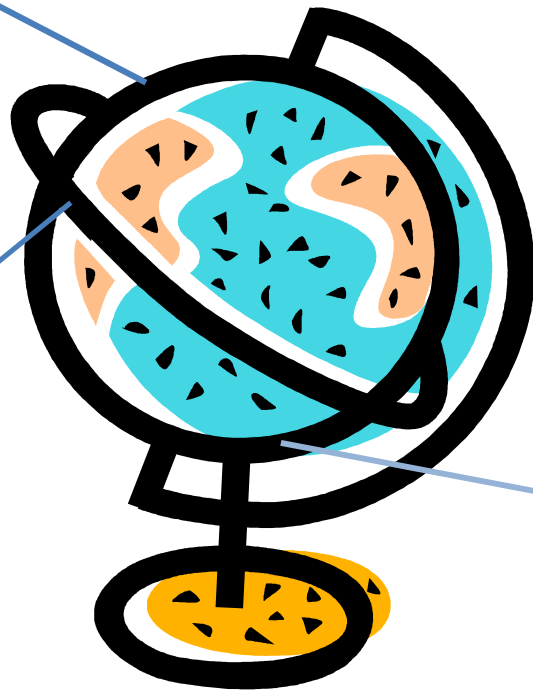


Hemisphere

Northern
Hemisphere

Equator



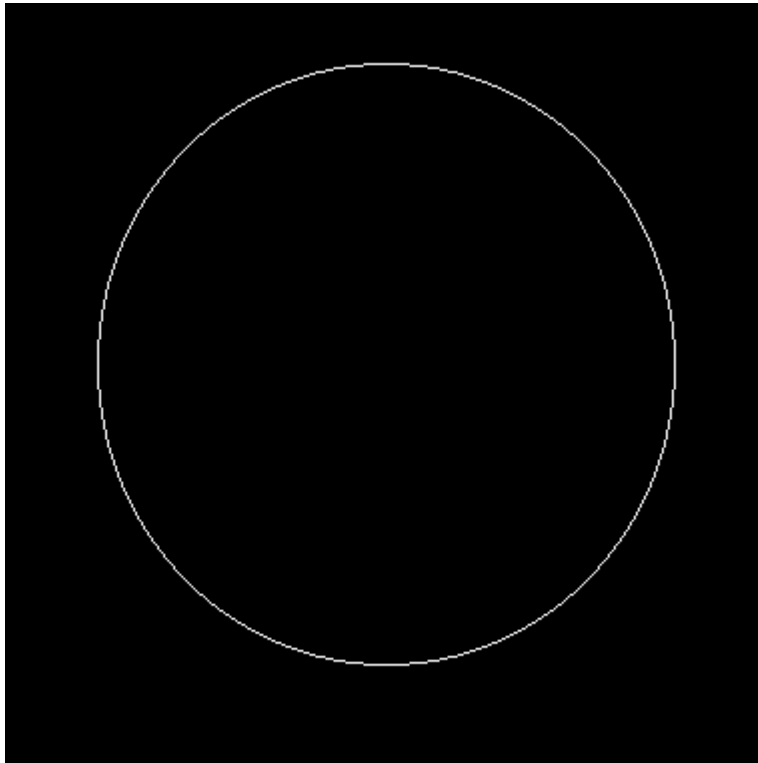
Southern
Hemisphere

What do we know about the moon?



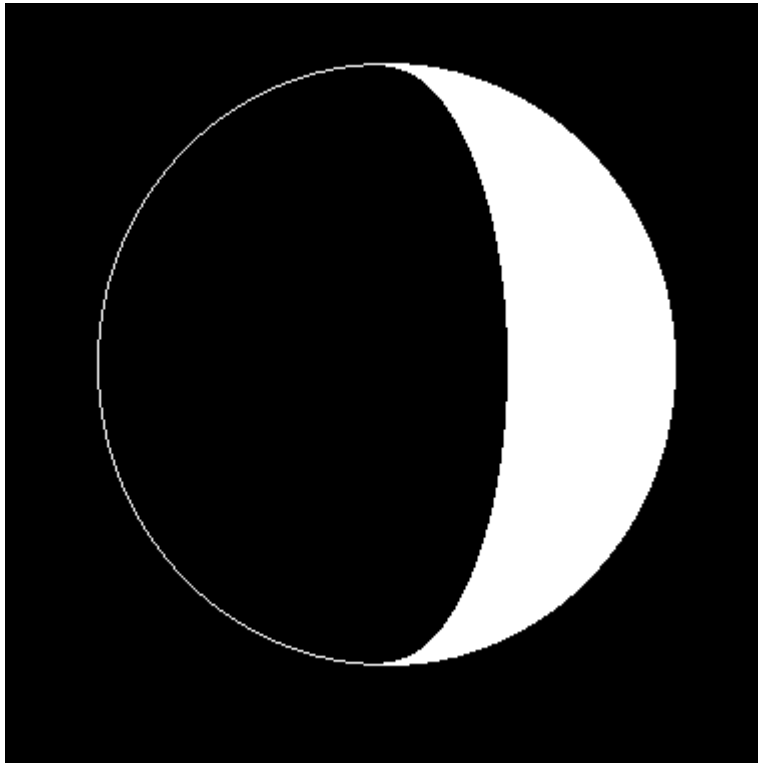
- From any location on the Earth, the Moon appears to be a circular disk which, at any specific time, is illuminated to some degree by direct sunlight. Like the Earth, the Moon is a sphere which is always half illuminated by the Sun, but as the Moon orbits the Earth we get to see more or less of the illuminated half.

