

The Moon



An integrated science and ELA unit based on
Common Core Performance Standards in ELA and
Georgia Performance Standards in Science.



Created By: April Gilbert
2013 ©

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1. Anchor charts
2. Phases of the moon mini-flipbook
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4. Comprehension questions to accompany mini reader
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8. Moon phases spin book
9. "Oreo" phases graphic organizer
10. "Moon Walk" moon shoes experiment. (A pair of great moon shoes can be purchased from Amazon for around \$30.)
11. "Deep Impact" craters experiment
12. Phases of the Moon ordering cards
13. "Moon" concept organizer
14. "Moon" writing stationary
15. "Moon Pies" activity

Additional Literature Suggestions

What the Moon Is Like by Franklyn M. Branley

The Moon by Marc Singer

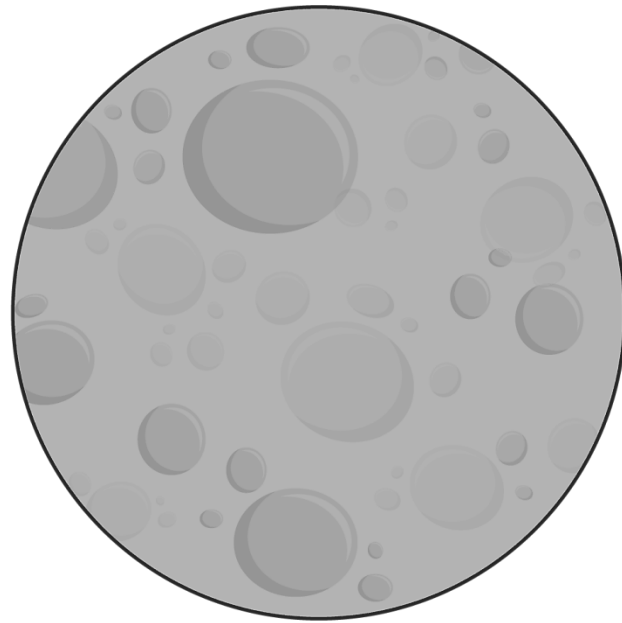
Phases of the Moon by Gillia Olson

The Moon Book by Gail Gibbons

The Moon



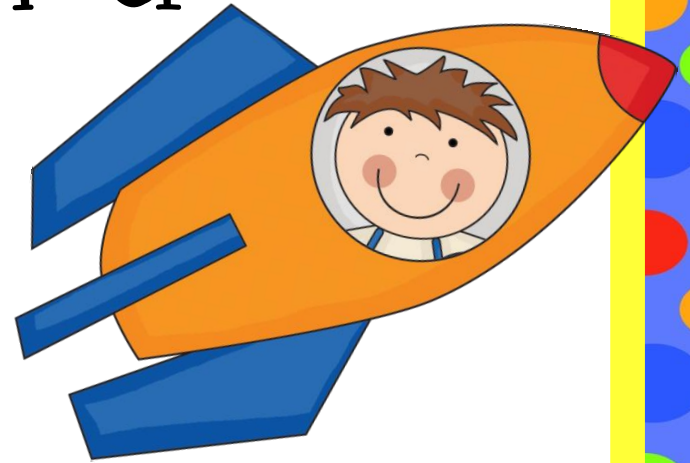
Moon



The moon is a satellite that orbits the Earth.

Standard

I can...




Use observations and charts to record the shape of the moon for a period of time.

Question

What is the moon?

How does the moon appear
to change over time?

