The Book of Genesis

Lesson 4

Chapter 1:14 – 23

On the first day, God created the heavens, the earth and the gush of perpetual energy that will control and affect everything created by Him. On the second day, God separated the waters of the earth to form the oceans and the atmosphere. On the third day, He moved the waters by reforming the earthen core to allow the land to appear and He filled it with vegetation of all kinds. Because of our finite minds and limited understanding, the magnitude of the events of these first three days is difficult to comprehend. With the arrival of the fourth day, His following creations are easier to grasp.

Formation of the Stars, Moons and Planets

Genesis 1:14 Then God said, "Let there be lights in the expanse of the heavens to separate the day from the night, and let them be for signs, and for seasons, and for days and years; 15 and let them be for lights in the expanse of the heavens to give light on the earth"; and it was so. 16 And God made the two great lights, the greater light to govern the day, and the lesser light to govern the night; *He made* the stars also. 17 And God placed them in the expanse of the heavens to give light on the earth, 18 and to govern the day and the night, and to separate the light from the darkness; and God saw that it was good. 19 And there was evening and there was morning, a fourth day.

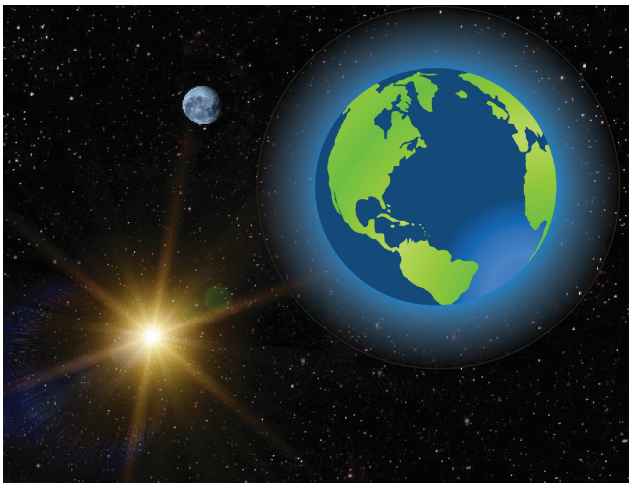

Figure 19: On the fourth day the LORD created the suns, moons, stars and all the planets of the heavens

On the fourth day, God created the lights in the expanse of the heavens. We must not confuse them with the expanse of the waters created on the second day – our atmosphere. Verse 14 is a reference to the expanse of the heavens which, today, we would call outer space. Especially at night, when we look into the skies, we see the handiwork of the LORD of this fourth day. Our sun and moon were created on that day as well as all the rest of the stars, moons and planets. Neither should we confuse these lights with the light that was created on the first day. In this case, the LORD gathered some of that energy created the first day to create the suns that are scattered throughout the heavenly creation. They are all stars! We call our star the sun. These

stars radiate all levels of energy that the LORD created on the first day including that specific spectrum of visible light that we call daylight and the colors we can see.

