

New Words or phrases:

Atmosphere-the whole mass of air surrounding the earth

Bat- night-flying mammals with forelimbs forming wings

Experiment – a test or a trial, a procedure carried out under controlled conditions to discover something, to test a hypothesis, or to serve as an example

Fermilab- Fermi National Accelerator Laboratory. A national particle physics lab in Batavia, IL (near Chicago, IL). The MINOS beam starts here.

Gram - A unit of mass. One dollar bill is about 1 gram.

Hypothesis – Something not proved but assumed to be true for purposes of argument or further study or investigation

MINOS- The Main Injector Neutrino Oscillation Search. This is an experiment starting at Fermilab near Chicago, IL, and ending in the Soudan mine in Soudan, MN. The near detector and particle accelerator (beginning of beam) are in Fermilab, while the far detector is in Soudan.

Scientist- a person skilled in science.

Neutrino- fundamental particle with very little mass and no charge. The MINOS project is investigating neutrinos.

Particles – one of the very small parts of matter (like an electron). Everything in the whole universe is made up of particles.

Particle accelerator (beam)- a device that is used to give high velocities to charged particles (like electrons and protons).

Physicist- A certain type of scientist who specializes in knowledge of physical science (physics).

Sun – The large star at the center of our solar system. It gives off neutrinos from the interactions deep inside that provide its power.