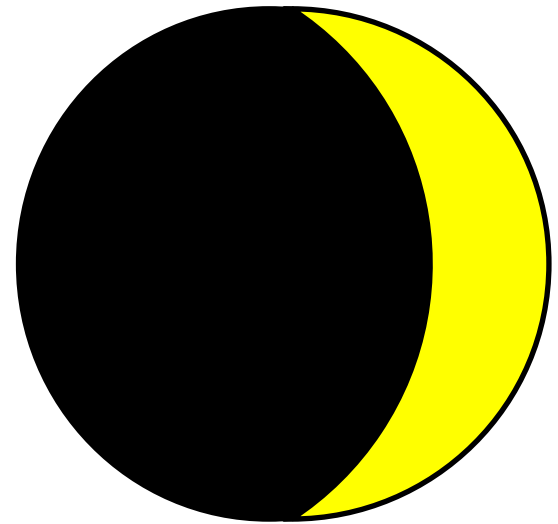


Phases of the MOON

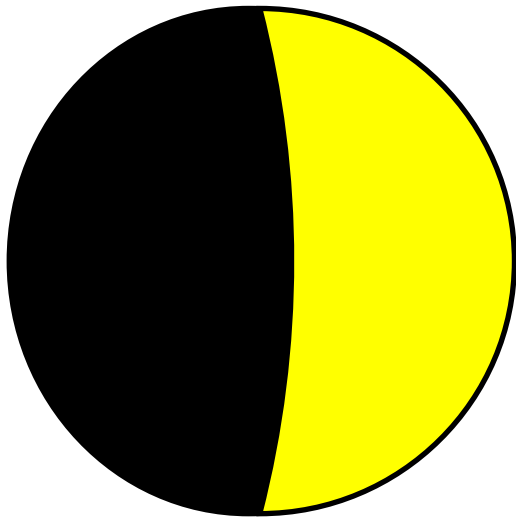
New
Moon



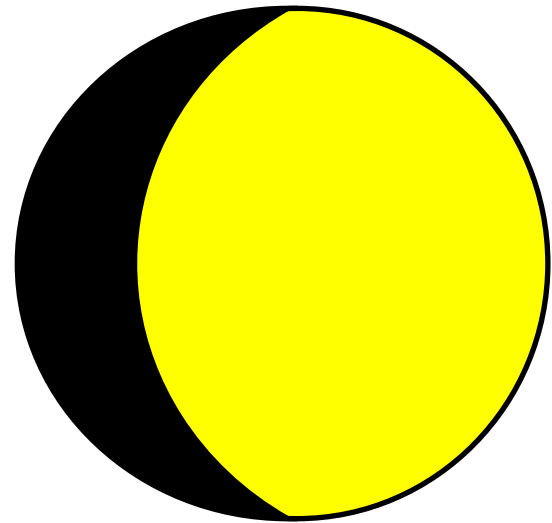
Waxing
Crescent



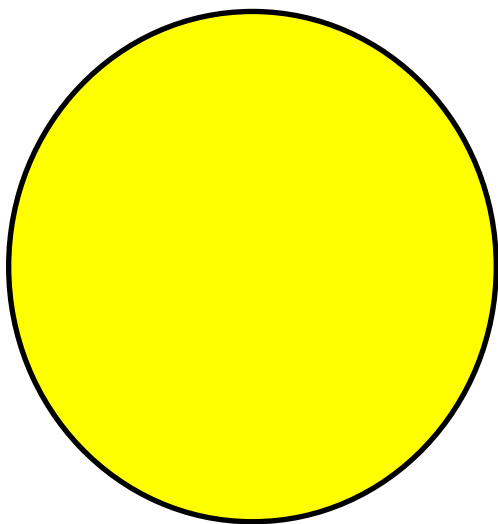
First
Quarter



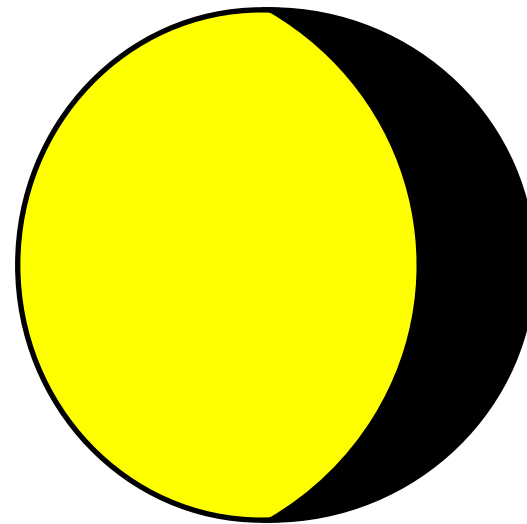
Waxing
Gibbous



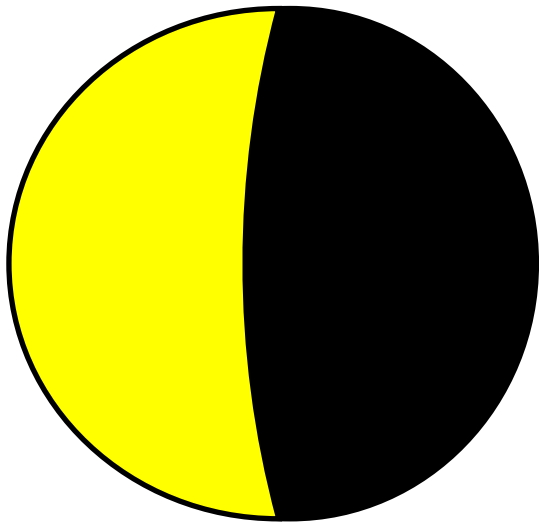
Full
Moon



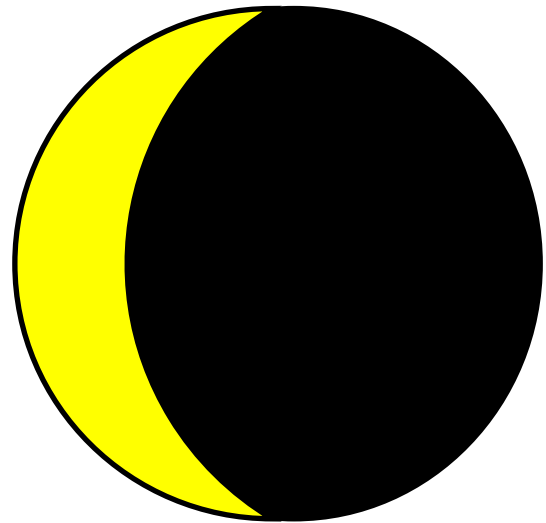
Waning
Gibbous



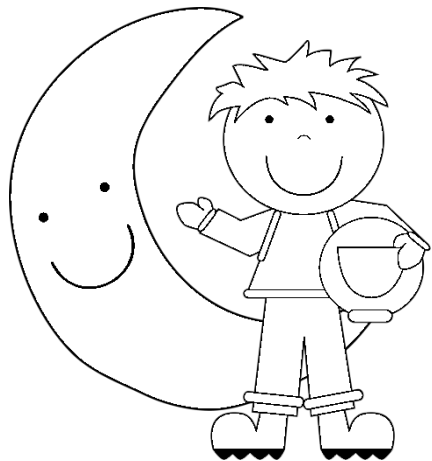
Last
Quarter



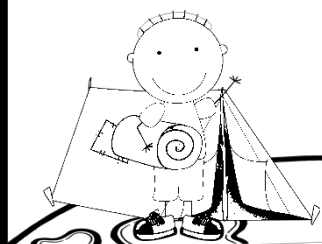
Waning
Crescent



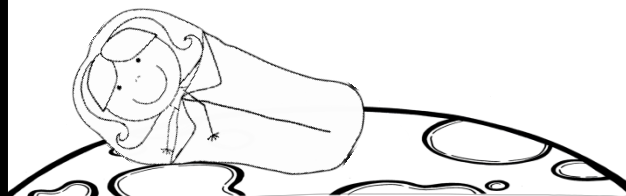
Phases of the Moon



New Moon



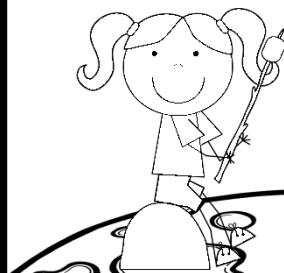
Waxing Crescent



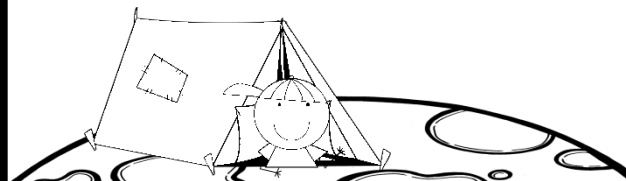
First Quarter

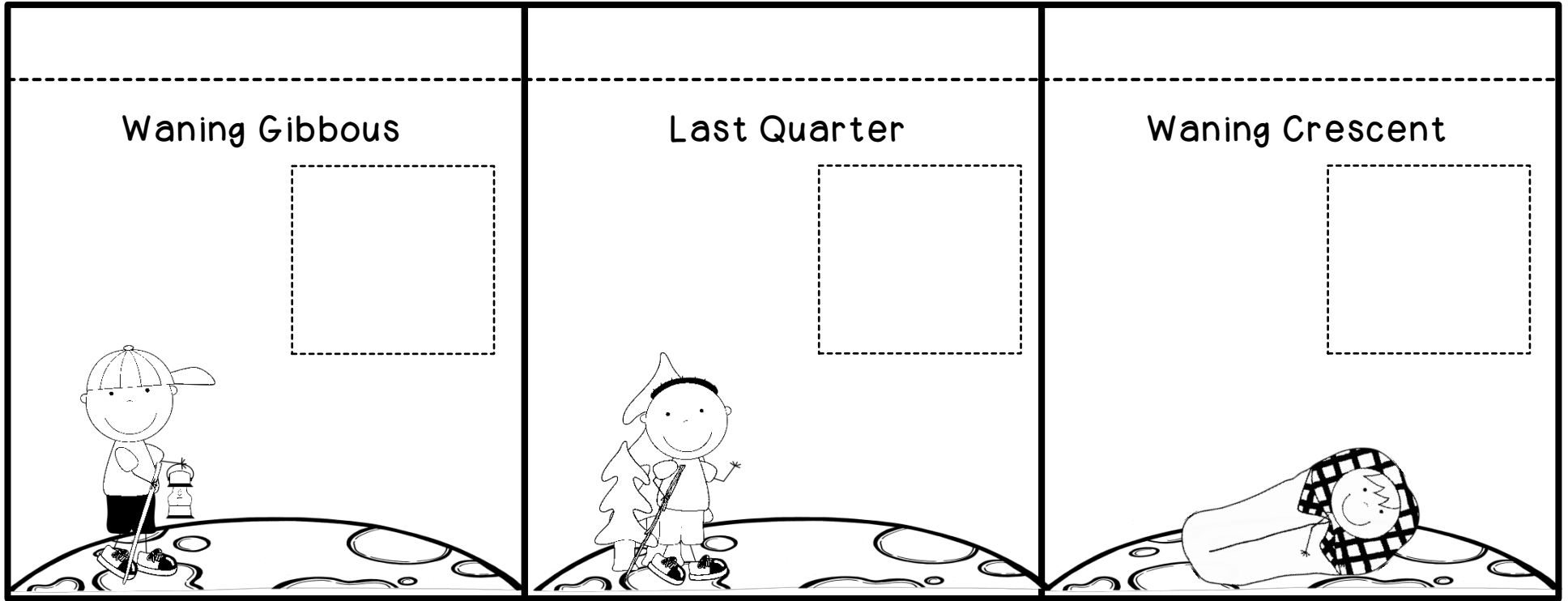


Waxing Gibbous



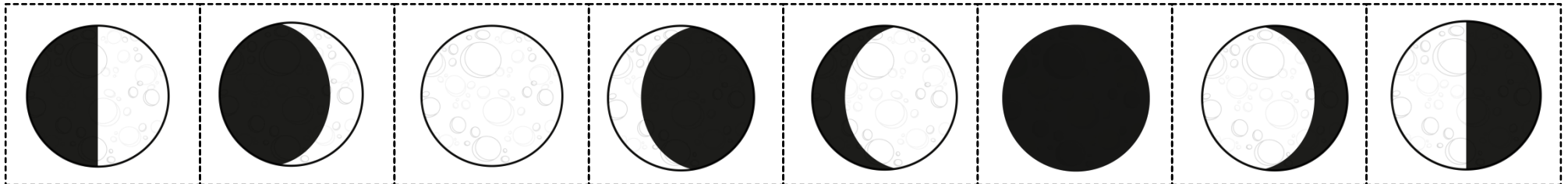
Full Moon





Phases of the Moon

Cut apart the pictures below. Glue them on the correct page in the moon flipbook.