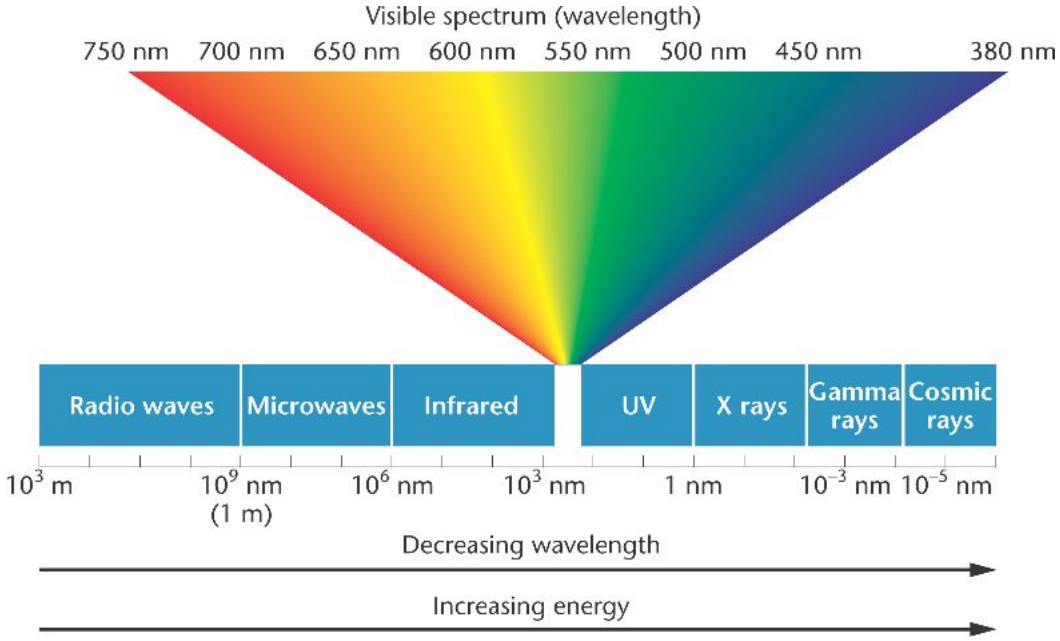

Figure 20: Chart showing the colors and visible light

The wavelengths of the visible spectrum from 750 nm to 380 nm make up what the LORD calls the "greater light" that governs the day as it shines down on the portion of the earth that faces the sun as well as all the other planets and moons in our solar system.[26] To a greater extent, all the stars of the heavens shine light upon all the faces of all the other heavenly bodies with the same spectrum of visible light to create a daylight experience on every planet and moon in creation. But these same stars send forth more than just the visible spectrum of light; they emit all the possible wavelengths that we cannot see at the same time.

The "lesser light" that governs the day is totally different from the "greater light" of the stars. The "lesser light" is the reflective light of the moons and other planets. For example, the portion of the earth that faces away from the sun is dark and we call that "night." Circling the earth in an ellipse, our moon comes as close as 225,623 miles and, as far as 252,088 miles. The moon contains no visible radiating light that we can see, and yet, it acts like a mirror to reflect the light from the sun on the dark side of the earth. The various stages of the moon determine the amount of light reflected on the dark side of the earth every night.

As we search the heavens with our telescopes, we are often so mystified by the greatness of the heavenly bodies that we, in turn, miss admiring them for their intended purposes of indicating signs and determining the seasons, days and years. Although they are spinning through space in their own orbits, they are fixed in their positions – predictable and reliable. At the equator, the earth is approximately 24,901 miles around and it spins at an estimated 1034 miles per hour.

[26] nm = Nanometer

Through the year, during the winter and summer solstice, the earth averages 12 hours of sunlight and 12 hours of dark each day; therefore, the sun controls the hours of daylight. In the northern hemisphere, as the earth rotates, the sun seems to move north of the equator, the day are longer and the nights are shorter. As the sun seems to move south of the equator, the days are shorter and the nights are longer. This apparent shifting of the sun above and below the equator causes the seasons we know as winter, spring, summer and fall (autumn). We can choose any season as the beginning of the year and after one full circle of the sun, the earth's position will be aligned to repeat that cycle. Therefore, the orbit of the earth around the sun determines both the years and the seasons.

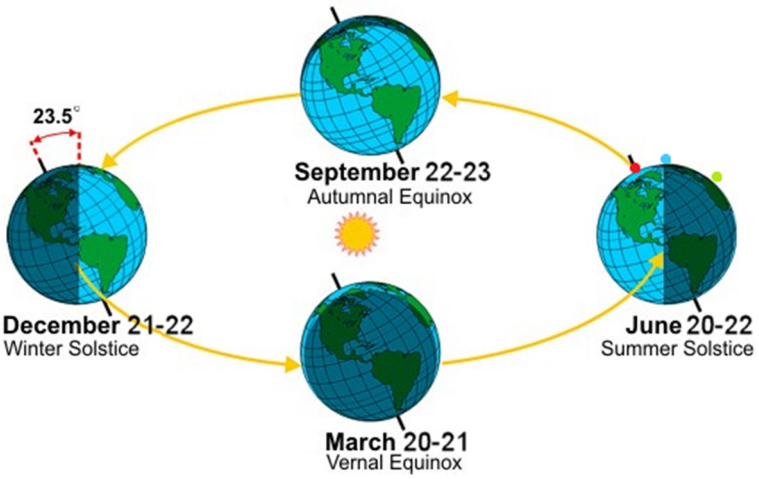

Figure 21: The earth's path around the sun which cause the seasons

The moon circles the earth 12 times in a lunar year. The new moon phase represents the beginning of a new lunar month. The months alternate between 29 and 30 days each month.

At night, as we look further into space, we can see all the rest of the moons, stars and planets in there perpetual orbits. They are always there, but the brightness of our sun outshines their glow during our daylight hours. The eternal placement of the stars acts as a sign to help the traveling sojourner navigate the globe. You have heard of navigation by the stars. Polaris is called the North Star because of its eternal proximity to the celestial North Pole. In the northern hemisphere travelers look to Polaris as a sign to determine a path to the north, south, east or west. By taking measurements from Polaris in conjunction with about 57 other stars located in 38 constellations, a traveler can determine his position on earth within just a few degrees.
Our sun and all its planets and their moons are vitally important to our solar system for determining our days, years and seasons. At the end of the fourth day, God said it was good! All the preparation had been made for all the creatures that the LORD created on the fifth day. They need the benefit