1. New Moon



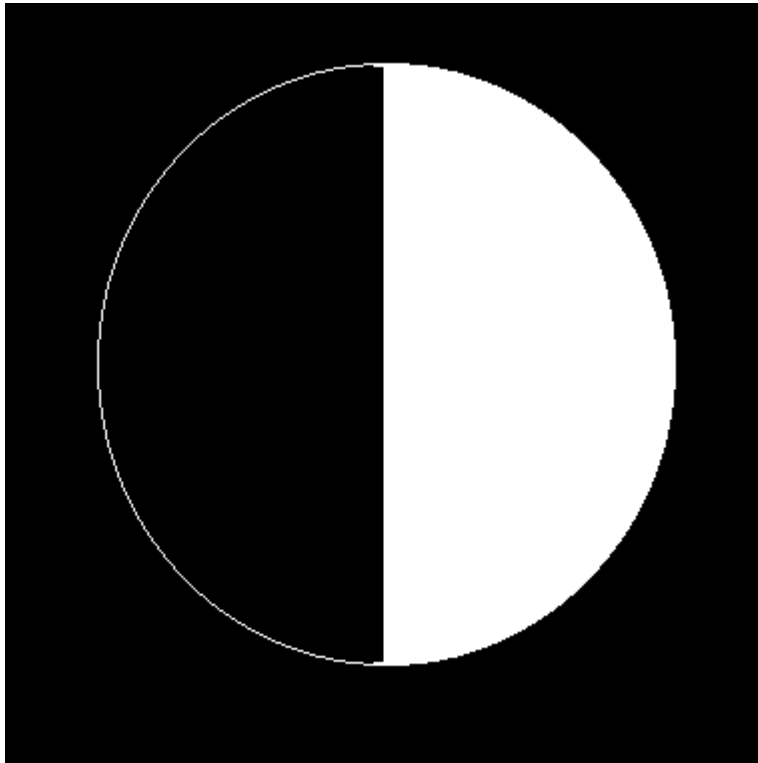
- The Moon's unilluminated side is facing the Earth. The Moon is not visible (except during a solar eclipse).

2. Waxing Crescent



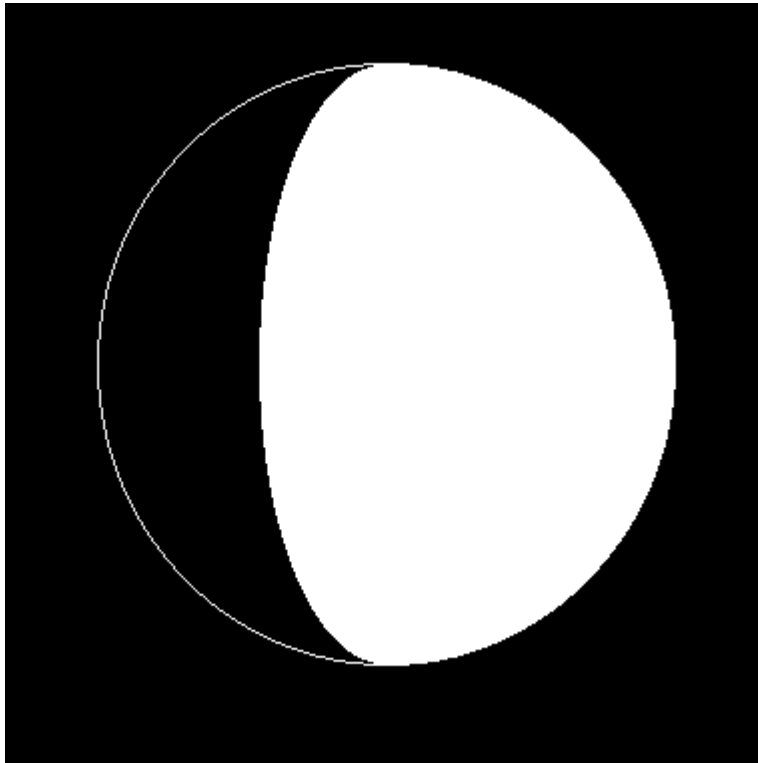
- The Moon appears to be partly but less than one-half illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.