6.

Glossary

atmosphere-the mass of air that surrounds a planet.

asteroid- a small planet.

astronaut- a traveler in a spacecraft.

axis- a straight line that an object rotates on.

comet- an object made of ice, dust, and rock.

crater- a hole made by something crashing into an object.

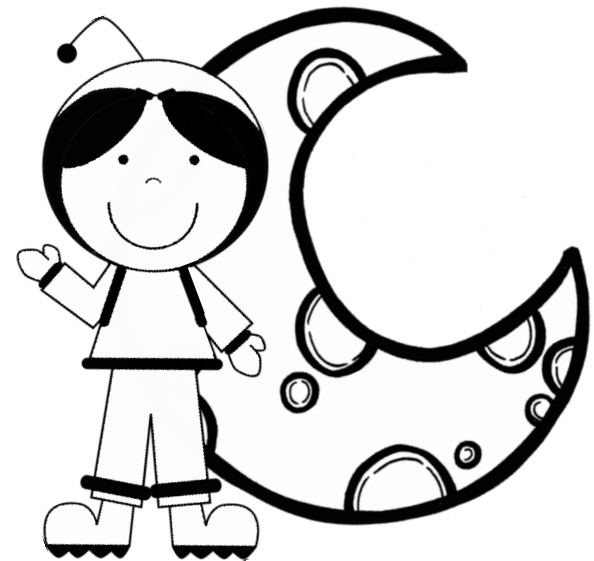
orbit- the path of an object moving around another object.

phase- a part of a series or pattern of changes.

reflecting- to throw back waves of light.

satellite- a heavenly body that orbits around a larger planet.

I
See the
Moon!



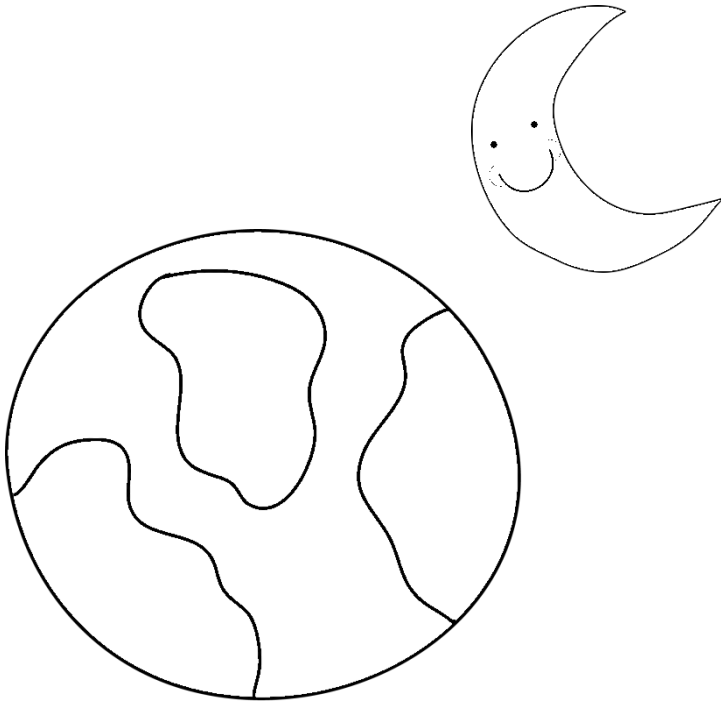
By April Gilbert 2013 ©

1.

What is the moon?

The moon is a natural satellite that orbits the Earth. A natural satellite is an object in space that orbits, or goes around, a planet.

There are many moons in our solar system, but only one moon orbits the Earth. Most of the time we can only see the moon at night, but the moon is always there. It is just usually too bright in the daytime to see it!



6.

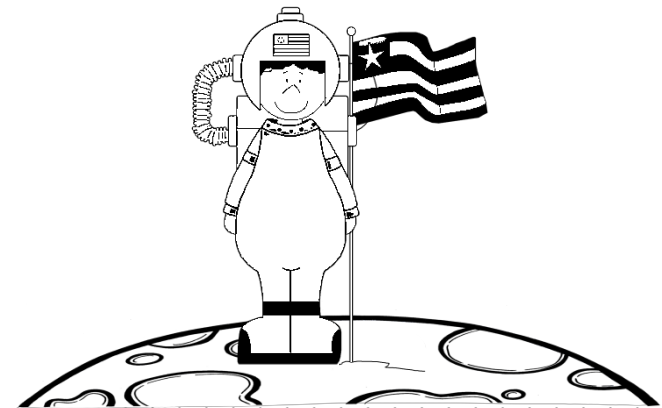
Moon History

Scientists believe the Earth is 4.5 billion years old.

In 1969, the Apollo 11 landed on the moon. This was the first time a human landed on the moon. When the astronauts landed the spacecraft on the moon they told mission control, "The eagle has landed."

The first person to walk on the moon was Neil Armstrong. He and his partner Buzz Aldrin spent time on the moon collecting dust and rocks.

They left an American flag on the moon that said, "We came in peace for all mankind."



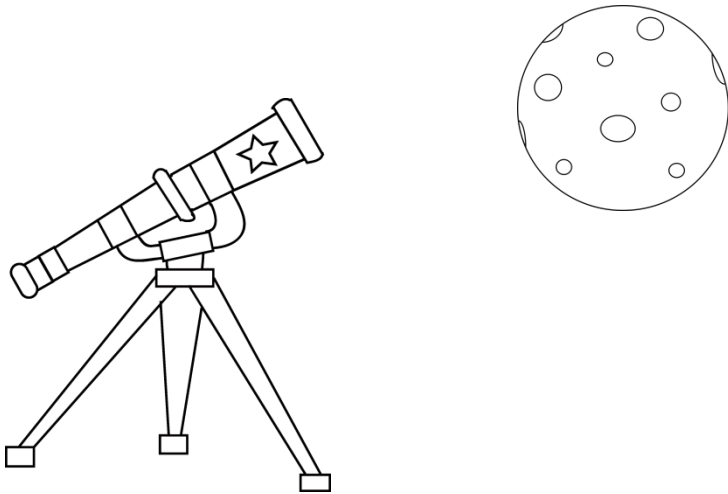
5.

Moonlight

The moon is not a source of light. This means that it does not make light. It does provide light in the night sky. This is because the moon is reflecting the sun's light.

Scientists talk about the light side and dark side of the moon. Actually, the sun shines on all sides of the moon. When scientists refer to the light side of the moon, they are talking about the side of the moon we see from Earth. The dark side is the side facing away from the Earth.

Because the moon rotates on its axis as it moves around the Earth we always see the same side!



