

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Hour: 1 2 3 4 5 6 7

## Phases of the Moon

### Word Journal Review

Planet:

Satellite:

moon:

Revolution:

### The Position of the Sun, Earth, and the Moon

The Moon is Earth's only \_\_\_\_\_.

The Moon appears to change shape due to the \_\_\_\_\_ of the Sun, Earth, and the Moon. The position/angle of these will change based on the \_\_\_\_\_ of the Earth around the Sun, and the Moon around the Earth.

The first thing to realize is that the Sun is always in the \_\_\_\_\_ because the Earth orbits the Sun.

- This creates the relationship of Day and Night or Light and Dark sides.
- Because the Sun produces the light
  - The half **facing** the Sun will be in \_\_\_\_\_
  - The half **not facing** the Sun will be in \_\_\_\_\_
  - You can draw a line straight down the middle to show it... Let's do that!

Diagram of Sun and Earth creating night and Day

| Mine                                     | Class | Yours |
|--|-------|-------|
| <br><br><br><br><br><br><br><br><br><br> |       |       |

Diagram of the Sun, Earth, and the Moon creating light and dark sides

| Mine                                     | Class | Yours |
|--|-------|-------|
| <br><br><br><br><br><br><br><br><br><br> |       |       |

It is important to remember that the position of the \_\_\_\_\_ will ALWAYS determine the light/dark sides. It's about the position of all 3 objects that creates the effect of the moon phases.

It is all about the \_\_\_\_\_.

## Word Journal Review

Waxing:

Waning:

Solar Eclipse:

Lunar Eclipse:

## Moon Phase Notes

The moon phases are caused by the change in the \_\_\_\_\_ of the Sun, Earth, and Moon.

As the moon orbits the Earth, the angle at which we \_\_\_\_\_ the moon changes; and with that the phase we see will change.

There are \_\_\_\_\_ Phases of the Moon. Before we learn them let's just take a look at their positions and look at the angle we would see them from Earth.

Check to make sure the light and dark sides match the Sun's Rays. Then you want to start with the position directly between the Earth and the Sun. This is position 1. Count Counter clockwise from 1

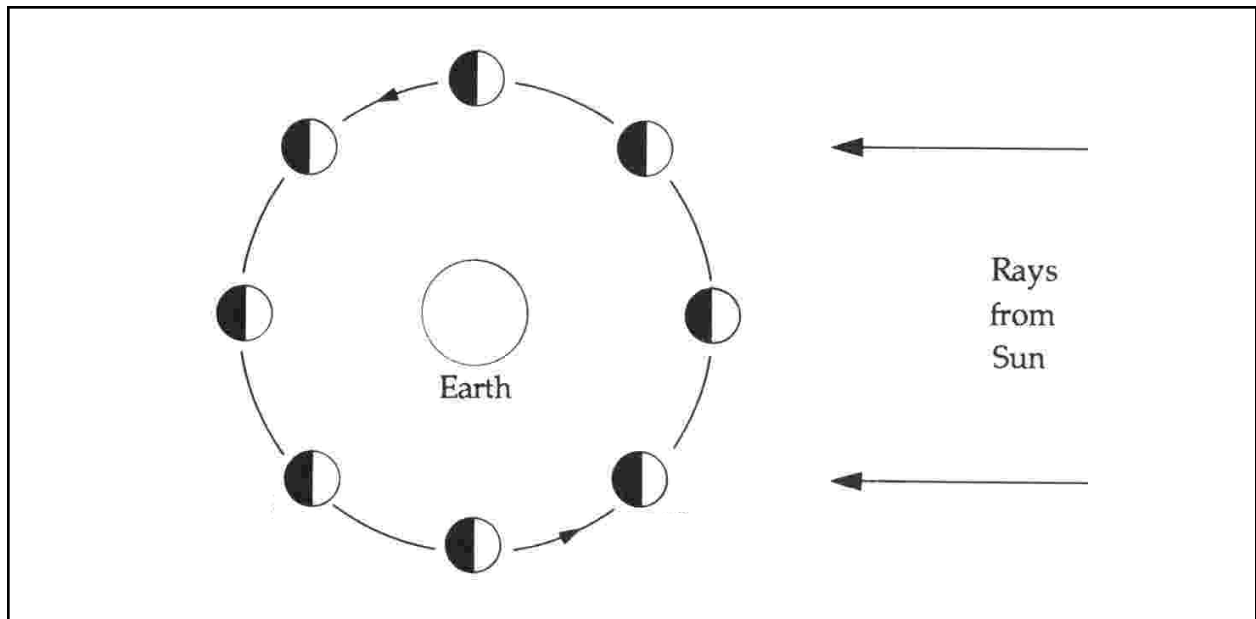


Diagram of the positions of Sun, Earth, and Moon during different Phases.

Tip: Set up Sun, Earth, and Moon, set up light and dark sides, then number the phases.

What are the 8 Phases of the Moon?

1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_ 4) \_\_\_\_\_  
5) \_\_\_\_\_ 6) \_\_\_\_\_ 7) \_\_\_\_\_ 8) \_\_\_\_\_

Steps to determining the Moon Phases

1: Determine the Sun's Position and then Light/Dark sides of the Earth and Moon.

The side \_\_\_\_\_ the sun is the light side, the side \_\_\_\_\_ from the sun, or not facing the sun is the dark side.

2: Identify the two easiest phases based on position in orbit; \_\_\_\_\_ and \_\_\_\_\_

The phase between the Earth and Sun is \_\_\_\_\_

The phase with the Earth between the Moon and the Sun is \_\_\_\_\_

3: Remember that the Moon always revolves counter clockwise.

