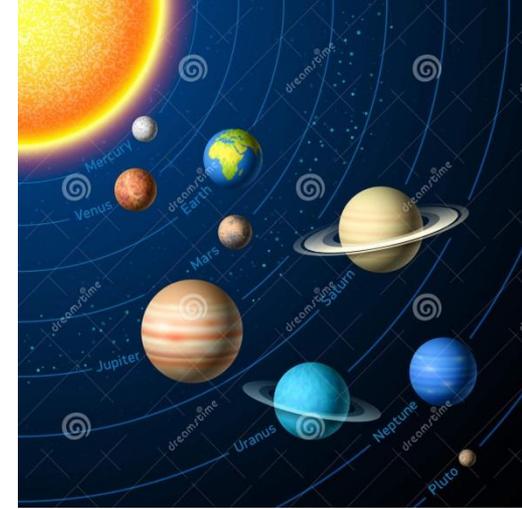


Our Solar System



By the end of this lesson, YOU will be able to:

- Identify the 8 phases of the moon.
- Explain how the movements of the Earth and moon create different moon phases observed by humans on Earth.

Lesson

Vocabulary

Orbit Illuminate

lunar eclipse

Waxing Waning

Crescent Gibbous

New moon

Full moon

The Learning Plan

1. BrainPop Video: Moon Phases
2. Ms. Artis Teaches About Moon Phases
3. Song: Phases of the Moon Rap
4. Moon Phases Demonstration
5. Group & Partner Activities

Essential Question

How do the movements of the Sun, Earth and moon affect the patterns observed by humans on Earth?

MARCH 5, 2019 DO NOW

Why does the moon look like
it changes?



Why does the moon have phases?

- The revolution of the Moon around the Earth causes the Moon to appear to have phases.
- It takes 29.5 days for the moon to make a complete circuit around the Earth.