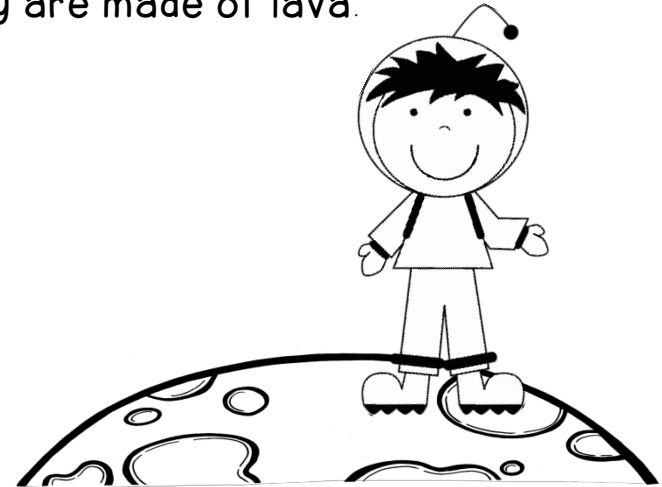
2.

The Moon's Surface

The moon is covered in dust. There are many craters in the moon's surface. These craters were formed when comets and asteroids crashed into the moon.

There is no atmosphere on the moon. This means there is no weather and no wind. Scientists can use telescopes to see the surface of the moon. Because there is no wind, they can still see the footprints that were left by the first astronauts who walked on the moon.

There are also mountains and huge rocks on the moon. The large dark spots that can be seen on the moon are called seas. These seas are not like our seas. They are not made of water. Scientists think they are made of lava.



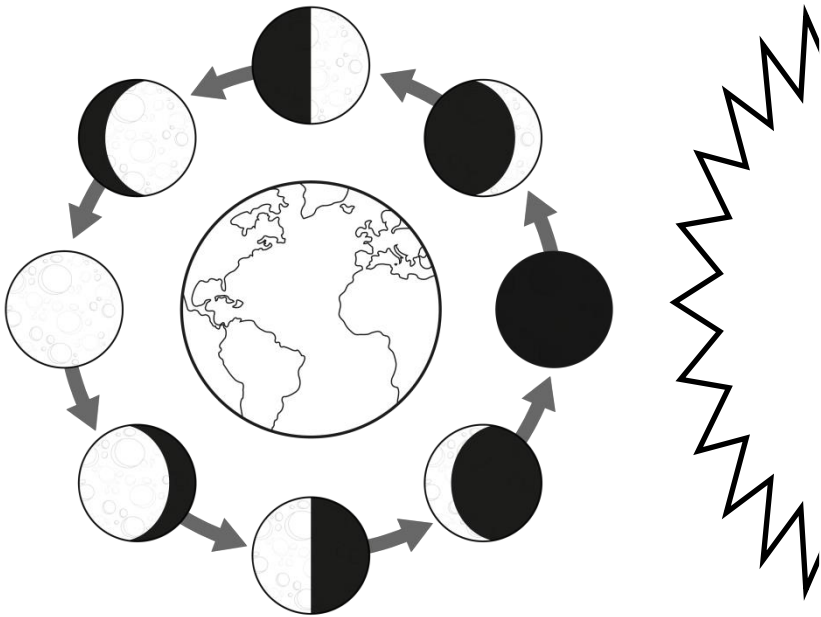
3.

Phases of the Moon

The moon orbits the Earth about every 27 days. It looks like the moon changes shape each night, but what we see is how much of the moon is lit up by the sun.

The sun shines on the moon just like it shines on the Earth. As the moon moves around the Earth, we are able to see different parts of the moon that are reflecting the light from the sun.

Each of the different patterns of light we see from the moon are called phases.



4.

Each phase of the moon has a different name.

New Moon



Waxing Crescent



First Quarter



Waxing Gibbous



Full Moon



Waning Gibbous



Last Quarter



Waning Crescent



I See the Moon

Name _____ Date _____

1. What is the moon? _____

2. How long does it take the moon to orbit the Earth? _____

3. Describe the surface of the moon. _____

4. Why can scientists still see the footprints of the first astronauts who walked on the moon? _____

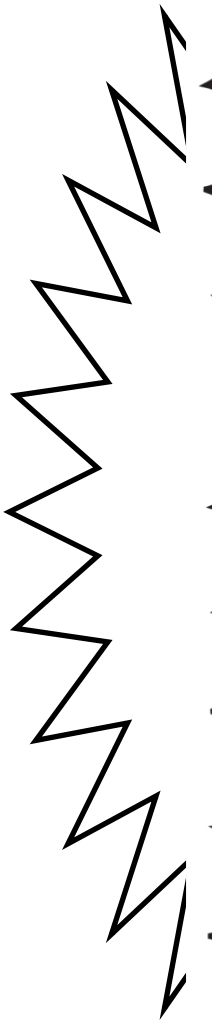
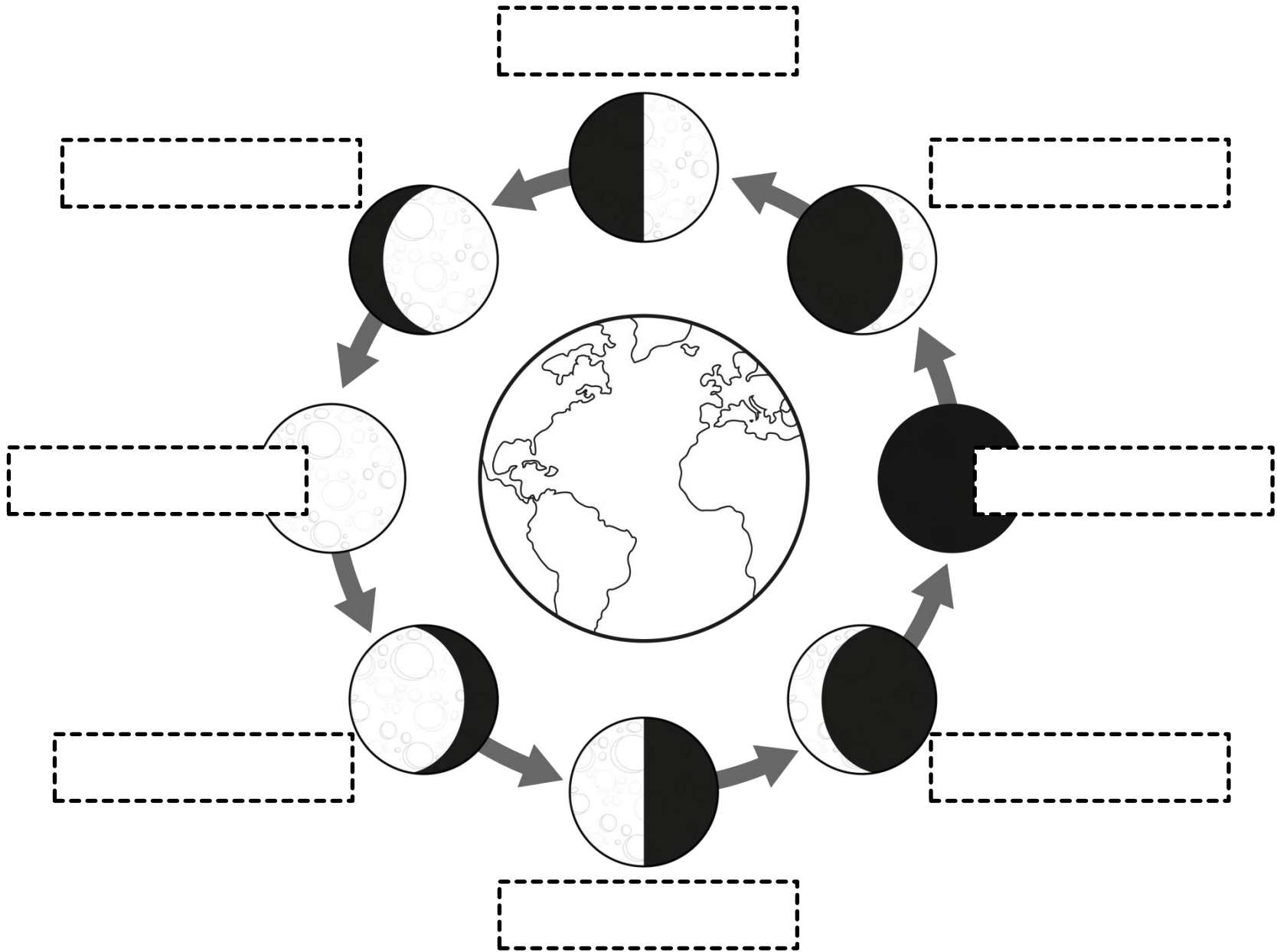
5. Name the phases of the moon. _____

