Day and Night

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References:  Columbus Public Schools 5th grade science curriculum guide

Benchmarks:
  SLC number and description.

Objectives:
  Students should understand the Earth’s rotation and revolution as well as the moon’s orbit around the Earth.

Materials
  • 3D model of the solar system or of the sun, Earth, and moon
  • Educational video about the solar system, space, or the Earth
  • Handouts (fill in the blanks, found in CPS guide)
  • Pre-test (found in the CPS guide)
  • Science journals for each student (should have them from the beginning of the year)

Initial Observation/Demonstration:
Day 1
  After administering the pre-test, review the questions of the test and give the correct answers. Have the students take out their science journals to take notes of the discussion. Start the discussion with an overview of day and night. Ask the students to explain how day and night occur. Explain that the rotation of the Earth is the cause of day and night and it takes 24 hours for the Earth to make a complete rotation. Also explain the Earth orbits the sun and the moon orbits the Earth. It takes about 365 days for the Earth to orbit or revolve around the sun.
  
  Now continue the discussion with facts about Earth. Explain to students that ¾ of the Earth is covered with water or ice. Let the students ask questions about space and the Earth. Some fun facts about the Earth are described in the CPS guide in the teacher background section of the universe unit. Continue to discuss the relationships between the sun, moon, and Earth. Include discussion of the Earth’s tilt (23.5 degrees) and its axis.
  
  Day 2
  
  Review (for a short time) the previous day’s discussion. Allow the children to ask questions they may have not been able to ask on the previous day. Let the children watch the video and let them know there will be a short quiz after the video. Have them watch the video. After the video, give the quiz.

Initial Observations:
  Initial student observations

Initial Model:
Initial model students devise

**Procedure:**
Description of “putting the lesson/activity in action”

**Discussion/Summary:**
What did the students find? Leading questions to incite further questions and inquiries.

**Revised Model:**
Revised version of model students devise

**Procedure:**
Further activity proving/disproving/revising new model

**Discussion/Summary:**
Continuing discussion or summary of lesson objectives