## A Sky System- Sun, Earth and Moon

## Cindy Woolery

## **Synopsis**

Students are naturally curious about the world around them. In North Carolina the focus for third grade is on identifying systems and patterns in systems. The overarching unifying concept of this unit is for students to gain the ability to think about the whole in terms of its parts and, alternatively, about parts as they relate to one another and to the whole. The sky system is one of the subjects studied under this concept.

The main components in our "sky system" are the Sun, Moon, planets, stars and space. The competency goal is to make observations and use appropriate technology to build an understanding of the Earth/Moon/Sun system.

This unit was written to challenge the students to make their own discoveries, observations and have their own "aha" moments as they view the Earth, Sun and Moon in new and creative ways.

Using this goal and the following objectives as a base, this curriculum unit will focus on students making their own discoveries through observations and experimentation. This unit will be focused on being highly engaging for the students through the use of hands-on activities and an inquiry-based approach.

During the course of the unit the students will observe that light travels in a straight line until it strikes an object and is reflected, refracted and/or absorbed. They will also observe that objects in the sky have patterns of movement including, the Sun, Moon, Earth and stars. Using shadows, the students will follow and record the apparent movement of the Sun in the sky during the day. The students will also use appropriate tools to make observations of the Moon. Students will observe and record the change in the apparent shape of the Moon from day to day over several months and be able to describe the pattern of changes.