6. Why do we only see one side of the moon? _____

7. Who were the first astronauts to walk on the moon? _____

8. Why do you think they left a U.S. flag on the moon? _____

Phases of the Moon



Phases
of the
Moon

waxing crescent	full moon	waning gibbous	new moon
first quarter	waxing gibbous	waning crescent	last quarter

Phases
of the
Moon

waxing crescent	full moon	waning gibbous	new moon
first quarter	waxing gibbous	waning crescent	last quarter

Phases
of the
Moon

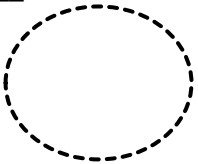
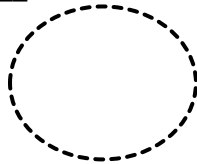
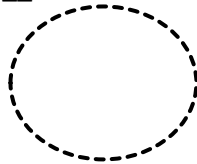
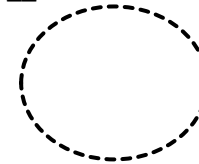
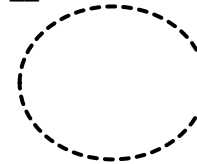
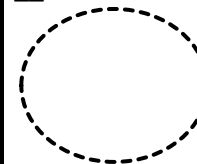
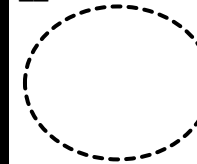
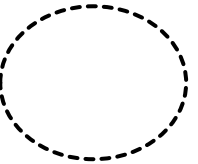
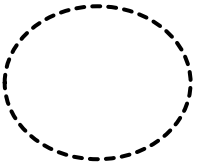
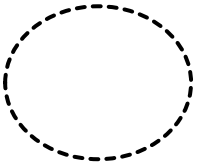
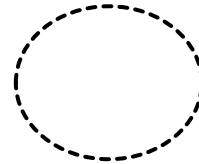
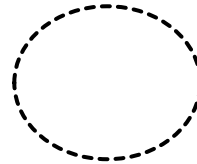
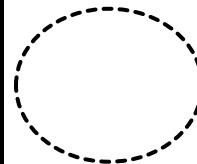
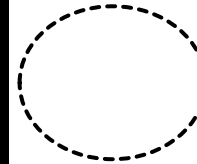
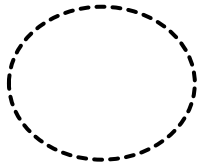
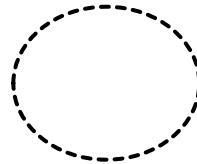
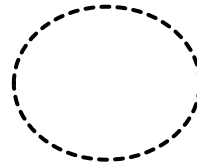
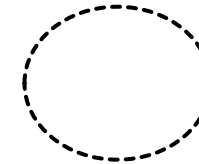
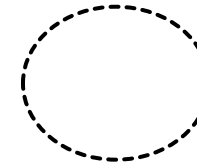
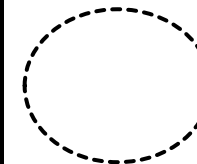
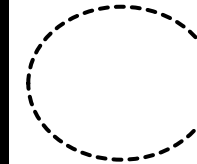
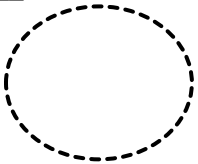
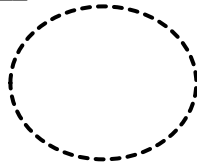
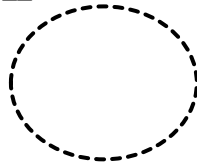
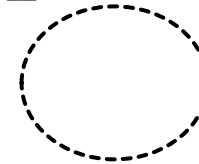
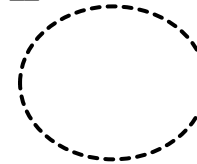
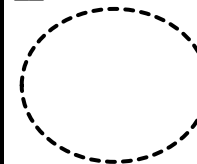
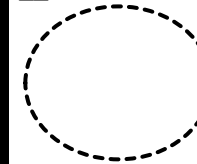
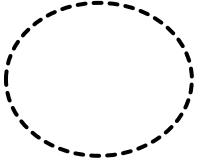
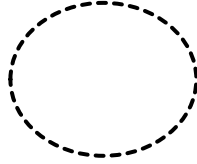
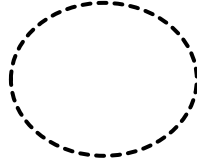
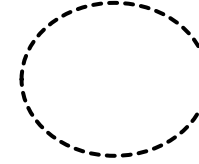
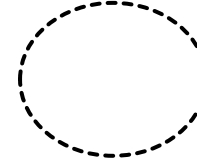
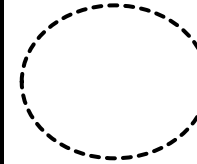
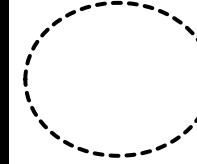
waxing crescent	full moon	waning gibbous	new moon
first quarter	waxing gibbous	waning crescent	last quarter

Phases
of the
Moon

waxing crescent	full moon	waning gibbous	new moon
first quarter	waxing gibbous	waning crescent	last quarter

My Moon Log

Number the days on the calendar. Color the circle to show what the moon looks like each night.

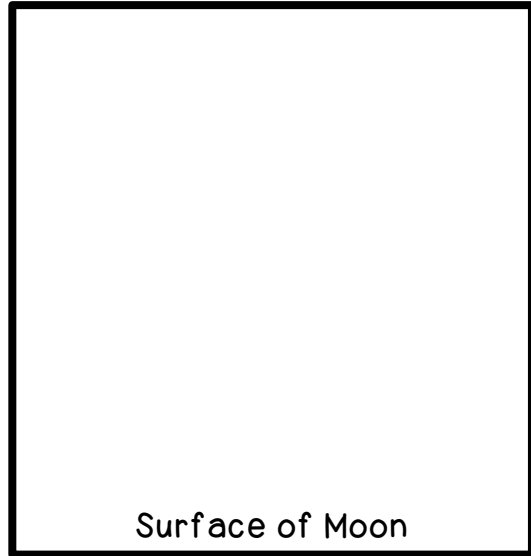
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						
						
						
						
						

NASA News

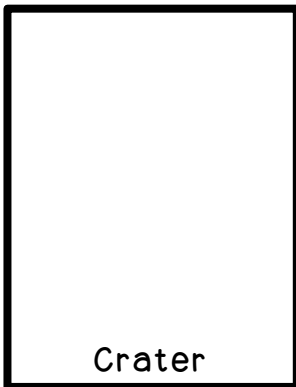
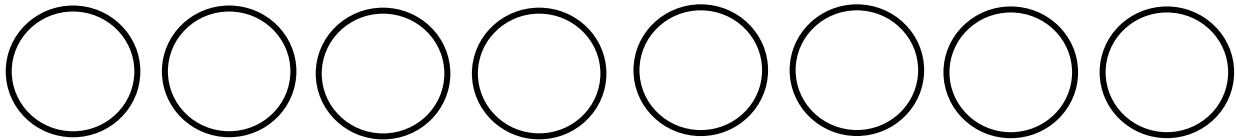
Date _____

Moon Mission A Success

Astronauts Describe
Moon's Surface



Moon Phases Seen From Earth



Scientists Explain What Moon Is

Moon Phases Book

Students can make this flipbook to show the phases of the moon. They can practice identifying phases, and you can easily see if they are understanding the concept.