3. First Quarter



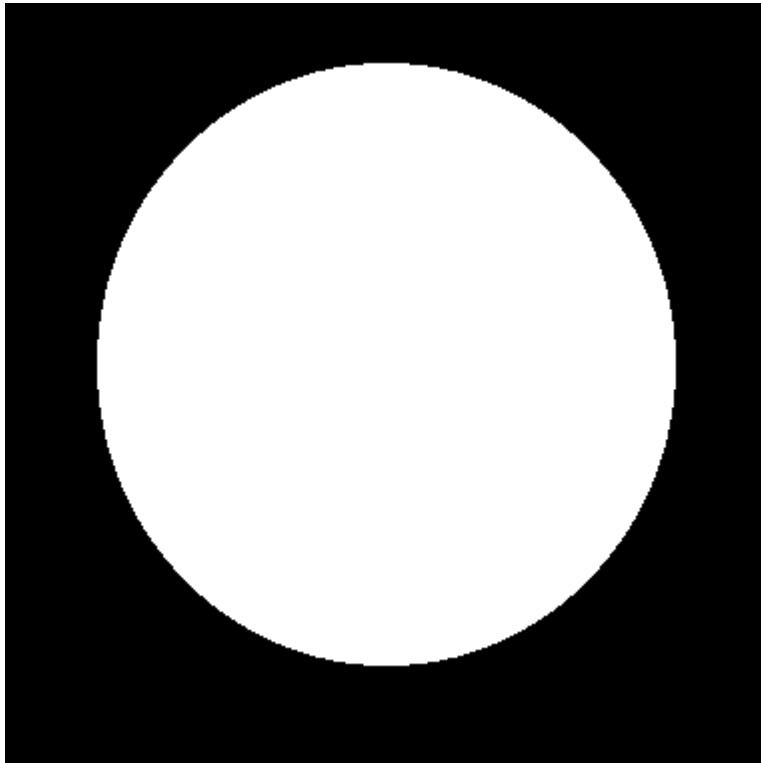
- One-half of the Moon appears to be illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.

4. Waxing Gibbous



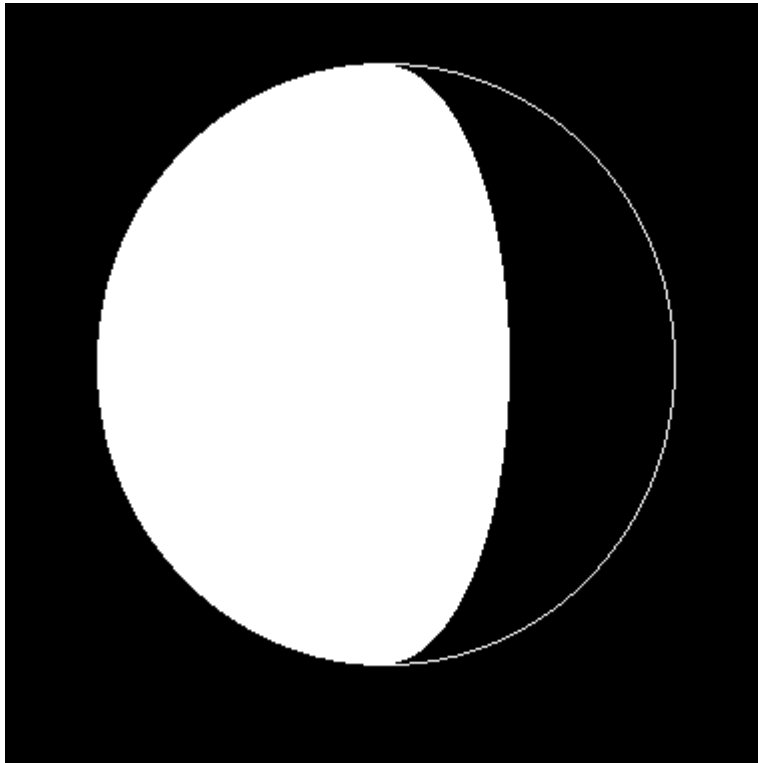
- The Moon appears to be more than one-half but not fully illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.

