## Study Guide for Odyssey The Moon April 2010

The guide was created by Robert Maxim. Robert is an English language arts teacher and author in New York.

The first activity involves reading the editors introduction: *This Month in Odyssey*. Also, read the neighboring articles *Titan the Barbecue King*, *Moon Crash Finds Water*! and the *Power of Tides*. Ask students to use details, from the articles, to prove life may exist or once existed in space. (Examples: water on the moon, compounds could be building blocks for biological molecules or DNA; icy moons may have liquid oceans under a layer of ice that hold life.)

Students can write a short story about what they think life would be like on the moon. Students in your class create characters and plots. The setting is of course the moon. Next, mix the characters and plots. Give students a different plot and character. Let the students write. Some good examples of science fiction will emerge. (*Fly for Your Life*, pg. 33)

Students can create cartoons of life on the moon, or cartoons depicting the search for water.

Students can create an advertising campaign for a cleaning agent, vacuum cleaner, or dust mop that will fight moon dust. (*Warning: Sticky Dust*, pg. 4) For example: The Moon Duster eliminates ultraviolet radiation and x-rays to terminate static electricity.

Teachers might want to include this science activity. This issue addresses the many science discoveries concerning the moon. How do scientists make discoveries, when they can't see inside an object? Teachers may want to show your students how this is done.

1. Make clay balls, about the size of a baseball. Place a variety of objects in the balls: coins, paperclips, chalk, nuts, bolts etc.

2. Have students probe the balls with toothpicks. Have the students write down their observations and guess what objects are inside the balls of clay.

3. Have the students discuss why scientists use this type of method to make discoveries. Can students compare this method to the methods used to discover water on the moon?

Moon poetry as described in *Moon Riddles*. Students create a taxonomy or list of words that are related to the moon. Ten or fifteen should be enough. For example: waxing, waning, craters. Take a word and place it in a sentence. Use techniques of poetry. Here is a sample, or my best example.

The *waxing* moon grows, High in the sky. Before you know it, The moon resembles a white pie.

The article *Moon Phrases* gives students a chance to explore more myths about the moon. Have students research the dreaded full moon. Do things really go crazy during a full moon? What about werewolves? I seem to recall some myths about werewolves appearing during a full moon. Also, if the human body is mostly water, do tides influence us in some way? Let me know what you find out.

*Perhaps the Moon Cannot Exist* (page 38) Use this article to have students put the information, in the article, into their own words. For example: what is the Co-formation hypothesis? **The moon and the earth were made from the same cloud of space dust.** 

Describe in your own words the Captured hypothesis. *The moon stood by itself, and was captured by the earth's gravity after the moon's orbit was weakened by larger planets.* 

Have students use a thesaurus to change words, to words they understand and also to put the text into student's own words. In the above example students might change, *destabilized* to *weakened*.

Describe the Fission Hypothesis. *The earth, which wasn't very firm at the time, was rotating really fast on its axis. The earth threw off a piece of itself and this chunk of earth became the moon.* In this case we would change *solidified* to *firm*.

Enjoy the magazine and the guide.