Each student will need:

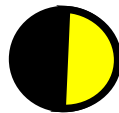
The patterns on the attached pages. (Colored or painted correctly.)

1 paper fastener

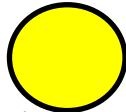
1. Students will color and cut out each pattern.
2. Place the "New Moon" on the bottom. (Black side facing up.)
3. Place the "Crescent Moon" on top of the "New Moon." (Yellow side facing up.)



4. Place the "Half Moon" on top of these. (Yellow side facing up.)

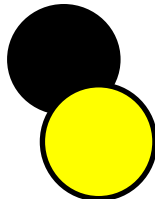


5. Place the "Gibbous Moon" on next (Yellow side up.) Followed by the "Full Moon."



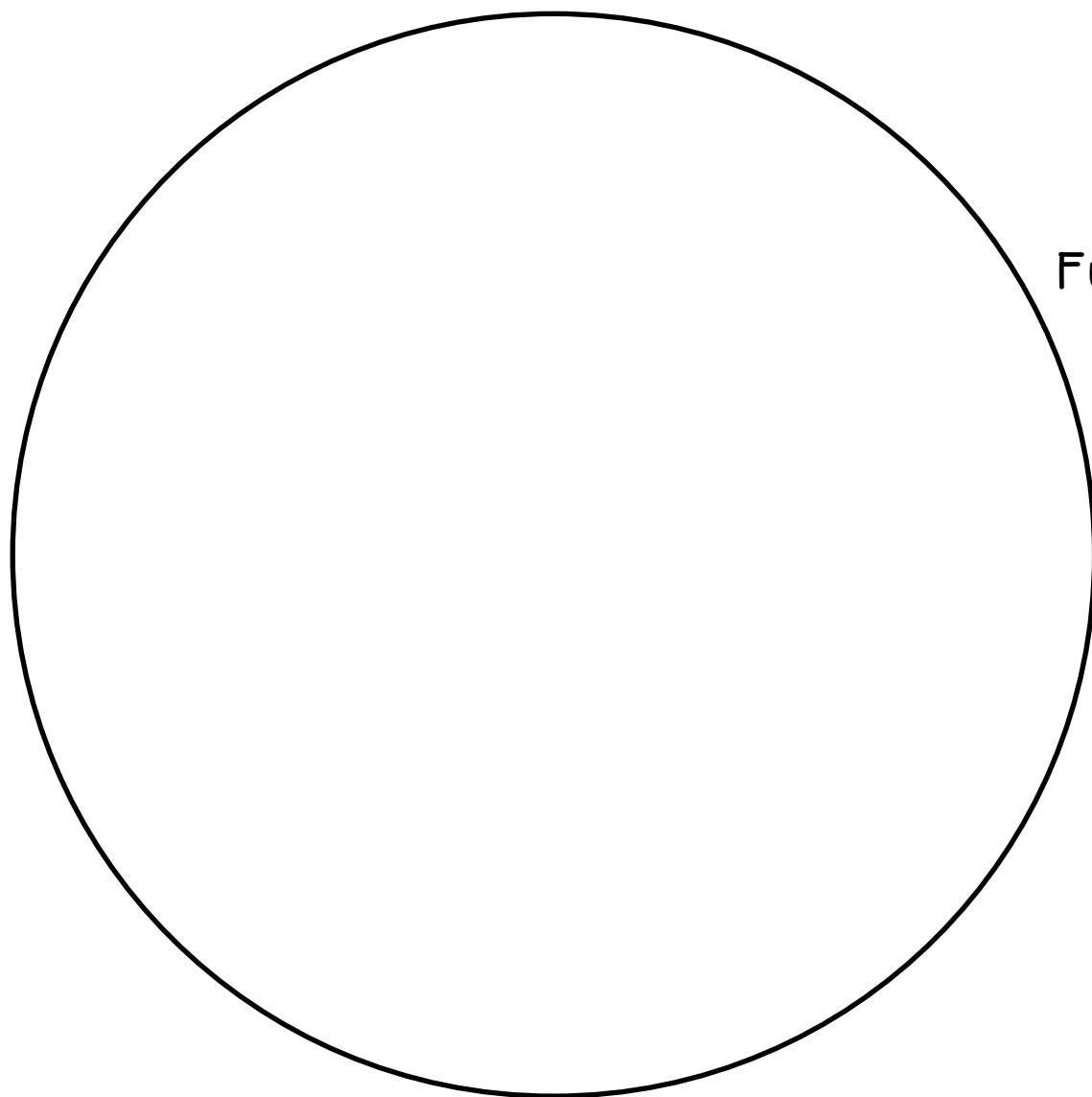
6. Stick the paper fastener in the middle at the bottom on the "Full Moon." Be sure to include the half and crescent moons.

Students will begin showing the phases of the moon by pulling out the new moon from the back.

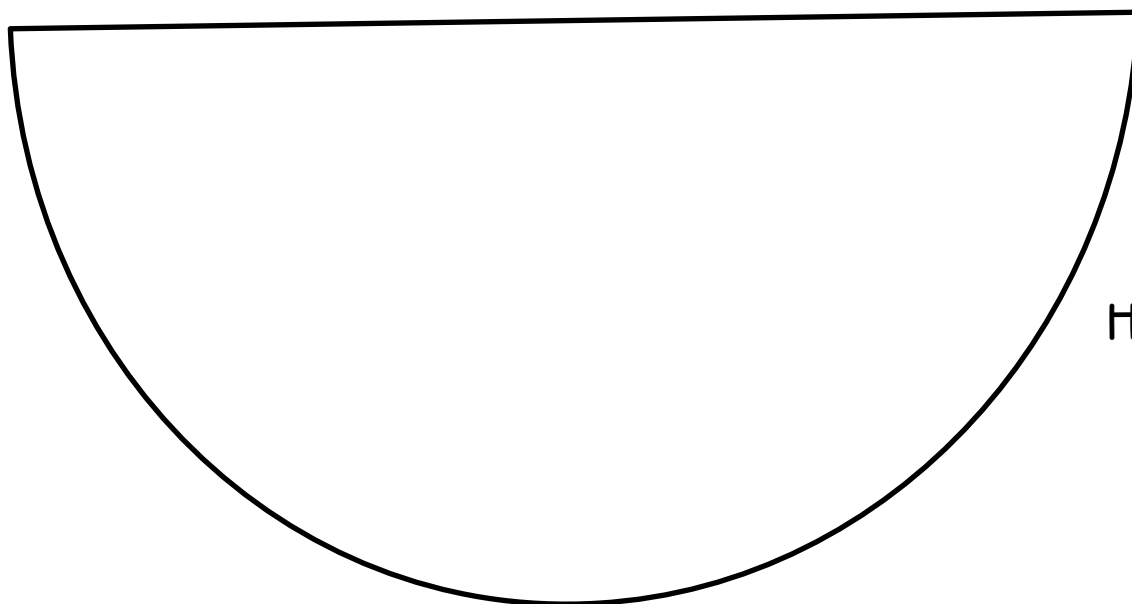


They can show each phase by rotating them around. Once they get to the full moon, they simply flip the book so the fastener is on the top. Then they slide the full moon off revealing the waning gibbous. They repeat the process until they are back to the new moon.

