

# Heat

## Lesson 1

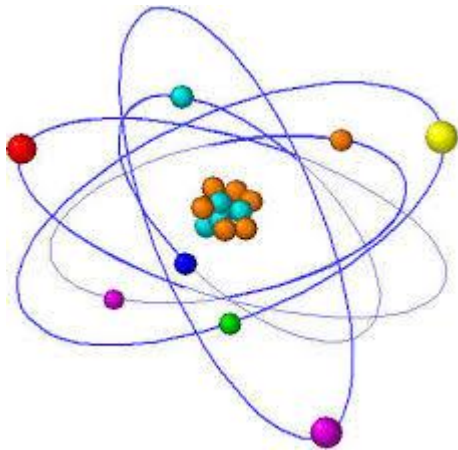
While the earth remains, seedtime and harvest, cold and **heat**, summer and winter, day and night, shall not cease.” Genesis 8:22

# What is thermal energy?

- Thermal energy is the energy of the moving particles of matter.

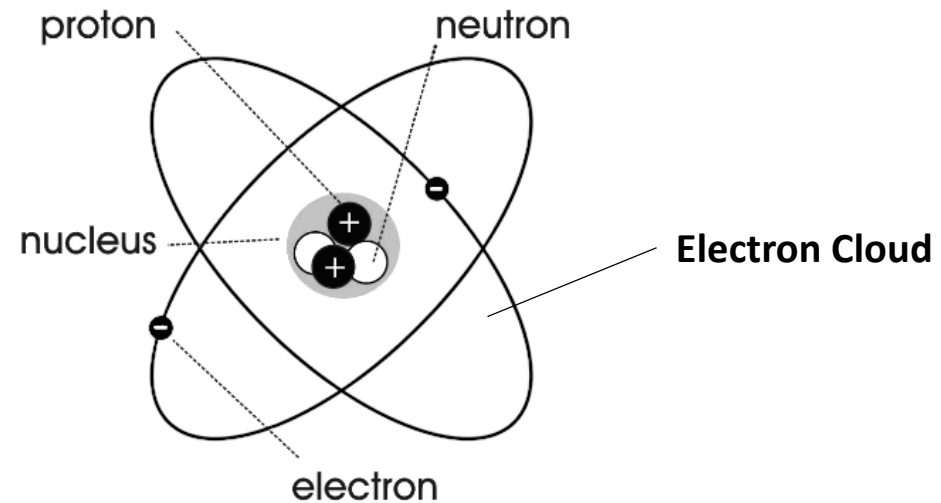
# Particles of Matter

- Every living and non-living object is made up of tiny nano-sized particles called atoms.



- Watch video on atoms.

<https://www.youtube.com/watch?v=o-3I1JGW-Ck>



- Fill in the names of the atom parts on your handout.

# Activity

Make marshmallow atoms.

Materials Needed:

- Marshmallows
- Toothpicks

If there is time, find what atom the student made on a periodic table.

<http://www.chemicalelements.com/>

# What is heat?

- Heat is the flow of thermal energy from one object to another. It always moves from warmer objects to colder.
- What are examples of heat?
- Why do animals/humans and plants need heat?

# Benjamin Thompson (“Count Rumford”)



Benjamin Thompson was the first person to show that HEAT is a form of ENERGY!!

He was an American colonist born on March 26, 1753. He went to Harvard. He died on August 21, 1814.

He is known for inventing the Rumford fireplaces.



# Homework

Your assignment is to study the diagram of the atom and learn the parts of an atom. You will have a quiz tomorrow.