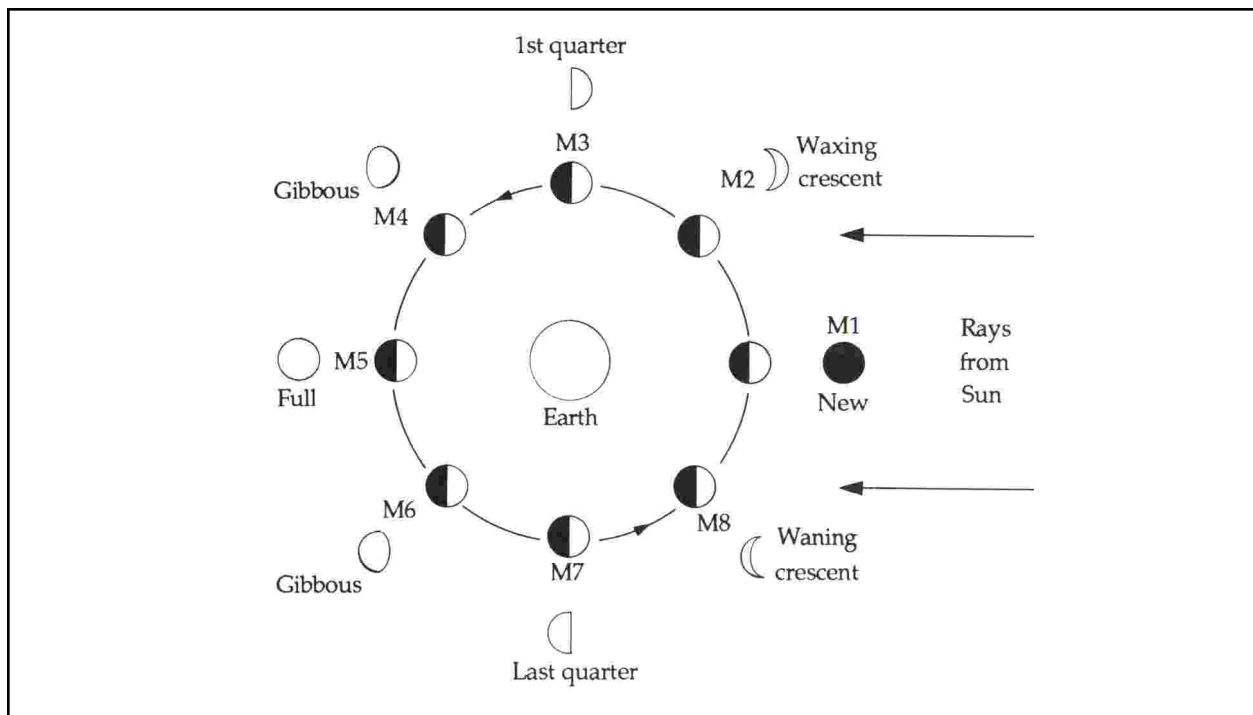
4: Count out the 8 phases.

It takes the Moon \_\_\_\_\_ days to complete one revolution around the Earth. In that time the Earth will rotate \_\_\_\_\_ times.

Waxing is when the moon appears to be getting \_\_\_\_\_.

Waning is when the moon appears to be getting \_\_\_\_\_.

Let's break the chart into sections.



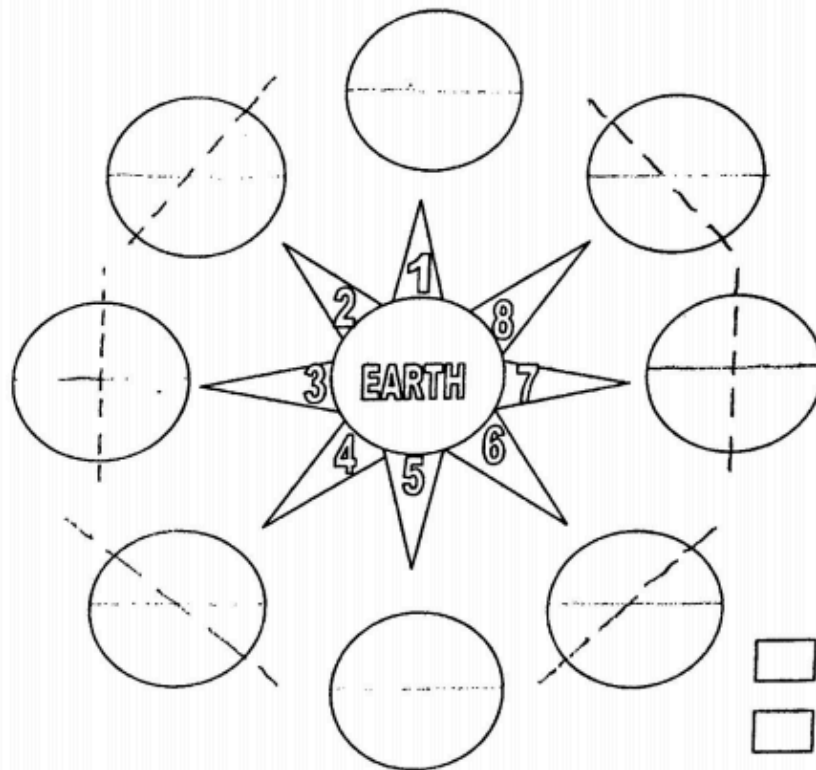
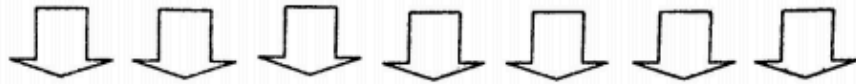


Name \_\_\_\_\_

Date \_\_\_\_\_

# DRAWING MOON PHASE - WHAT'S ACTUALLY HAPPENING

## SUN



How the moon appears from Earth

