

Name \_\_\_\_\_

## Phases of the Moon WebQuest

As you observe the Moon over a month, you notice it changes. Sometimes the right side is in sunlight; other times it's the left. Sometimes you see it at night; sometimes you see it during daytime.

This WebQuest will help you understand why the Moon changes shape throughout the month.

You will need to read the information available on the webpages you visit. *All answers can be found one or more of the websites.* Your task is to read and find the information.

### Introduction

In the space below, summarize the myth (*in your own words!*) at the beginning of the WebQuest.

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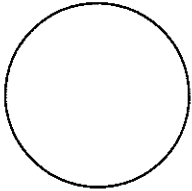
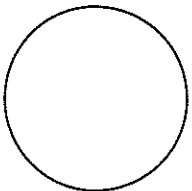
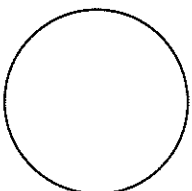
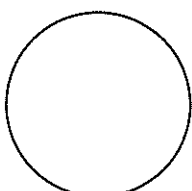
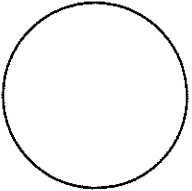
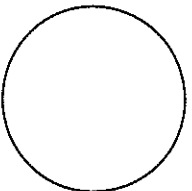
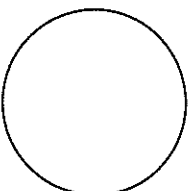
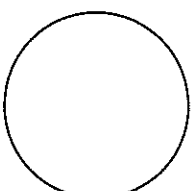
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# The First Task - Eight Important Phases of the Moon

You should know eight important phases of the Moon. Using your links, complete the table below. In the top of each square, write the phase of the Moon. In the circle, draw a picture of what it looks like.

To understand science, you need to understand the words that are used. There are three important terms you need to know and use when discussing phases of the Moon. Define these three words.

Waxing - \_\_\_\_\_

\_\_\_\_\_

Waning - \_\_\_\_\_

\_\_\_\_\_

Gibbous - \_\_\_\_\_

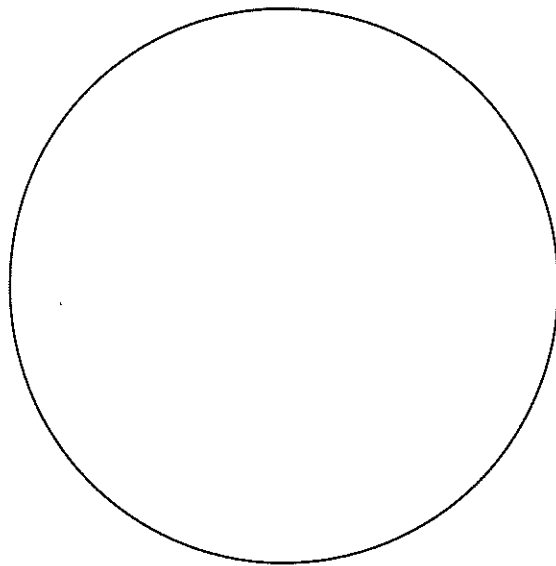
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## The Second Task - Birthday Moon

What was the phase of the Moon the day you were born? Go to the website and find out. Fill in the circle and identify the phase of the Moon.

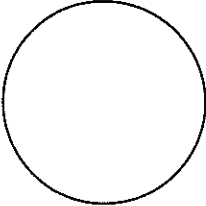
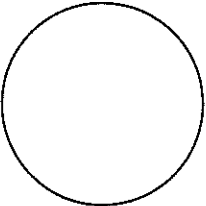
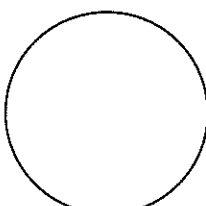
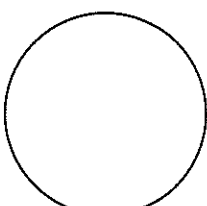
My birthdate \_\_\_\_\_