8 Phases of the Moon



• **New Moon**

• **Full Moon**

• **Waxing Crescent**

• **Waning Gibbous**

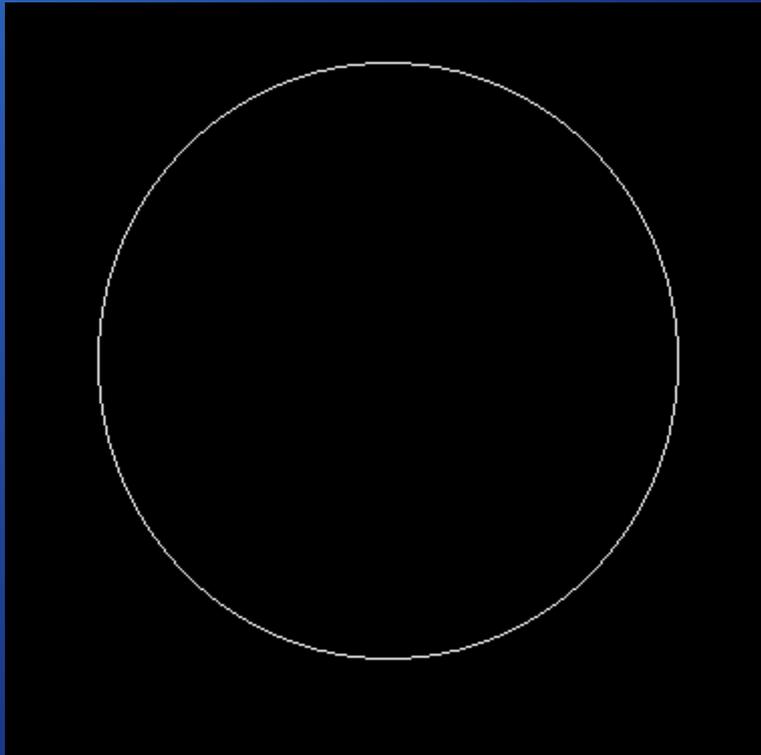
• **First Quarter**

• **Last Quarter**

• **Waxing Gibbous**

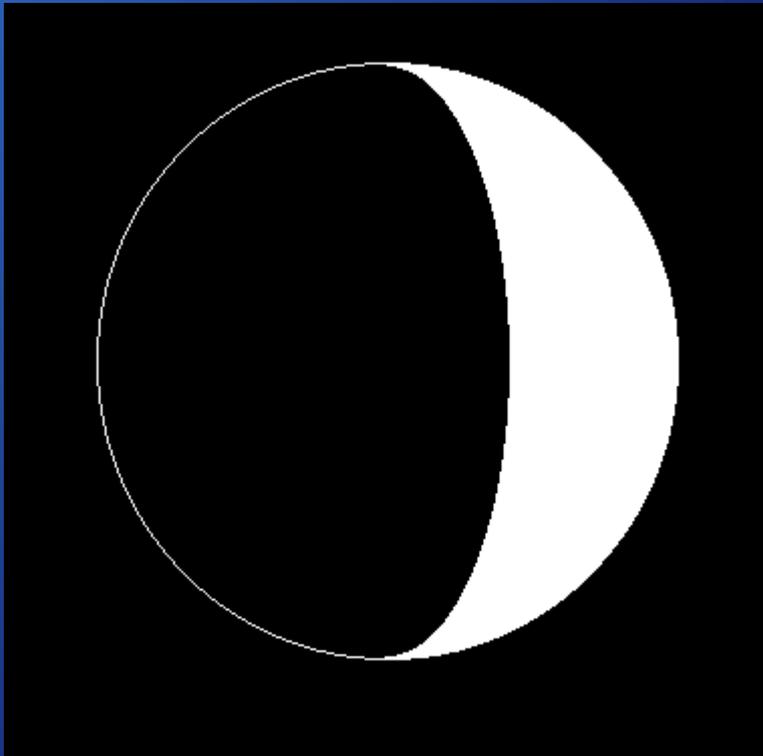
• **Waning Crescent**

New Moon



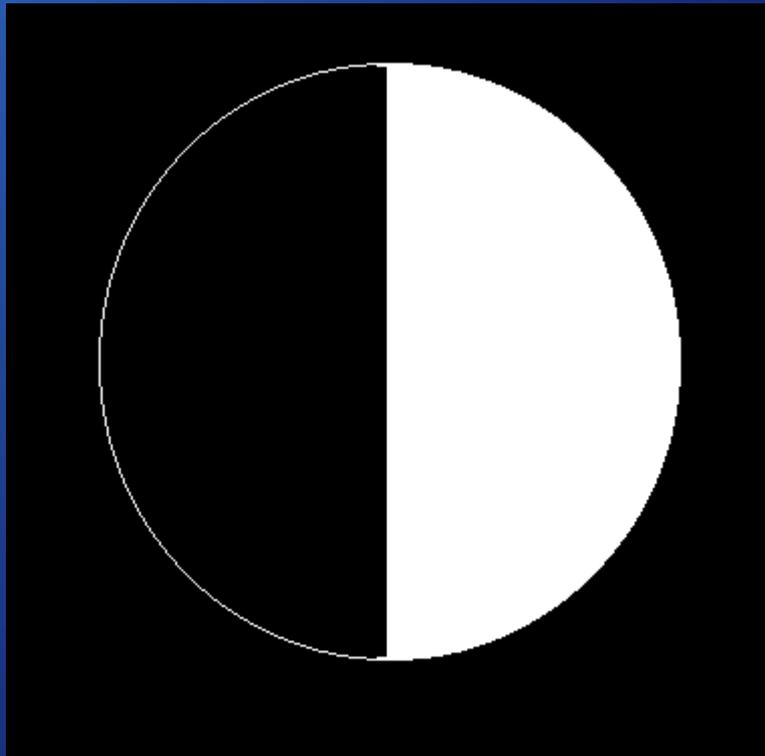
- **The moon is not visible from Earth.** The moon is between the Sun and the Earth.
- **The dark side is facing us.**
- **This phase lasts one night.**

Waxing Crescent



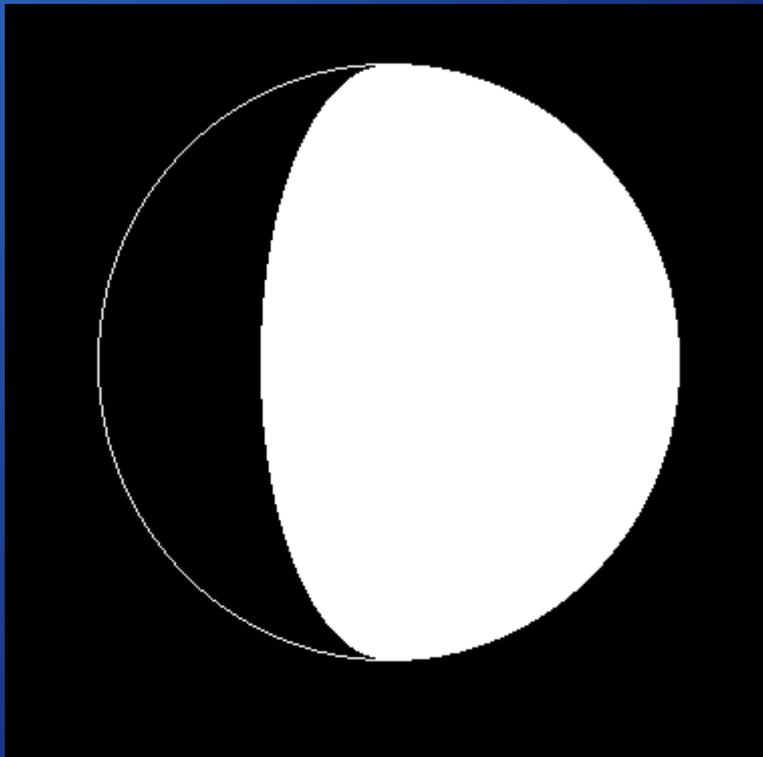
- **Waxing means that the bright side is increasing. The right side is the bright side.**
- **Less than one half of the moon is illuminated.**
- **This phase includes any visible moon from a small sliver to almost half.**