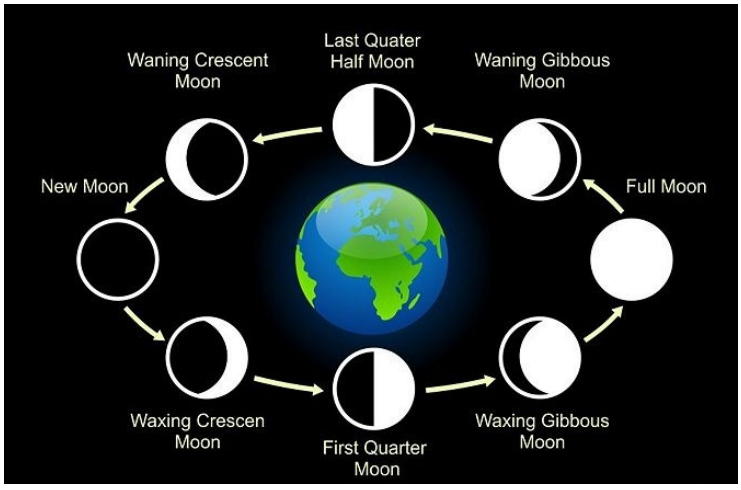

Figure 22: The phases of the moon as it revolves around the earth

of day and night caused by the turning of the earth, the changing of the seasons each year as a result of the earth revolving around the sun and the alignment of the stars and planets to guide and direct their paths.

Creation of the Creatures of the Sea and the Birds of the Air

> **Genesis 1:20 Then God said, "Let the waters teem with swarms of living creatures, and let birds fly above the earth in the open expanse of the heavens." 21 And God created the great sea monsters, and every living creature that moves, with which the waters swarmed after their kind, and every winged bird after its kind; and God saw that it was good. 22 And God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth." 23 And there was evening and there was morning, a fifth day.**

The details of all of the LORD's creation from day one through day four are beyond our ability to comprehend. They work together in perfect unity, miraculous in every way! Finally, on day five, living animals are created.

Focus on the words "teem with swarms of living creatures" in verse 20. Adam Clarke's Commentary says the following about these small animals.

> There is a meaning in these words which is seldom noticed. Innumerable millions of animalcula are found in water. Eminent naturalists have discovered not less than 30,000 in a single drop! How inconceivably small must each be, and yet each a perfect animal, furnished with the whole apparatus of bones, muscles, nerves, heart, arteries, veins, lungs, viscera in general, animal spirits, etc., etc. What a proof is this of the manifold wisdom of God! But the fecundity of fishes is another point intended in the text; no creatures are so prolific as these. A TENCH lay 1,000 eggs, a CARP 20,000, and Leuwenhoek counted in a middling sized COD 9,384,000! Thus, according to the purpose of God, the waters bring forth abundantly. [27]

In verse 21, the LORD created the larger sea animals. This English version of Scripture calls them the "great sea monsters"; however, the Hebrew is straightforward and refers to the great aquatic animals such as the whales, porpoise, dolphin, and sharks.

Both verses 20 and 21 tell of the creation of the fowls. Once again, Adam Clarke has beautifully explained this part of the LORD's creation in the following excerpt from his commentary.

> It is truly astonishing with what care, wisdom, and minute skill God has formed the different genera and species of birds, whether intended to live chiefly on land or in water. … The structure of a single feather affords a world of wonders; and as God made the

[27] Adam Clarke's Commentary by **Adam Clarke** (b. 1760-1762, d. August 28, 1832) a British Methodist theologian from North Ireland and biblical scholar who is chiefly remembered for writing his commentary on the Bible which took 40 years to complete and became primary Methodist theological resource for two centuries.

> fowls that they might fly in the firmament of heaven, Genesis 1:20, so he has adapted the form of their bodies, and the structure and disposition of their plumage, for that very purpose. The head and neck in flying are drawn principally within the breast-bone, so that the whole under part exhibits the appearance of a ship's hull. The wings are made use of as sails, or rather oars, and the tail as a helm or rudder. By means of these the creature is not only able to preserve the center of gravity, but also to go with vast speed through the air, either straight forward, circularly, or in any kind of angle, upwards or downwards. In these also God has shown his skill and his power in the great and in the little—in the vast ostrich and cassowary, and in the beautiful humming-bird, which in plumage excels the splendor of the peacock, and in size is almost on a level with the bee.[28]

The English translation says "birds fly" in verse 20 and "winged birds" in verse 21; however, the Hebrew actually means "flying creatures" in general. Commentators through the years have generally determined the text to mean birds or fowl but the original encompasses all winged animals including the bees, hornets, mosquitoes, butterflies and other flying insects. We must understand the completeness of this day of creation. The bees were created along with their honeycomb, the hornets were created with their nests and brood, the birds of the air were created with nests in the trees complete with hens to sit on the newly created eggs that would soon hatch. Each animal created on day five was instilled with the natural instinct to know how to live and survive in the new world and how to "Be fruitful and multiply." They did not have to be taught. Swimming and flying creatures in all stages of life were formed and given life on that day, enough to fill the entire world. When God saw it, He said, "it was good."

[28] Adam Clarke's Commentary by **Adam Clarke** (b. 1760-1762, d. August 28, 1832)