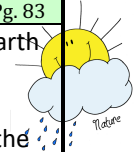


Lesson: Navigating the Moon

Reference to English
Interconnections
Lesson
The Moon part 2 Pg. 83



Science Standard(s): Students will gain an understanding of Earth and Space Science through the study of earth materials, celestial movement, and weather.

Objective(s): Observe and record recognizable objects and patterns in the night sky.

Indicator(s): Observe, describe and record patterns in the appearance and apparent motion of the moon in the night sky.

Content Objective(s):	Language Objective(s):
kid friendly objective. Will be posted on the board.	Kid friendly. Posted on the board. May include listening, speaking, reading, writing. See list of possible verbs.
Essential Questions: How does the natural world change?	Academic Vocabulary: 晚上, 天空, 月亮
Materials: <ul style="list-style-type: none"> - websites - scissors - stapler - The Moon Book (one for each students) 	Language References and Word Wall: Required: 月亮, 月亮的周期 Additional: 比较小, 比较大, 晚上, 天空 Sentence Frames: 月亮变大. 月亮变小.

Lesson: Navigating the Moon	Instructional time: 30 minutes
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Opening: (4 minutes)
Show and explain the videos on the following websites.
<http://www.usno.navy.mil/USNO/astronomical-applications/astronomical-information-center/phases-percent-moon>
- Someone took a picture of the moon every day for a year and put them together to make it into a movie.
<http://www.usno.navy.mil/USNO/astronomical-applications/data-services/rs-one-day-us>
- Someone filmed the sky for a whole night and that is what he or she saw.

Introduction to New Material (Direct Instruction): (5 minutes)
- Show students pictures of the moon
- Have students describe the moon with a partner (colors, smooth, cratered, round)
- Whole group discussion about the moon, what did it look like last night?
昨天晚上月亮象什么?
- What do you think it will look like tonight?
你们猜, 今晚月亮会象什么?
- Have students come up to the board and draw different phases of the moon.

Guided Practice: (19 minutes)
- Introduce students to My Moon Book.
- Using the website: <http://stardate.org/night sky/moon/> fill out two weeks worth of moon phases as a whole group.
- **Language suggestions:**
What did you notice about the moon?
看月亮时, 你发现了什么?
Did you see a pattern?
有看到规律吗?
Did the shape change?
形状有改变吗?
- Have the students fill out the second 2 weeks of moon phases on their own.
- Come back to whole group.

Questions:
What did notice?
Were there patterns?

Teacher Does:
Demonstrates how to cut and assemble The Moon Book into a flipbook.
Model using the sentence frame *the moon gets bigger, the moon gets smaller* as the teacher flips through the



book.

Teacher Does with Student:

Student and teacher use the sentence frame to describe the phases of the moon.

Two Students Do:

Two students take turns describing the phases of the moon while flipping through their books using the sentence frame.

All Students Practice:

All students partner up and demonstrate and narrate their flip books using the sentence frame.

Closing: (2 minutes)

Class comes back together talks about the pattern.

Extension:

If you want to observe the phases of the moon at home I will give you the first page. When you finish bring it back and I will give you the next page.

Assessment:

My Moon Book



1	2	3	4	5	6	7	8
New Moon	Waxing Crescent	First Quarter	Waxing Gibbous	Full Moon	Waning Gibbous	Third Quarter	Waning Crescent

Moon Phase Flip Books

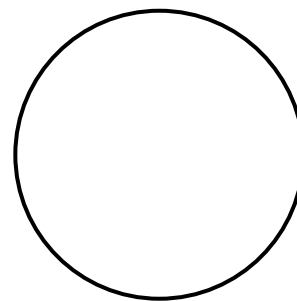
1. Cut apart the cards on the dotted line.
2. Stack in order with the earliest date on the bottom of the pile and the most recent date at the top of the pile.
3. Make sure the cards are neatly stacked and right-side up.
4. Staple the book along the left side.
5. Flip through the book starting with the back card.
6. Make a pocket in the Moon Journal to store the

Flip Book.