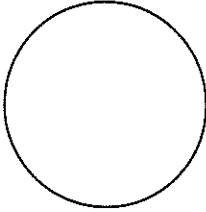
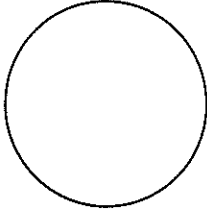
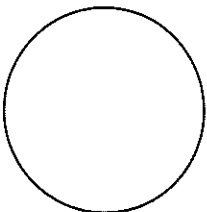
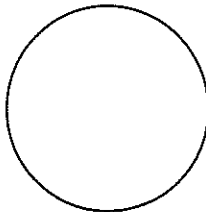
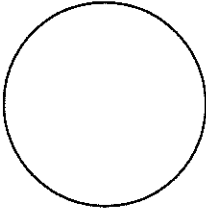
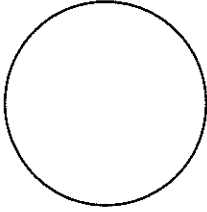
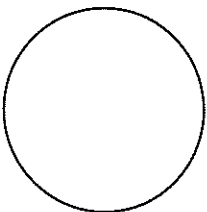
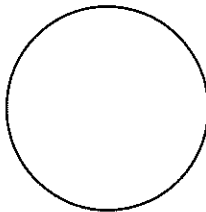
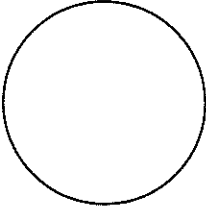
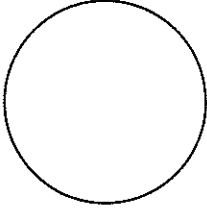
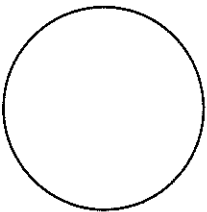
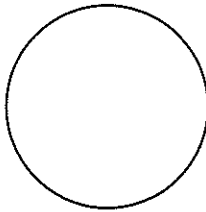
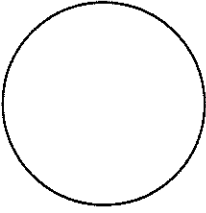
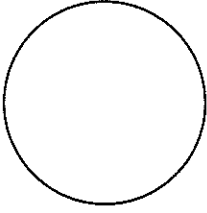
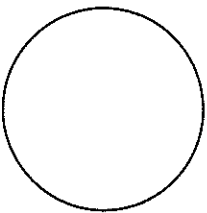
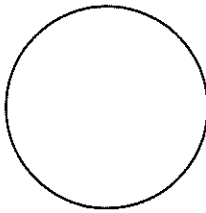
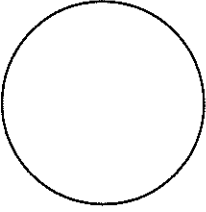
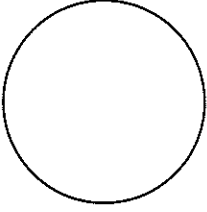
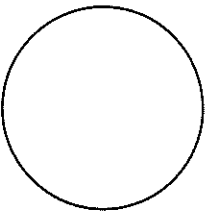
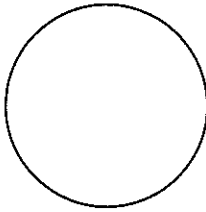
Moon Phase \_\_\_\_\_



## The Third Task - Moon Over a Month

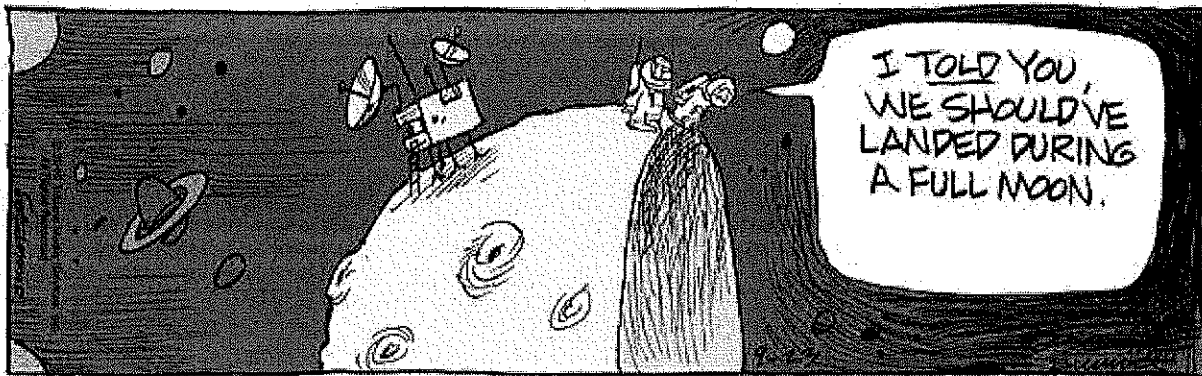
This gives you a chance to see how the Moon changes over a month. Go to the website, select the current month, and complete the table below by coloring in the appropriate portion of the Moon.