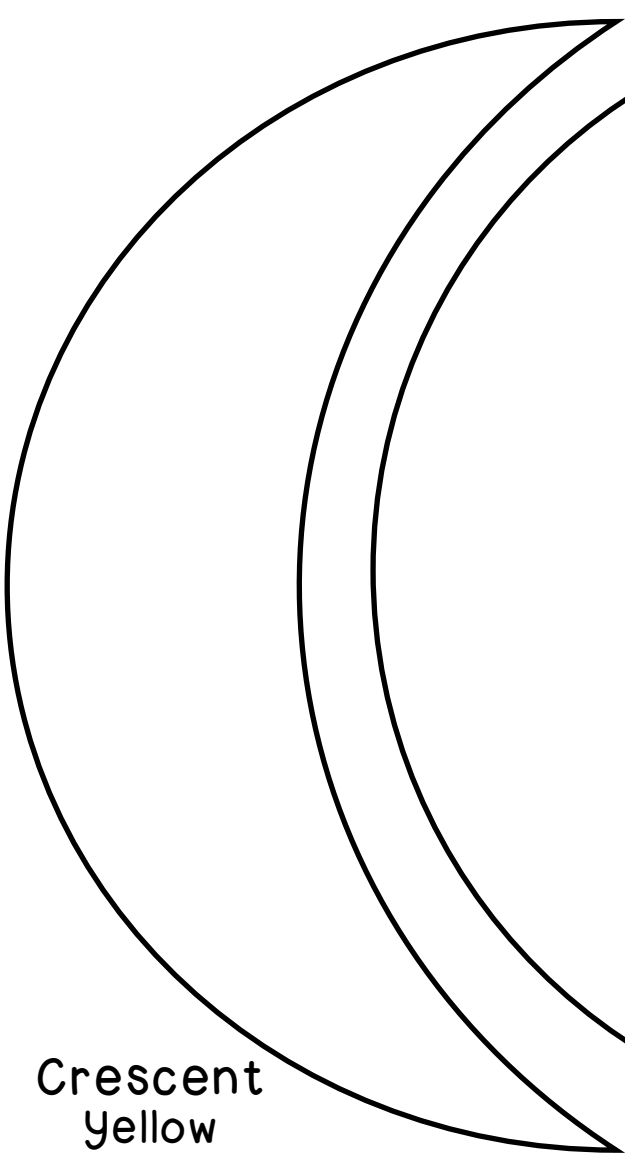
Moon Phases Book



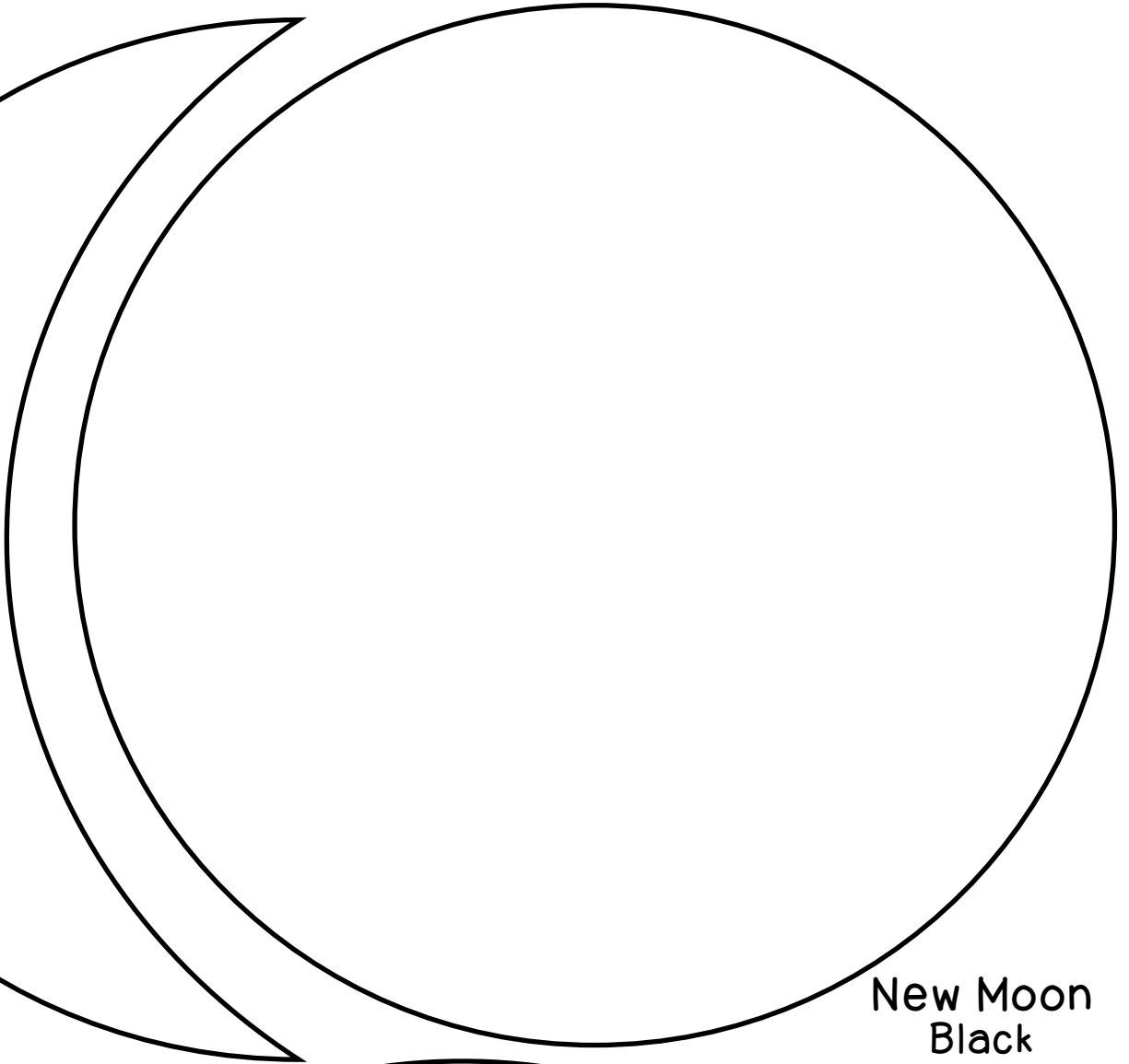
Full Moon
Yellow



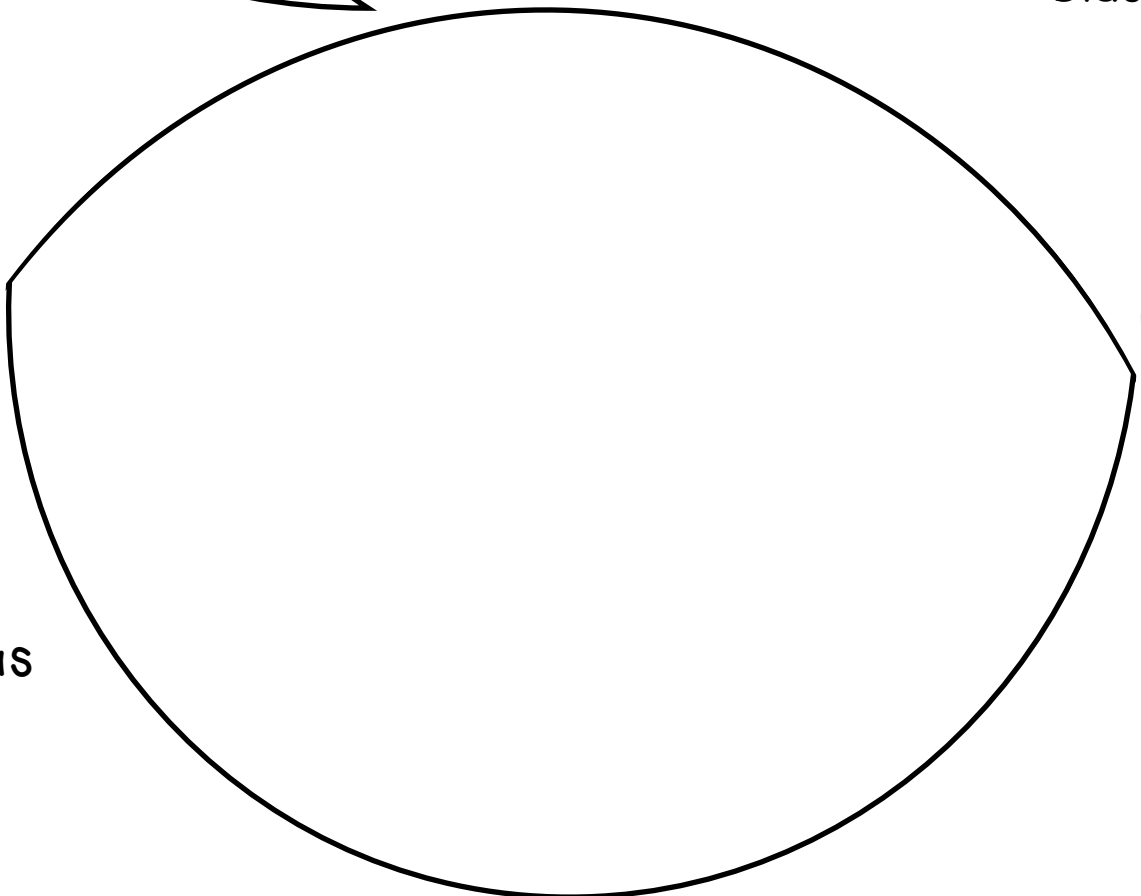
Half Moon
Yellow



Crescent
Yellow



New Moon
Black



Gibbous
Yellow



Take a Bite Out of the Moon!

Using a toothpick, cut the cream on Oreos to show the phases of the moon.

New Moon

Waxing Crescent

1st Quarter

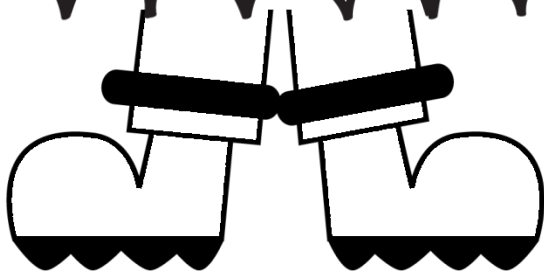
Waxing Gibbous

Full Moon

Waning Gibbous

Last Quarter

Waning Crescent



Moon Walk

Background Information

There is around 6 times more gravity on Earth than there is on the moon. Astronauts who walked on the moon had to grow accustomed to the feeling of weightlessness in order to move.

Goal of Experiment

I will demonstrate an understanding of weightlessness.

Steps in Procedure and Findings

Attach the "Moon Shoes" to your feet. Walk in the designated area.

Words to Describe

Picture

Results

How can you describe the feeling of weightlessness? _____

How could astronauts make "moon walking" easier?

Deep Impact



Goal: To demonstrate an understanding of how craters are made.

Procedure: Drop each of the objects into the “moon dust.” Draw a picture to show what you see and answer the questions below.

Moon dust before impact

A large, empty rounded rectangular box with a black border, intended for drawing the state of moon dust before an impact.

Moon dust after impact

