



LESSON 20 Our Sky: Home of Stars and Planets

Grade Level: 7-9

1. Grades 7-9

2. Overview The sky is generally believed to reveal much more at night than during the day. Astronomers have shown that with patient and focused study, we can observe much in the sky. The planets out there in space have provided very interesting areas of space science.

3. Purpose The purpose of this lesson is to describe in simple form, what astronomers have revealed. Astronomy is a very important branch of science.

4. Objectives Students will be able to:

- i. Show that the earth is not the only planet
- ii. Explain that stars appear small because they are very far from the earth
- iii. Describe at least two constellations that can be observed in the sky on a clear night.

5. Resources/materials

- A globe

6. Activities and Procedures Astronomy is not a very popular subject in schools in many parts of Africa. Many of the syllabuses and books in use make very little mention of Astronomy. And yet we all see the sky every night and continue to live on one of the nine known planets, the earth. With space exploration as a challenging technological adventure, some attention is now being paid to learning more about the planets. From landing human beings on the moon, attention is gradually shifting to the exploration of mars, a planet.

The sun, the moon and the stars are familiar objects to everybody. Of the three, the stars appear as the tiniest. That is so because the stars are relatively very far from the earth. However, most of the information on planets give their relative distances from the sun. The teacher should obtain that information.

The sun, together with all the bodies which revolve round it, make up the solar system. The solar system consists of the Sun, nine planets, thirty-two moons which revolve round some of the planets, many comets and asteroids. The names of the

planets, in order of their nearness to the sun are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto.

The final thing to put across to the students deals with the constellations. The stars in the sky on a clear and dark night group themselves into formations that are given names such as Orion, Pegasus, Scorpius and the Plough. This aspect of this lesson should be given as Project for the students to find out the relevant information. The teacher can check the information from an encyclopaedia or from textbooks dealing with the subject.

7. Tying it all together Astronomy as a discipline can be interesting. The teacher should draw attention to the fact that space science is fast receiving attention in many educational systems. In these Lessons put together in electronic form by IICBA, this aspect of Astronomy was discussed in the Primary Science Series. The teacher should check it out.

8. Assessment The assessment of this lesson should be done through students' Project Reports.

9. Author(s) S. T. Bajah stan@alpha.linkserve.com

10. References Bajah, Sam. Tunde et al (1996) **Integrated Science: A New Approach for Junior Secondary Schools. Book One** [New Edition] Ibadan: University Press, Plc.

STAN (1998) **Nigerian Integrated Science Project**. Ibadan: Heinemann Educational Books (Nigeria) Limited.