



Lesson Plan: Earth, the Universe, and Culture

Overview

The following activity will help the students understand the cultural nature of scientific research. The students will understand how people interpret science in different ways based on their social environments.

Objectives

Students will

- Explore famous scientists, their theories, places of origin, and their culture
- Document scientific viewpoints of famous scientists throughout history
- Discuss geographical region, culture, gender, and other factors effecting scientific theories and discoveries.

Assessment Strategies

Class discussion through review of Explore the Famous Scientists (see [Student Handout](#) PDF Document).

Grade Level: 5-8

Suggested Time

30 minutes

Multimedia Resources

- [Universe Origins](#) QuickTime Video

Materials

- A large map of the world
- Pins of different colors to stick into the map
- Computers with internet access
- [Student Handout](#) PDF Document: Explore the Famous Scientists
- Images of Albert Einstein, Carolyn Shoemaker, and Abd AlRahman Al Sufi can be found at the following websites:

- Einstein: <http://albert-einstein.org/>
- Shoemaker: <http://www.universetoday.com/html/articles/2001-1211a.html>
- Sufi: <http://www.sfusd.k12.ca.us/schwww/sch618/ScienceMath/Science2.html>

Procedures

See [Teachers Notes](#) PDF Document for elaboration.

Part 1: Get students thinking about the processes of scientific inquiry and the nature of science by asking them questions. Show them Video 1:

[Universe Origins](#) QuickTime Video

[Time – 3:28]. Guide them to reflect and discuss the video.

Part 2: Guide students to explore that science is a collaborative effort among all of the different cultures and countries of the world.

Part 3: Provide Explore the Famous Scientists (see [Student Handout](#) PDF Document) and assign students work as individuals or in groups. Next, have the students place the scientists on the world map. Discuss how science is an accumulated contribution of different scientists coming from different cultures throughout many periods.

Extension: Ask students complete a report of a scientist from their selection.