Atoms are the basis for everything in the universe. All matter is composed of atoms. Solids are made of densely packed atoms while gases have atoms that are spread out. Protons, electrons, and neutrons are the basic parts of atoms. The parts of the atom include positive and negative charges and are responsible for the electrical charges known as electricity. Electrons are the smallest of the three particles that make up atoms. They are located in an area that surrounds the nucleus of an atom. Electrons have negative charges. Protons, electrons, and neutrons are all related to electric charges. Protons have positive charges. Protons are large and are found in the nucleus. Along with neutrons, they are grouped together in the center of the atom. Neutrons are neutral and do not have a charge. They are large and are found in the nucleus grouped together with the protons. Atoms start out with the same number of electrons and protons. Under certain conditions, electrons can be removed from an atom or added to an atom. Removing electrons would leave the atom with more positive than negative charges. Electricity is the transfer of electrons from one atom to another. Electrons have a negative charge; they sometimes are attracted to atoms that have a positive charge. Electrons orbit in an area that surrounds the nucleus of an atom. Electrons then sometimes jump to the shells of nearby atoms as they orbit. This jumping or movement of electrons creates electric current. Current is what flows through electrical wires and powers electronics items, from light bulbs to televisions. Electrical charges are created in power plants that goes through power lines to bring electricity into homes or businesses. Static electricity is the imbalance of positive and negative charges in an object. Static electricity is created when electrons move from one place to another. Electrons can move more easily in some objects than in others. The rubbing of certain materials against one another can transfer negative charges, or electrons. An example of static electricity is when a balloon is charged by rubbing it on the hair. It picks up extra electrons and has a negative charge. Holding it near a neutral object will make the charges in that object move. This is an example of static electricity. Another example involves clothing is in a dryer. The fabrics rub together and there is an exchange of electrons from the surfaces of the clothing. They are then attracted to each other and cling together. The crackling sound heard comes .from the electrons being pulled away from each other when the clothes are separated

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