



Static Electricity

Use the key words in the box below to complete the paragraphs describing static electricity.

Key Words

atoms	electrons	force	gains	insulating	loses
negative	neutral	neutrons	non-contact	oppositely	positively
repel	rub	subatomic			

Everything in existence is made up of tiny particles called _____. Atoms are made of even smaller particles known as _____ particles. These subatomic particles are called protons, neutrons and _____.

Charge is the property of a particle that causes it to experience a _____ in an electrical field. Some of the subatomic particles in an atom are charged. Protons are _____ charged and electrons are negatively charged. _____ have no charge. Because atoms have the same number of protons and electrons, they have a _____ charge overall. The protons in an atom cannot move, but the electrons can. This means that _____ charge can move, but positive charge remains fixed.

When two _____ materials come into close contact, electrons can be transferred from one material to the other. This can also happen when you _____ two insulating materials together. The object which _____ electrons becomes negatively charged, and the object which _____ them becomes positively charged. The properties of the material each object is made from determines which one loses electrons and which gains them.

Two _____ charged objects attract each other due to a force between them. This is called an electrostatic force. Electrostatic attraction is a _____ force because objects do not have to be touching to experience it. When two objects with the same charge are brought together, they _____ each other instead.