

Favorite Resources for Learning About the Earth, Moon, Sun, and Mars:

Print Resources

- Bone, E. 2010. *The solar system*. London: Usborne Publishing.
- Branley, F.M. 1998. *The planets in our solar system*. NY: Harper Collins.
- Cole, J. 1992. *The magic school bus lost in the solar system*. NY: Scholastic Press.
- Gibbons, G. 1995. *The reasons for seasons*. NY: Holiday House.
- Gibbons, G. 1992. *Star gazers*. NY: Holiday House.
- Glover, D. 2002. *The big book of space*. Princeton, NJ: Two Can Publishing.
- McNulty, F. 2005. *If you decide to go to the Moon*. NY: Scholastic Press.
- Rogers, K. 2000. *Pathfinder: Mission to Mars*. Barrington, IL: Rigby Education.
- Seymour, S. 1992. *Our solar system*. NY: Harper Collins.

Internet Resources

This website has excellent descriptions of the planets and other objects in our solar system

<http://stardate.org/astro-guide/ssguide>

This is a link for a simulated landing of the Mars Pathfinder

<http://marsrover.nasa.gov/gallery/video/movies/RoverAnimPart2.mov>.

Here is a NASA page with links for information about Mars, Mars missions, and multimedia links

<http://mars.jpl.nasa.gov/>

Lander Rubric:

Team Name:	_____
Lander Name:	_____
Mars Lander Projects Grading Sheet	
Working well in teams	5 4 3 2 1 x 5= _____
Complete and thoughtful outline	5 4 3 2 1 x 5= _____
Scientific questions and materials	5 4 3 2 1 x 5= _____
Presentation skills	5 4 3 2 1 x 4= _____
Creativity with materials and design	5 4 3 2 1 x 2= _____
Durability (How well did it land?)	5 4 3 2 1 x 2= _____
Appearance of the model	5 4 3 2 1 x 2= _____
Final Grade	_____
Teacher notes:	

Pre and post-test questions and student work

Solar System Pre-Test/ Post-Test


Answer these questions. Add more paper if you need it.

1. Use **words** and **pictures** to describe the sun, moon, and earth. Use as many of these vocabulary words as you can: atmosphere, size, temperature, star, surface and planet.
2. Use **words** and **pictures** to describe how the sun and earth interact with each other. Use as many of these vocabulary words as you can: rotate, revolve, satellite, tilt, seasons, day, night, northern hemisphere, southern hemisphere, orbit, axis
3. Use **words** and **pictures** to describe how the earth and moon interact with each other. Use as many of these vocabulary words as you can: revolve, satellite, moon phase, orbit, waxing, waning, crescent, gibbous, quarter moon, full moon, new moon
4. Use **words** and **pictures** to describe how the earth, moon and sun all interact with each other. Use the words solar eclipse and lunar eclipse.
5. Describe Mars. How is it similar to earth? How is it different?
Vocabulary ideas: surface, atmosphere, size, temperature
6. What are some SYSTEMS that need to be designed and tested by scientists in order to launch, steer, and land a spaceship on Mars?


Answer these questions. Add more paper if you need it.

1. Use **words** and **pictures** to describe the sun, moon, and earth. Use as many of these vocabulary words as you can: atmosphere, size, temperature, star, surface, and planet.


Sun: hot, smallest star, day, light, round



Moon: in sun's atmosphere, earth's only moon, has dents in it, round




Earth: has one moon, in sun's atmosphere, planet we live on, mostly water, part land, equator northern hemisphere, southern hemisphere, slightly egg shaped



1. Use **words** and **pictures** to describe the sun, moon, and earth. Use as many of these vocabulary words as you can: atmosphere, size, temperature, star, surface, and planet.

Sun: The sun's temperature is 27,000,000°. It is a medium sized star that gives off light and heat to other planets. It is round and sphere shaped and its surface is just gas.



Moon: The moon doesn't give off light it just looks like it does the sun is just shining on it to make moon phases. it takes about 29 days to go through. All of the moon phases

Earth: we live on earth. it is the only known planet that can provide life its atmosphere provides oxygen so we can breathe. it revolves and rotates around the sun it takes 24 hours to rotate 360° it takes a year for it to revolve around the sun. it has an invisible line going through it diagonally

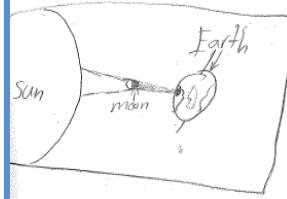
Student pre- and post-tests

4. Use words and pictures to describe how the earth, moon, and sun all interact with each other. Use the words solar eclipse and lunar eclipse.

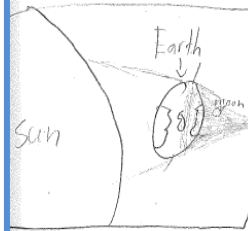
a lunar eclipse is when the sun covers the moon, a solar eclipse is when the moon covers the sun, you cannot look at a solar eclipse without dying



4. Use words and pictures to describe how the earth, moon, and sun all interact with each other. Use the words solar eclipse and lunar eclipse.



a solar eclipse is when the moon passes in between the Earth and sun and the moon provides a shadow on the Earth. it would usually be a new moon if the moon didn't go in between the sun and the Earth.



a lunar eclipse is when the moon goes into the Earth's shadow. It would usually be a full moon if it would be above the Earth's shadow during a lunar eclipse you could barely see the moon.