

Energy

$$E = mc^2$$

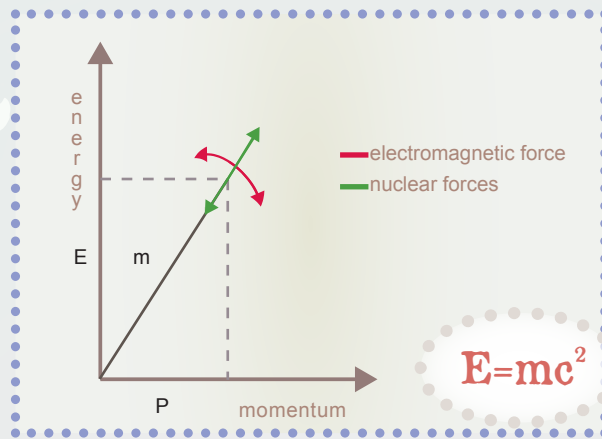
WHAT'S HAPPENING?

We all know this famous equation. But what does it all mean?

Two of the most important parts of physical science are matter and energy. Matter is anything that takes up space. Energy is the property of matter that performs work. Matter and energy are two forms of the same thing. Einstein created a mathematical formula that explains how matter can be changed into energy.

E = energy

m = mass



c^2 = Speed of light times the Speed of light.

E (energy) equals m (mass) times c^2
(c stands for the speed of light).

This equation allows scientists to know how much energy things have, whether it's the energy in a bowling ball or the energy in a supernova.

THINK ABOUT IT!

How do you think the following items use energy?

A growing tree: _____

A person: _____

A toaster: _____

A light bulb: _____

DID YOU KNOW?

Stars shine because the matter inside them is slowly being changed back into energy.

