 **New Life Christian Academy**

**SCIENCE - Grade 4th - Teacher Capellán**

**Weekly Lesson Plan (*Plan de Lección- Semana 13 -17 Abril, 2020*)**

**Contents (Contenidos) - The Universe: The Solar System**

**\* The Solar System:** (What is the Solar System? / Leftovers: Asteroids, Comets, and Moons / Planet Types: Terrestrial Planets and Jovian Planets or Gas Giants).

**Things to do:**

* Draw the Sun and label its parts.
* Draw and label the Phases of the Moon.

**Main Ideas to copy and memorize it:**

* Our Sun is a star, which means it is a hot sphere of electrically charged gases (plasma).
* The Sun is a yellow-white star, average in size, in the main sequence phase of its life cycle. It lies about 93 million miles (150 million km) away from the Earth, and its light takes about 8 minutes to reach Earth.
* The Sun is made up of gases. It is about 92% hydrogen and 7% helium. 90 other elements, including carbon, oxygen, iron, and neon, make up the remaining 1%.
* The Sun generates the energy that makes it burn and heats up Earth by turning hydrogen into helium. This is called nuclear fusion, and it releases a huge amount of energy.
* The structure of the Sun consists of the core, envelope, corona, chromosphere, solar flares and prominences, photosphere, and sunspots.
* The Core: is the hottest part of the sun, at 15,000,000 degrees Celsius. Nuclear fusion occurs here.
* The Envelope: is the layer that wraps around the core. Its function is to move the energy produced in the core outward. It has 2 layers, an inner and outer, which move the energy in different ways.
* The Corona: is the outer layer of the sun’s atmosphere. Extend about 1,600,000 km. into space. Its temperature is up to 3,500,000 degrees Celsius.
* The Chromosphere: is the layer of the sun’s atmosphere just above the photosphere. Its temperature goes from 5,500 – 1,000,000 degrees Celsius.
* The Solar Flares and Prominences: are eruptions of energy from the sun’s surface. Charged particles from flares can travel as far as Earth and beyond.
* The Photosphere: is the sun’s surface and the part that shines brightly. Its temperatures is about 5,500 degrees Celsius.
* The Sunspots: are areas of cooler temperature on the photosphere. They appear as dark spots on the sun’s surface.
* The Moon: is a planetlike satellite that revolves around Earth, completing one orbit every 29 ½ days.
* New moon: happens when the moon is between Earth and the Sun, it is very near the sun and invisible to us.
* A Crescent Moon: is a thin sliver of moon. Is also called “the old moon in the new moon arms”.
* A Half or Quarter Moon: is a half circle. Happens twice a month, a week before and a week after full moon.
* Full Moon: it rises when the sun sets and sets when the sun rises. It is in the sky all night.
* A Gibbous Moon: is more than half lit.

**YouTube Suggested Videos:**

* <https://www.youtube.com/watch?v=2HoTK_Gqi2Q> / The Sun.
* <https://www.youtube.com/user/christianready> / Structure and Composition of the Sun.
* <https://www.youtube.com/watch?v=1CC0P7y90PU> / Phases and Motions of the Moon.