

# Moon Activities - computer

Per

Names

Directions:

1) Go to website <http://science.howstuffworks.com/question491.htm>

Click on the figure of the person on the bottom right of the picture around and see what happens.

- When does the figure look bigger? \_\_\_\_\_.
- When does the figure look smaller? \_\_\_\_\_.
- What is it called when things look bigger than they really are? \_\_\_\_\_.
- Is the moon actually bigger when it is close to the horizon? \_\_\_\_\_.

2) Go to website : <http://www.jackstargazer.com/cartoonFeb03.jpg>

- What images may you be able to see on the moon? \_\_\_\_\_  
\_\_\_\_\_.
- What do you think causes their to be "images" on the moon? \_\_\_\_\_  
\_\_\_\_\_.

3) Go to website : <http://www.tsgc.utexas.edu/everything/moon/calculator.html>

Type in your weight in the first box and click on the calculate button to see how much you would weigh on the moon.

- Your weight \_\_\_\_\_ Your weight on the moon \_\_\_\_\_.
- If you went to the moon, would you have less mass? \_\_\_\_\_.
- Why would you weight less on the moon? \_\_\_\_\_  
\_\_\_\_\_.

4) Go to website : <http://www.astro.wisc.edu/~dolan/java/MoonPhase.html>

Click on "both views" in the drop down box and click the "animate" button.

- Describe what you see happening. \_\_\_\_\_  
\_\_\_\_\_.

5) Go to website : <http://csep10.phys.utk.edu/astr161/lect/time/moonorbit.html>

- How many days does it take the moon to make a revolution around the earth?  
\_\_\_\_\_.
- How many days does it take the moon to make a rotation on its own axis?  
\_\_\_\_\_.
- How many side of the moon does one see on earth? \_\_\_\_\_

6) Go to website : <http://www.niehs.nih.gov/kids/lunar/home.htm>

Scroll down to the page that displays the pictures of the moon surrounding the earth.

- Why do we see different phases of the moon? (hint: the answer is about the diagram)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

7) Go to website : [http://aa.usno.navy.mil/faq/docs/moon\\_phases](http://aa.usno.navy.mil/faq/docs/moon_phases)

- Draw and label the 8 phases of the moon shown on the website.

8) Go to website: <http://tycho.usno.navy.mil/vphase.html>

In the drop down boxes, change the dates to match your birthday for this year

➤ Draw a sketch of the moon phase on your birthday. Label the phase.

➤ Draw a sketch of the moon phase that will be on your birthday next year. Label the phase.

9) Go to website : <http://science.howstuffworks.com/solar-eclipse.htm>

➤ What is a solar eclipse? \_\_\_\_\_

➤ How many times does the moon cross the earth's orbital plane a year? \_\_\_\_\_

➤ What phase must the moon be in for an eclipse to happen? \_\_\_\_\_

➤ Since the moon makes a revolution around the earth every 27.3 days, why isn't there a solar eclipse every 27.3 days? \_\_\_\_\_

10) Go to website: <http://www.mreclipse.com/Special/LEprimer.html>

- What is the diameter of the moon? \_\_\_\_\_.
- What is special about a full moon? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- What two things must happen for a lunar eclipse to occur? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- If there were astronauts on the moon during a total lunar eclipse of the earth, what would they see on the moon? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11) Go to website : <http://aa.usno.navy.mil/data/docs/LunarEclipse.html>

In "form A" Choose PA in the drop down menu

Type in Philadelphia in the "place name.

Choose the appropriate date in the first drop down box.

Fill in the times that the event takes place ,in the data table below, for the next 3 lunar eclipses.

	12/10/11	12/21/10	6/26/10
Moon enters umbra			
Middle of eclipse			
Moon leaves penumbra			

12) Go to website : <http://www.jackstargazer.com/cartoonOct02.jpg>

- Describe what happens to the stars during the seasons.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- Is there a star that you see all year long? If so, which one is it? \_\_\_\_\_

\_\_\_\_\_