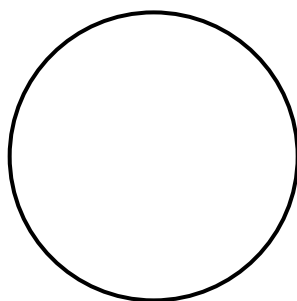




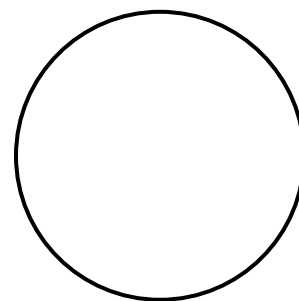
My Moon Book



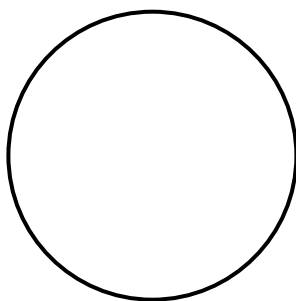
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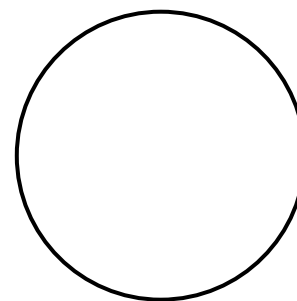
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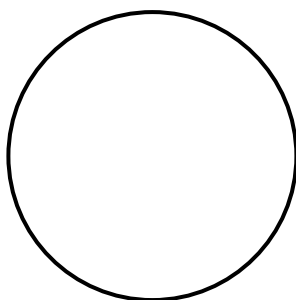
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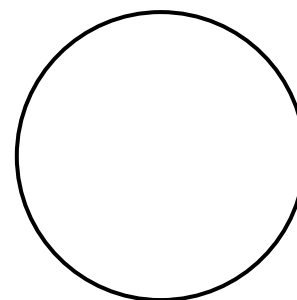
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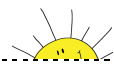


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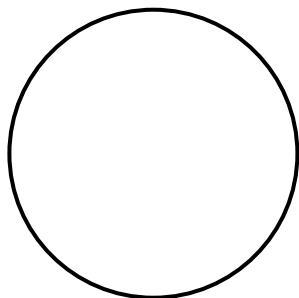


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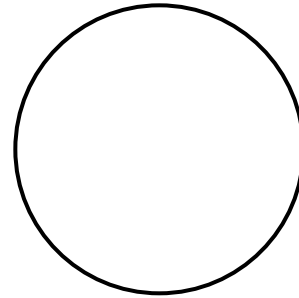




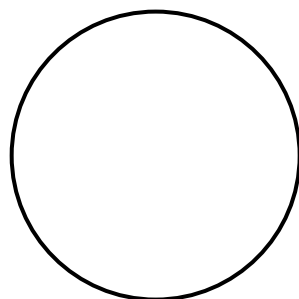
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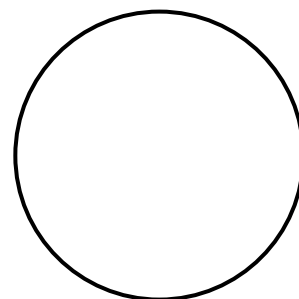
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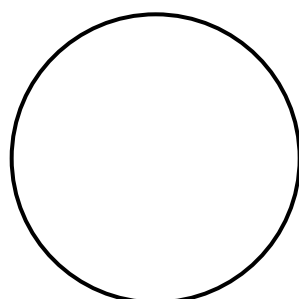
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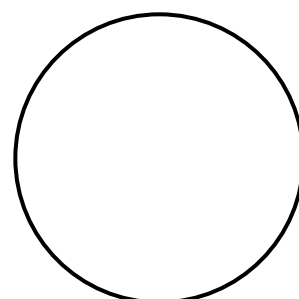
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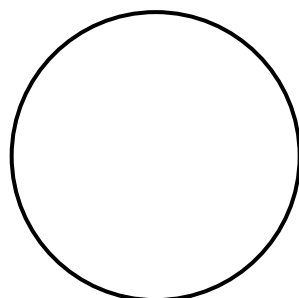
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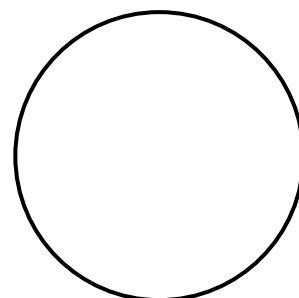
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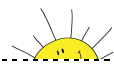


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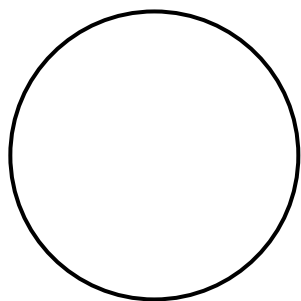


