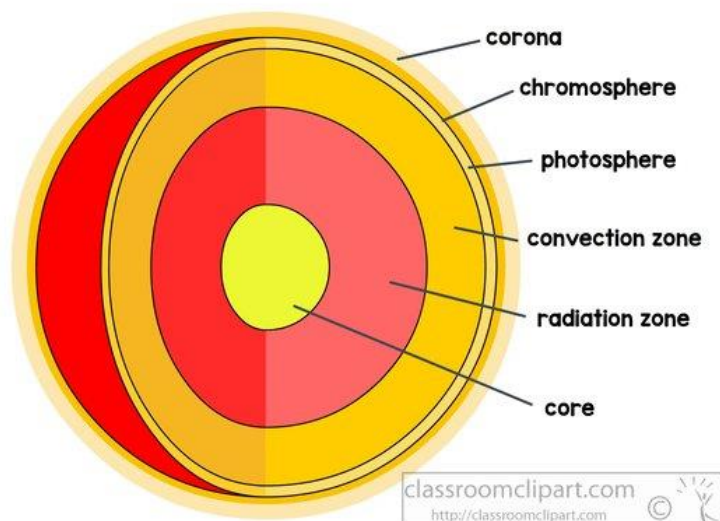


SOLAR ENERGY

• The Sun :

The Sun is our star, and the **solar system's main source of energy**. It is mainly composed of Hydrogen (73 %) and Helium (25 %). These elements form a plasma, which is a specific state of the matter under extremely high temperature. On the surface, the temperature is around 5500°C, but in the center, in the core, the temperature reaches 15 million °C.



• The Sun's energy :

Energy can have many different forms, and one of them is heat. The Sun being the hottest object in the solar system, this is why it is such a big source of energy. We can have access to that energy thanks to the solar emissions. The Sun sends us a small part of its energy in the form of sunlight. This is the main source of energy on Earth : plants use it for photosynthesis, humans need it to survive, etc... We consider that **the amount of energy that the Sun sends us is always the same.**

• How to capture it ?

The Sun sends us its energy in the form of heat. We can use it directly like that (photosynthesis for the plant) or **try to transform it into another form of energy.**

The way that we use is to **transform the light that we receive into electricity.** To do so, **we use photovoltaic panels, and more specifically solar cells.**

These cells, made of many layers of silicon, can **take in the heat from the Sun (light) and transform it into electricity.** We use these solar panels to produce electricity thanks to the Sun.

