

Using NewsHour Extra Feature Stories

STORY

NASA Probes a Step Toward Moon Base, 6/23/09

http://www.pbs.org/newshour/extra/features/science/jan-june09/moon_06-23.html

Estimated Time: One 45-minute class period with possible extension

[Student Worksheet](#) (reading comprehension and discussion questions without answers)

PROCEDURE

1. WARM UP

Use initiating questions to introduce the topic and find out how much your students know.

2. MAIN ACTIVITY

Have students read NewsHour Extra's feature story and answer the reading comprehension and discussion questions on the student handout.

3. DISCUSSION

Use discussion questions to encourage students to think about how the issues outlined in the story affect their lives and express and debate different opinions.

INITIATING QUESTIONS

1. What is the moon? How far away is it?

2. What does NASA do?

READING COMPREHENSION QUESTIONS – [Student Worksheet](#)

1. What is NASA and what did it do recently?

The National Aeronautic and Space Administration launched a pair of lunar probes June 18 from Cape Canaveral, Fla., as the first part of a plan to build a base on the surface of the moon by 2020.

2. What are the two probes called?

One is called LRO for Lunar Reconnaissance Orbiter and the other LCROSS for Lunar Crater Observation and Sensing Satellite.

3. What will the LRO do?

The LRO craft will orbit the moon and take high resolution images of the surface that will be more detailed than any available moon images.

4. What about LCROSS?

The LCROSS craft will perform a more dramatic mission: It will launch part of its rocket booster into a crater on one of the poles of the moon.

If there is water in the craters, the impact will eject ice particles and other material out into space for the LCROSS to collect and analyze.

5. Why is the moon important to study?

Space exploration expert and author Andrew Chaikin said that by studying impact craters and substances on the moon, scientists can look back in time in a way that is not possible by studying the earth.

6. What have scientists learned by studying the moon?

By studying the surface of the moon, scientists have posited that impacts from comets were important in establishing the building blocks of life on earth by depositing water and organic molecules on the planet.

7. What did George W. Bush propose in 2004?

The plan to send Americans to the moon and build a base there by 2020 in preparation for a manned mission to Mars was introduced by President George W. Bush in 2004.

DISCUSSION QUESTIONS (more research might be needed)

- 1. Do you think it is important to send humans back to the moon? Why or why not?**
- 2. What do you think about the possibility of a moon base? Why should humans care about living on the moon?**
- 3. Having a space program is expensive. Do you think it is worth the cost to taxpayers?**
- 4. Would like to travel to space? What do you think will be possible, in terms of space travel, in your lifetime?**
- 5. What do you think would be different about life on the moon?**

Extension Activity

Have students write a 300-500 word essay on this topic providing clear examples. Send your completed editorial to NewsHour Extra (extra@newshour.org). Exceptional essays might be published on our Web site.