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
			

5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
			
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
			
13 <sup>th</sup>	14 <sup>th</sup>	15 <sup>th</sup>	16 <sup>th</sup>
			
17 <sup>th</sup>	18 <sup>th</sup>	19 <sup>th</sup>	20 <sup>th</sup>
			
21 <sup>st</sup>	22 <sup>nd</sup>	23 <sup>rd</sup>	24 <sup>th</sup>
			

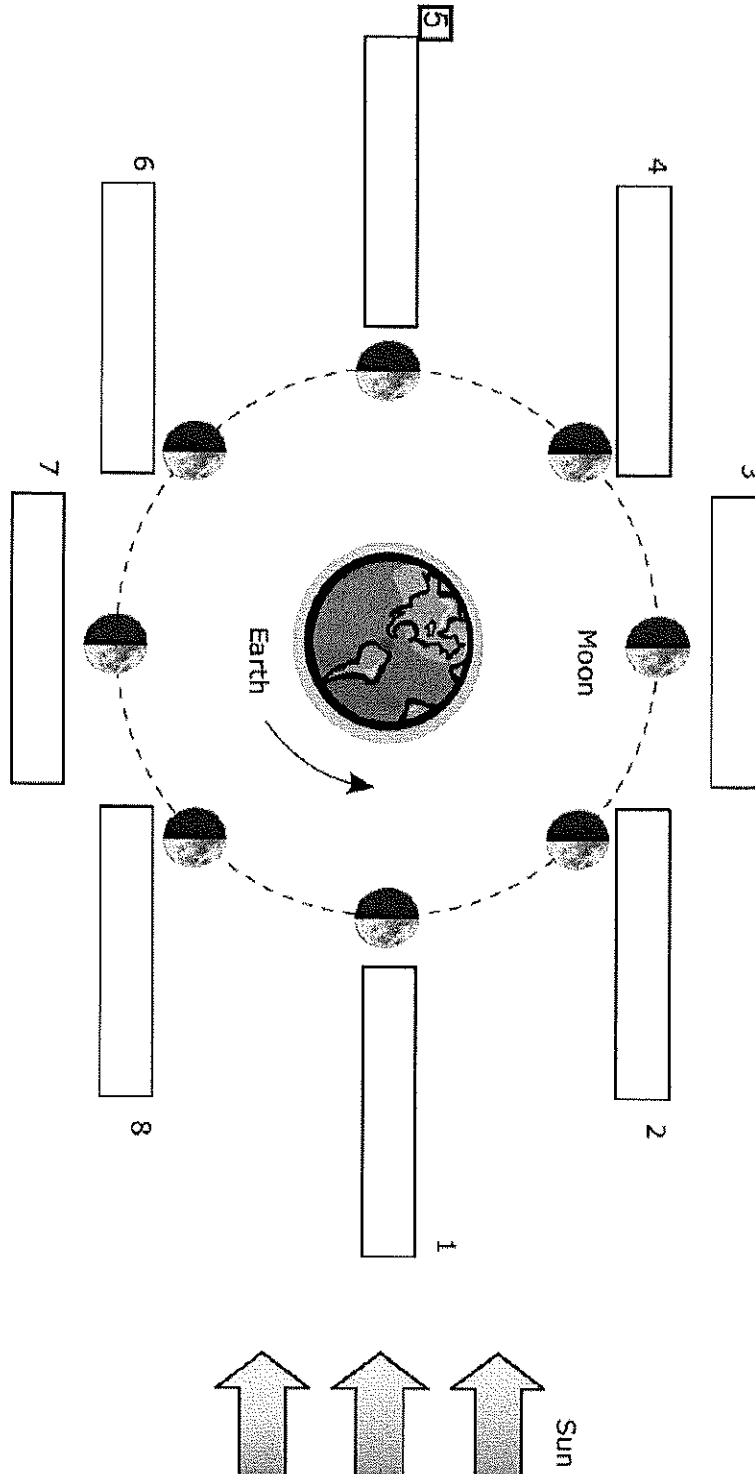


25 <sup>th</sup>	26 <sup>th</sup>	27 <sup>th</sup>	28 <sup>th</sup>
29 <sup>th</sup>	30 <sup>th</sup>	31 <sup>st</sup>	