A large, empty rounded rectangular box with a black border, intended for drawing the state of moon dust after an impact.

1. Which object made the deepest crater? _____

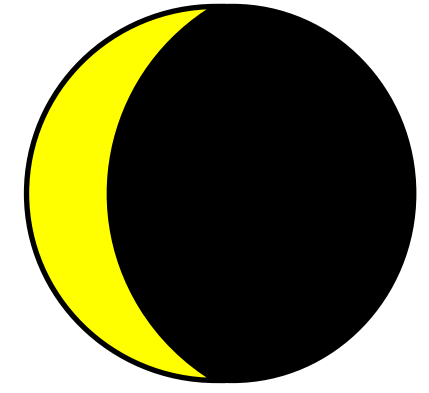
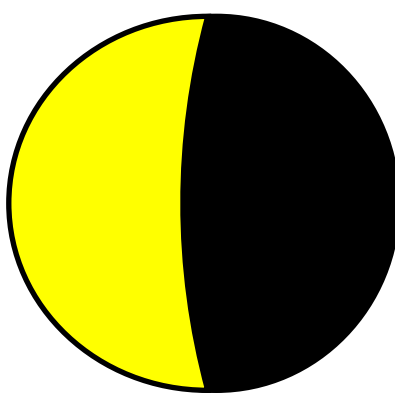
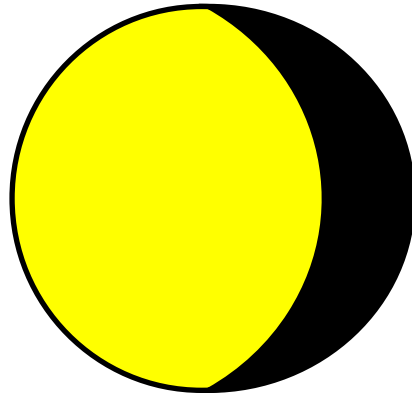
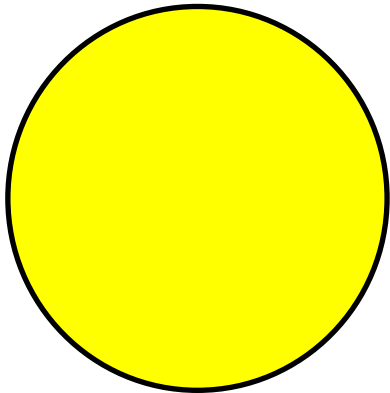
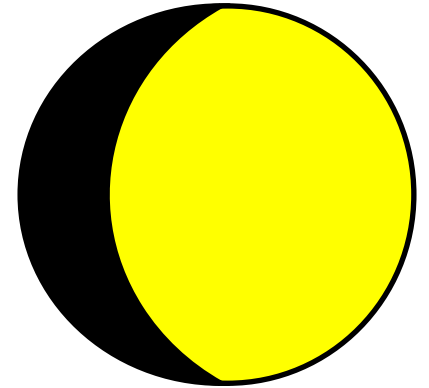
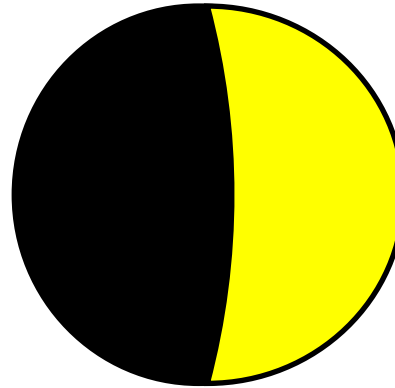
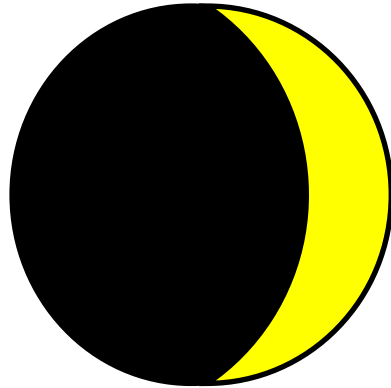
2. Why do you think this object made the deepest crater?

Procedure: Stand in a chair and drop each of the objects into the “moon dust.” Answer the questions.

3. Describe the difference between these craters and the craters described above? _____

4. How does the distance the object travels affect the craters? _____

Phases of the Moon Ordering Cards



new moon

waxing crescent

first quarter

waxing gibbous

full moon

waning gibbous

last quarter

waning crescent

The moon is...

The moon is not...

**Half
Moon...**

Picture

The Moon



**Crescent
Moon...**

Picture

Describing Words

Interesting Facts

Marvelous Moon Pie

How do I describe my Moon Pie?



My Moon Pie is as sweet as ...

My Moon Pie is made of ...

My Moon Pie is...

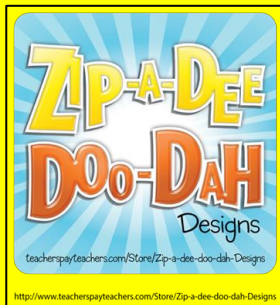
My Moon Pie is not...

Thank You!

For purchasing my activity pack!

I hope your students enjoy it!

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