

Assignment 4 reading selection

One of the branches of science heavily dependent on mythology naming is that of astronomy. Astronomy is the scientific study of heavenly bodies - that is, the universe, comets, planets, and the stars. Astronomers study the movement and position of groups of stars (called constellations) in relation to other heavenly bodies, and the time of the year. Many of the constellations are named after beings found in mythology.

Constellations are apparent associations of stars and galaxies, as seen from Earth. In reality, these objects are very far away from each other. The stars that make up the constellations are all within our own Milky Way galaxy. The galaxies can be much further away; because of their distance, they appear as points of light to the naked eye.

Constellations were very important to early people. They allowed them to find directions during the night, which helped them navigate on land and at sea. The yearly changes in the constellations also revealed to early farmers when spring and summer were approaching. This was more accurate than watching the Sun rise and set every morning.

One special group of constellations is called the Zodiac. The stars in the Zodiac constellations move very slowly compared to the Sun and the rest of the Solar System. They seem to be fixed in the sky.

As the Earth moves around the Sun, the Sun comes between the Earth and each of the Zodiac constellations. Because the Earth always revolves around the Sun in the same direction, the Sun crosses in front of the Zodiac constellations in the same order every year. This means that if you can recognize the Zodiac constellations, you can tell what time of year it is. They work like a calendar.

This sky calendar and the Zodiac constellations we identify today were first used by ancient people to tell when spring was coming. This allowed them to tell when it was time to plant crops and to prepare for changes in the weather.

Because the study of the heavens was so important to the basic survival of ancient people, that study began to become incorporated into their various belief systems, and the “art” of astronomy developed.

Astronomy should not be confused with astrology. Astrology is the nonscientific study of how the stars and other heavenly bodies affect people’s personalities and lives. A major part of astrology is the zodiac signs, and their significances and influences on people’s lives. Many stories were told about the people, animals, and objects represented by the stars of the constellations. Astrology existed long before astronomy ... again, people tried to explain the influence of nature around them on themselves before science evolved to provide scientific explanations. Still, the study of and belief in astrology for many persists even today.

