

The Wonderful Sky

Wonderful Sky

Children at a very young age become aware of the daily cycle of daylight and darkness. The planetarium, with its realistic sky, lends itself nicely as a tool for exploration of the many objects that can be seen by them during this cycle.

During this first trip, the students will patrol the planetarium's 24-hour sky to observe various objects such as the sun, moon, planets, groups of stars (constellations), Milky Way galaxy, sunrises and sunsets.

These budding astronomers will be able to continue developing basic science skills by their participations.

Teacher Preparation

Explain to your students what a planetarium is like. You may want to devise a classroom activity to acclimate them to a darkened environment like they will see in the planetarium. This activity may be done during story time by reading the student stories, like the myths of the stars, in the dark. Star legends are very appropriate, but; the students may want to relate one of their own bedtime stories.

Student Preparation

The students' first trip to the planetarium is the most important of their visitations. The will be introduced to planetarium procedures, the planetarium exhibit area, the planetarium chamber and star projector.

Review with the students their normal experiences of observing the day and night sky. Ask them to list all the things they ever see in the sky (sun, moon, clouds, birds, etc.). Relate their experiences to time frames such as day, night, yesterday, today, tomorrow, and the time of day. Also do activities for (C) classroom objectives that follow.

Objectives

(C) Classroom

(P) Planetarium

(C)

1. The student will be able to observe the time and position of the sun, moon, and stars in the day and night sky.

(C)

2. The student will be able to identify night as the time when stars appear and day as the time when the sun appears.

(P)

3. The student will be able to explain verbally what objects are seen in the day and night skies in the planetarium.

(P)

4. The student will be able to observe and identify the differences between the sun, earth, moon and planets.

(P)

5. The student will be able to name one of the three parts of the planetarium.

(P)

6. The student will be able to identify the star pattern, the Big Dipper.

(C)

7. The student will be able to identify by pointing that up is away from the center of the earth and down is toward the center of the earth.

(P)

8. The student will be able to identify the horizon as the place where the sky meets the earth and objects in the sky appear and disappear.

(P)

9. The student will be able to identify the horizon areas of North, East, South, and West.

(P)

10. The student will be able to explain verbally or demonstrate using a model why or how day and night occur because of the earth's rotation.

Classroom Activities

1. Teach the concepts "up" and "down." It is normal for students to mistakenly relate up and down to the directions north and south. Clay balls representing the earth may be halved to show where up and down are in relation to the center.
2. Investigate shadow length of objects around your school and relate them to the sun's daily positions and directions. Verify your findings with a compass. Mark off those directions in your classroom.
3. Make a sundial. Relate this activity to time (hours), directions and shadows. There may be many spin-off activities from this project. You may want to make this a school project.
4. Have your students observe clouds and imagine what shapes of the earth and day and night.

Planetarium Follow-Up Activities

1. Have students make drawings and then discuss what they saw in the planetarium. Please send drawings to the planetarium.
2. Read or have the students make up stories about the sun, moon, planets and constellations.
3. Ask each student to draw a picture of the sun and earth to explain day and night.
4. Have each student look at a picture of the planetarium and tell its purpose.

Vocabulary

planetarium	Big Dipper
dome	planets
star projector	earth
controls	constellation
sun	crater
stars	rocket
moon	space shuttle