5. Full Moon



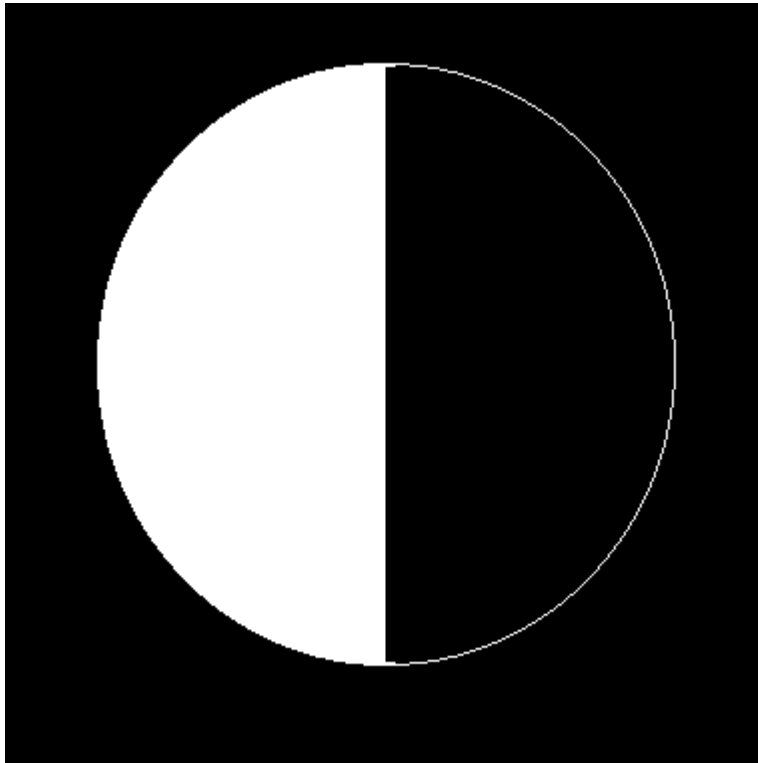
- The Moon's illuminated side is facing the Earth. The Moon appears to be completely illuminated by direct sunlight

6. Waning Gibbous



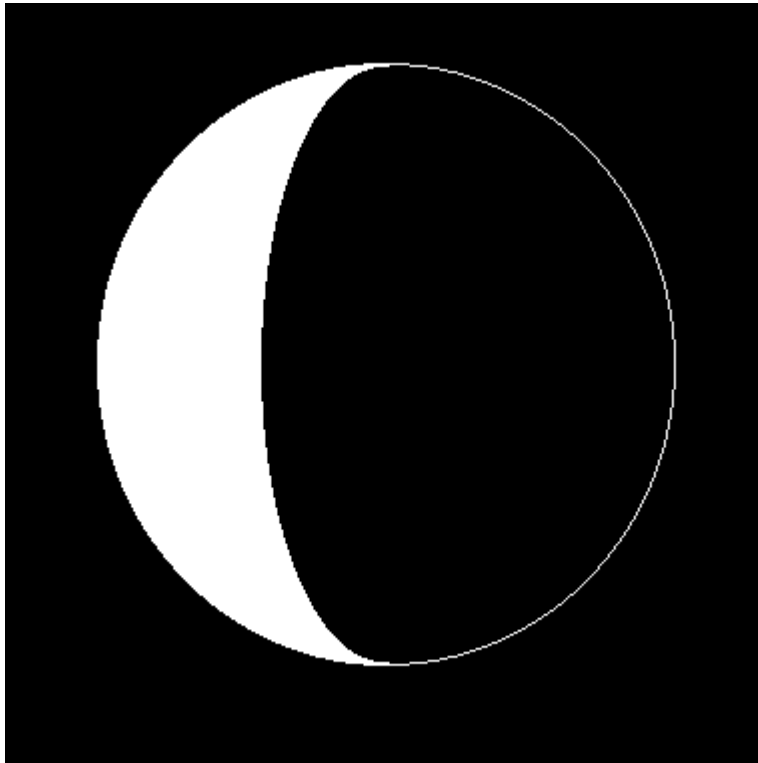
- The Moon appears to be more than one-half but not fully illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.

