**The Solar System**

Today in Science class, Mr. Smith taught us about the solar system.

Things I learned:

* Some of the particles from the sun’s solar wind gets past the magnetic field of the earth at the North and South Poles and reacts with the atmosphere to make the Aurora Borealis.
* The closer you go to the sun, the faster you orbit the sun.
* Mercury orbits the sun the fastest.
* Neptune has the longest orbit.
* The speed of launch of an orbiting satellite determines how high its orbit is.
* There is a satellite called SoHo that always is in between the earth and the sun.
* Galileo named the Aurora Borealis.
* Galileo also discovered the moons of Jupiter.
* Most of the energy coming from the sun is in the form of light.
* Sunspots move across the surface of the sun because the sun is rotating.
* The sun does not rotate like the earth because the earth rotates like a huge ball of rock.
* The sun is a giant ball of gas so some parts of the sun move faster than others.
* The reason sunspots are darker than the rest of the sun is because they are cooler.
* The stars that look slightly red are called red giants.
* The storm cycle of sunspots is about 11 years.
* In the middle of the 11-year period there are a lot of solar storms.
* The solar winds go millions of miles per hour.
* The young sun was made out of mostly hydrogen.
* If you smash hydrogen atoms together you get helium.
* That is how a hydrogen bomb works.
* The sun has used up a lot of its hydrogen.

