say

one formula, and the ball is given to the students in sequence. Each student who says the correct formula is rewarded with words of encouragement, and at the end the remaining child is given a reward. Through this method, students will try to memorize the formulas better and there will be repetition for everyone. Using this in class will be very effective, of course. Currently, it is very useful to use different methods in the course of the lesson to increase students' enthusiasm for the lesson, because the student is bored with the sameness.

it depends on the teacher.

Summary:

We use a lot of electricity during our life. In this article, I talked about the most important concepts of physics. Electricity, which is the most important part of physics, closely connects us with the world around us.