7. Last Quarter

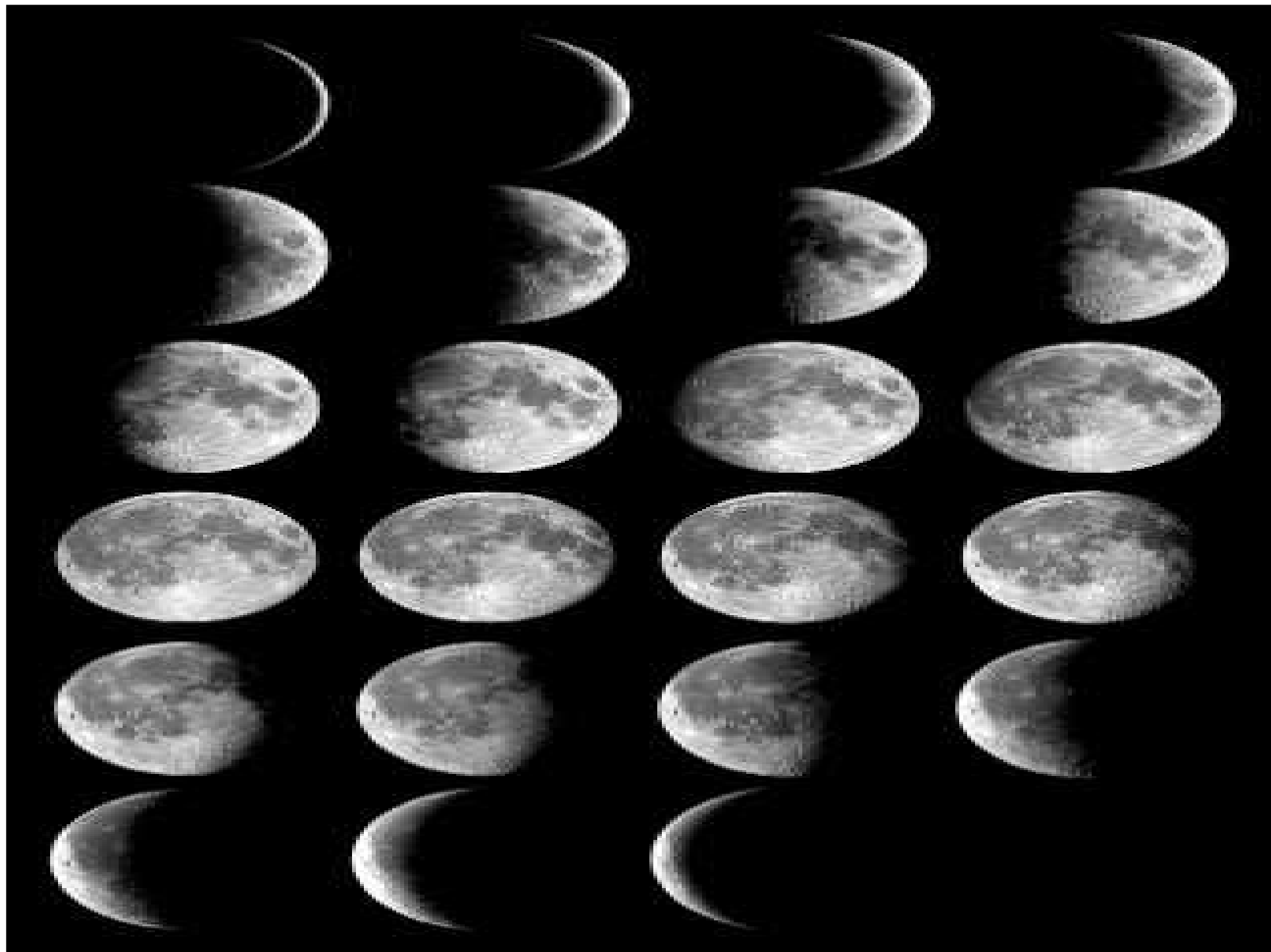


- One-half of the Moon appears to be illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.

8. Waning Crescent



- The Moon appears to be partly but less than one-half illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.



LO: To know that the Moon's changing appearance is due to a 28 day cycle.

- Complete the moon cycle sheet – shading in the parts of the moon that are not illuminated by the sun and labelling the different phases:

New Moon – Waxing Crescent – First Quarter – Waxing Gibbous – Full moon – Waning Gibbous – Last quarter – Waning Crescent

- Explain why the moon appears to change shape