First Quarter or Half Moon



- The entire right side of the moon is illuminated.
- The moon looks like a half circle.
- The illuminated side is increasing.
- This phase only lasts one night.

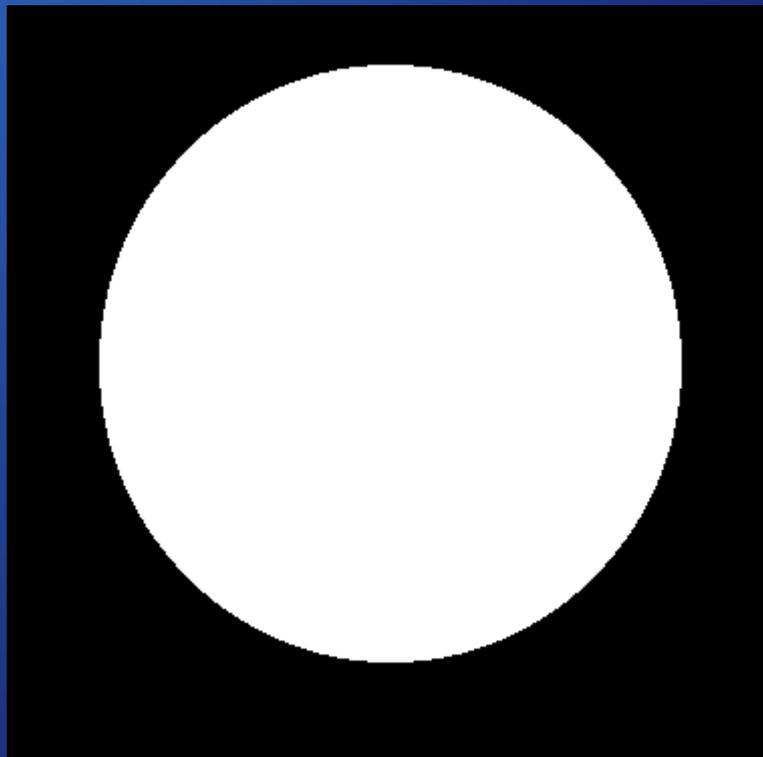
Waxing Gibbous



- **Gibbous means that more than one half is visible, but it is not quite full.**

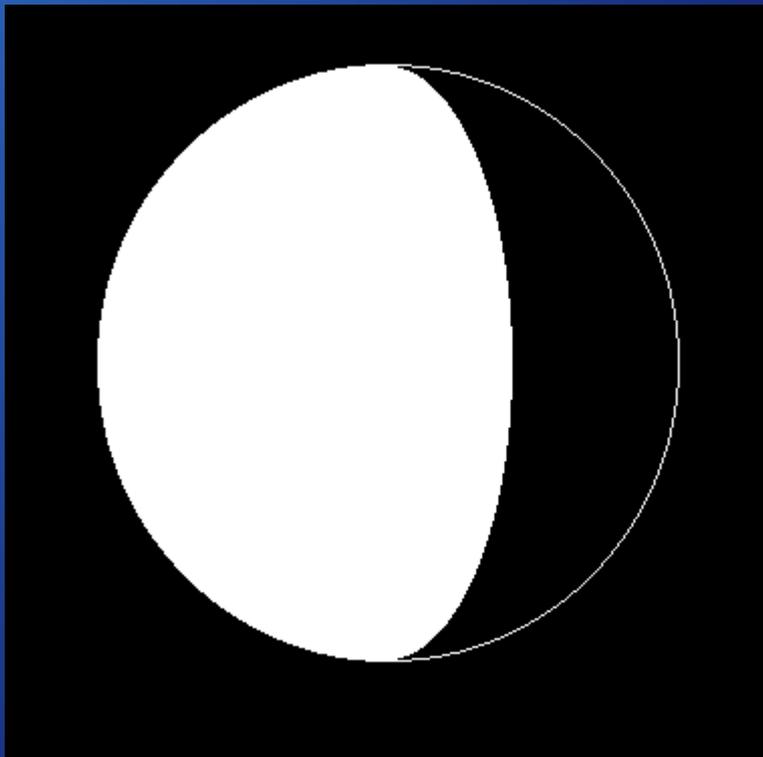
- **This phase includes the night after the first quarter to the night before the full moon.**

