Solar System Essay, Research Paper

Our Solar system, the sun and its planet?s has not always been there.It is nearly five billion years ago, and there is no solar system, no planets,moons, no sun. Instead there is a big cloud of dust and gas called a nebula. Thiscloud has been slowly twisting for more than 10 billion years, held togetherby it?s own gravity. Then a star explodes……WOW!! its a super nova…. Theblast pushes the gases of our nebula together. That strengthens the gravitationalpull of those gases even more and they begin to come together still more.The whole cloud begins to get smaller and as it does so, it swirls faster and faster,and grows smaller and smaller.

Ok, dudes and dudettes, lets take a closer look at our nebula. The cloud, scientiststhink started our solar system. The material of this nebula was more than 99% hydrogen and helium. These elements were formed at the very beginning of the universe. Heavier elements made up the rest. These heavier elements had formed during the lives and violent death of stars that were much larger than our own sun. These explosions spread the heavier elements through space. As the nebula shrank, most of the material fell to the center and gathered into a huge big ass ball of gas!! At the center of this ball, matter became very hot and tightly packed. In this test of heat and pressure hydrogen atoms smashed and combined with each other to form helium. This process is called nuclear fusion. The fusion released huge amounts of energyand as this energy spread to the outer layers of the ball, it began to glow. Thus,creating what is in the present day the sun!!

Away from the center of the cloud, the dust and gas were thinner. This materialcollected into a ball of hot gases. As the gases cooled tiny things began to form.Near the center only rocky elements could become solid particles. Farther fromthe sun icy things could form from the cooling gas. These particles began tocollide and strike each other, which in turns forms larger clumps. Some clumpsgrew more quickly than others and thier increased mass gave them greater gravityallowing them to gather more stuff and grow even more quickly. The rocky planetsMercury, Venus, Earth, and Mars formed where temperatures were high.The gas giants formed farther away from the heat of the sun.

Meanwhile the energy created at the center of the sun was beginning to reachthe surface of the star and radiate into space along with a gust of energetic particles.This radiation and solar wind began to push out the remaining bad house guestsof the nebula, sweeping the solar system clean.