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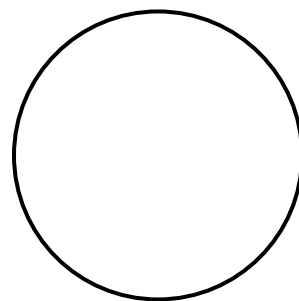




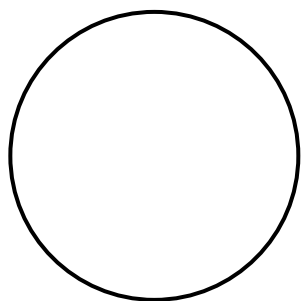
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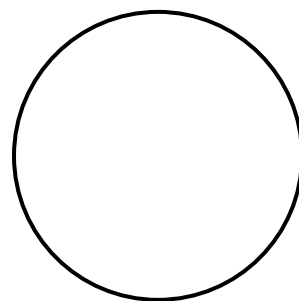
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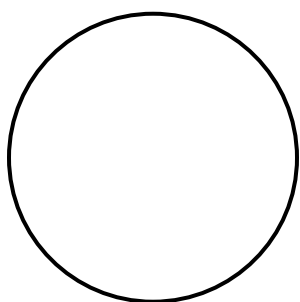
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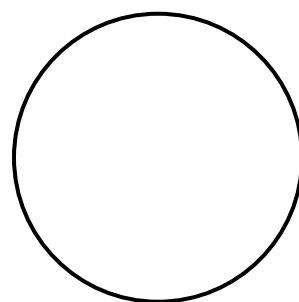
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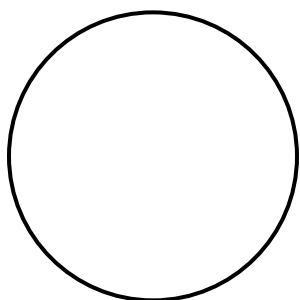
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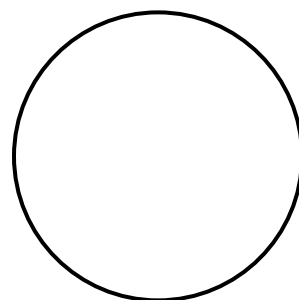
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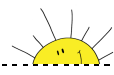


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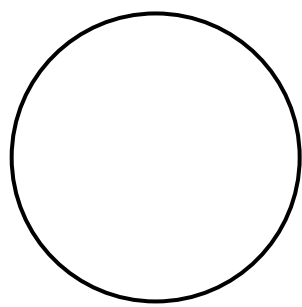


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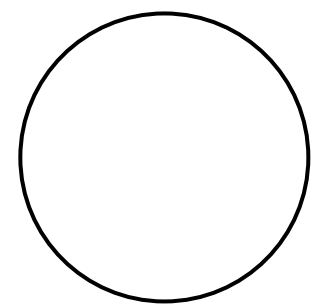




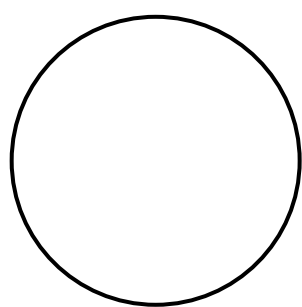
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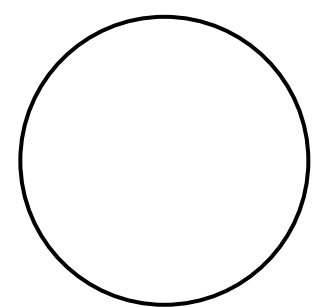
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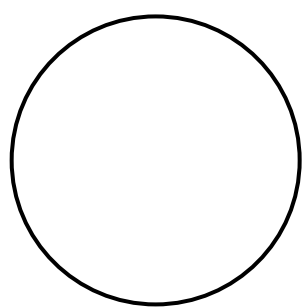
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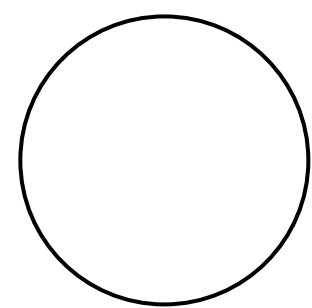
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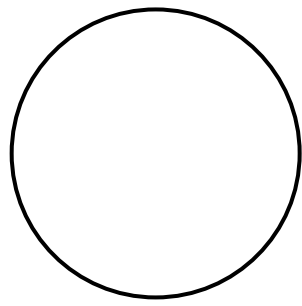
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