Full Moon



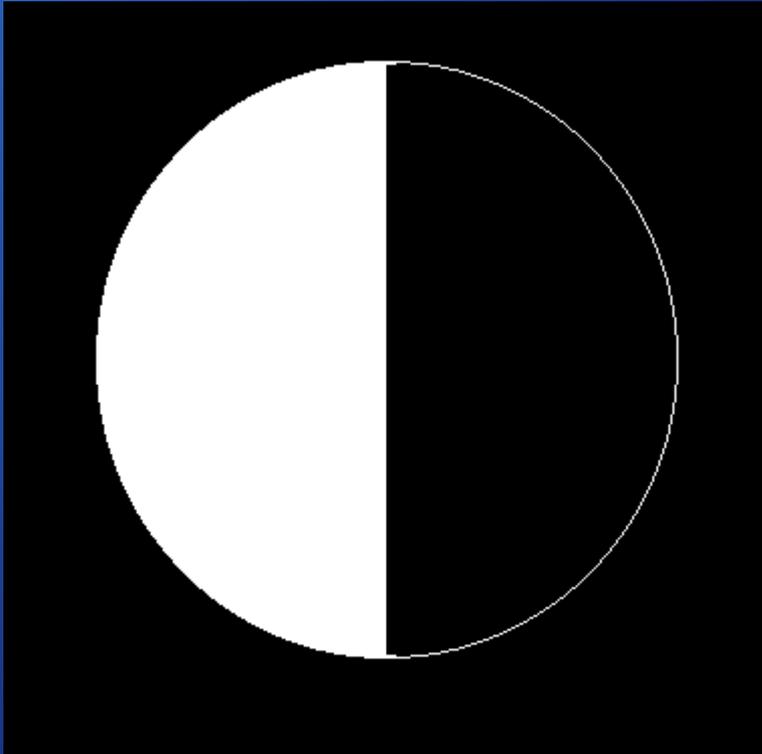
- **The moon is full and bright. It looks like a large circle.**
- **The illuminated side is facing us.**
- **Only happens one night per lunar phase cycle.**

Waning Gibbous



- The moon appears more than half but not quite full.
- Waning means that the illuminated side is decreasing.
- The left side is the bright side.

Last Quarter/ Half Moon

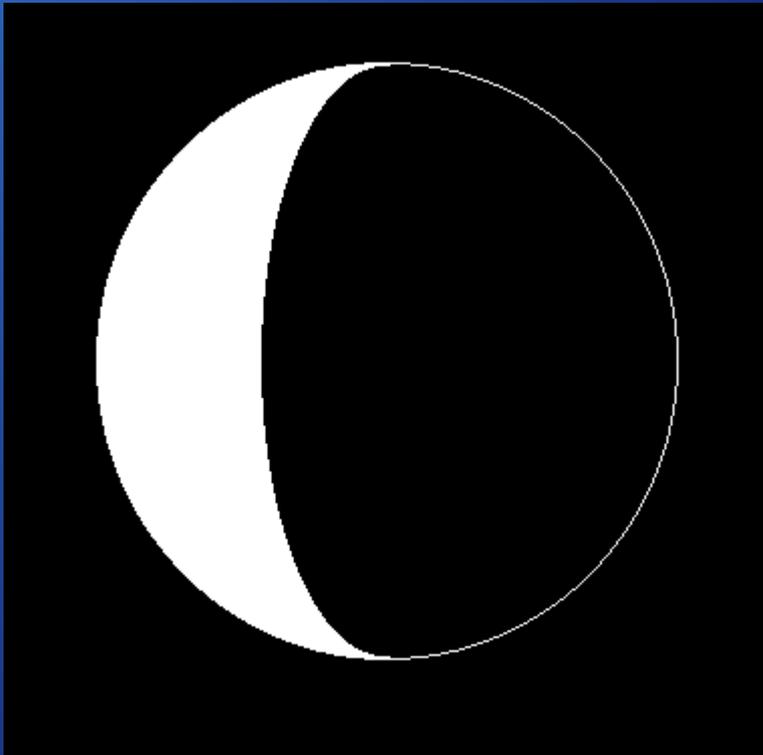


- **Left Half of the moon is illuminated.**

- **The illuminated side is decreasing.**

- **This phase also only lasts for one night.**

Waning Crescent



- **Less than one half of the moon is illuminated.**

- **The moon will continue to become smaller and smaller.**

Homework

A 3rd grader has sent you a letter asking you to explain why the moon looks different almost every night.

Write a letter to the 3rd grader thoroughly explain this phenomenon.