

## Lunar Astronomy Review

Earth Science

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Hr: \_\_\_\_\_

### USE OUR CLASS WEBPAGE TO COMPLETE THE FOLLOWING QUESTIONS

#### **Link #1: Your WEIGHT on Other Worlds**

Estimate your weight on Earth, type it in on the webpage, then click **calculate**.

Object →	Venus	Our Moon	Jupiter	Sun
Your Weight				

7. Explain why mass and weight are NOT the same thing.

8. Explain WHY you weigh LESS on Venus & Our Moon, but MORE on Jupiter & Our Sun.

#### **Link #2: Google Moon**

Study the image of the Moon shown by Google.

9. Study the **Apollo 11** landing (click!). Click the **zoom in** link and find the #1 balloon.  
What is a **mare (maria)** and how do they form???

10. Return to the Google Moon screen showing **all** the Apollo landing sites. Look at the **Apollo 16** site.  
How is this site physically different from the Apollo 11 landing site?

#### **Link #3: Current Moon Phase**

11. Name the **current** moon phase: \_\_\_\_\_ = \_\_\_\_\_ % full

Predict the Moon phase that will occur in:

• 3 days: \_\_\_\_\_

• 10 days: \_\_\_\_\_

• 7 days: \_\_\_\_\_

• 14 days: \_\_\_\_\_

Use the **Moon Calendar link** (class website) to check your answers...change them if necessary.

How close were you? \_\_\_\_\_

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### Link #4: Moon Phase Animation

12. Complete the chart using the animation on this webpage. You will need to see BOTH the top view (space view) and earth view (backyard) together, plus "animate" and "stop" at various times:

Moon Phase	Space Diagram ("Top View")	"Earth View"	Moon Phase	Space Diagram ("Top View")	"Earth View"
Waning Crescent			1 <sup>st</sup> Quarter		
Waxing Gibbous			Waxing Crescent		

### Link #4: NOAA Tide Animation

13. Use the terms **solar tide** and **lunar tide** to explain the cause of spring tides on Earth.

14. Use the terms **solar tide** and **lunar tide** to explain the cause of neap tides on Earth.

### Link #5: Moon Calendar

15. Using the Moon Calendar, complete the chart below for the following dates:

Date	Earth View of Moon Phase	Space View (Sun, Earth, Moon diagram)	Moon Phase	Tide (neap, spring, normal)
<i>Your ORIGINAL birthdate (including year!)</i>				
<i>Your UPCOMING Birthday!</i>				
<i>Your GPS Graduation (June 15 of your grad year)</i>				