# The Final Task - The Moon Orbiting the Earth

The position of the Earth, Moon, and Sun are responsible for the phases of the Moon. As the Moon revolves around the Earth, different parts of the Moon's surface are in sunlight. Complete the diagram below by identifying the correct phase at each number.



*I have completed Moon Challenge, Level 3. Teacher's initials \_\_\_\_\_*

Using the websites, answer the following questions.

1. The phases of the Moon are produced by...

- a. the spin of the Earth.
- b. varying amounts of sunlight reaching the side of the Moon that faces Earth.
- c. varying amounts of sunlight reaching the side of the Moon that faces the Sun.
- d. the orbit of the Earth around the Moon.

2. At full Moon...

- a. the side of the Moon facing Earth receives no sunlight.
- b. the side of the Moon facing Earth receives full sunlight.
- c. the Moon is between the Earth and the Sun.
- d. none of these.

3. At new Moon...

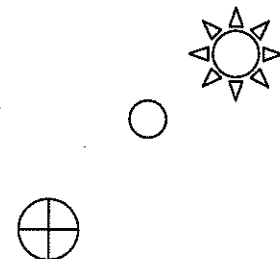
- a. the side of the Moon facing Earth receives no sunlight.
- b. the side of the Moon facing Earth receives full sunlight.
- c. the Moon is between the Earth and the Sun.
- d. A and C
- e. none of the above.

4. In the first half of the lunar cycle, the "growing" part of the Moon appears on the \_\_\_\_\_ side. After full Moon when the moon is waning, the illuminated part of the Moon appears on the \_\_\_\_\_ side.

- a. right, left
- b. left, right
- c. right, right
- d. left, left

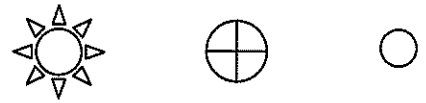
5. What phase is shown in the diagram? (Remember, the Moon revolves *counterclockwise!*)

- a. New Moon
- b. First Quarter
- c. Full Moon
- d. Last Quarter



6. What phase is shown in the diagram?

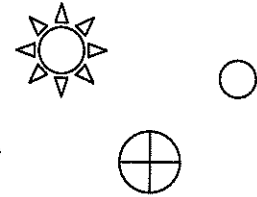
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

7. What phase is shown in the diagram?

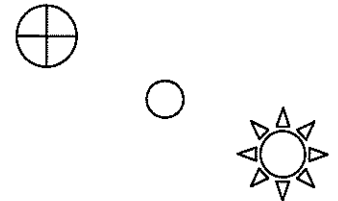
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

8. What phase is shown in the diagram?

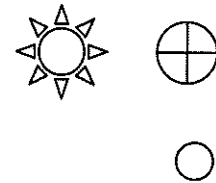
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

9. What phase is shown in the diagram?

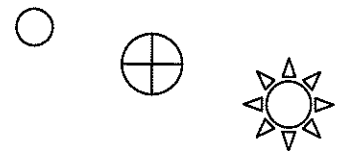
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

10. What phase is shown in the diagram?

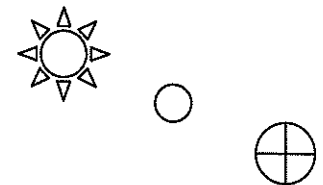
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

11. What phase is shown in the diagram?

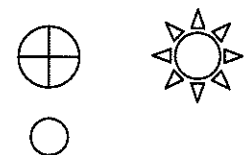
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

12. What phase is shown in the diagram?

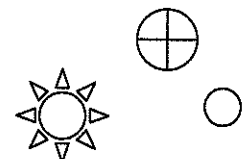
- a. New Moon
- b. First Quarter



- c. Full Moon
  - d. Last Quarter
- 

13. What phase is shown in the diagram?

- a. New Moon
- b. First Quarter



- c. Full Moon
- d. Last Quarter