

World Language – STEM MODULE COVERSHEET

Different “Faces” of the Moon

月亮的不同月相

Target Language: Chinese	Grade Level: 1
Proficiency Level: Junior Novice Low – Junior Novice Mid	
Context and Storyline: <p>The teacher begins this module by reading Eric Carle’s book, “Papa, Please Get the Moon for Me.” As the children access this piece of literature and learn key words and expressions in the book, they become motivated to explore the changing phases of the moon and the moon’s relationship to the sun and the earth.</p> <p>The teacher will guide children to understand the phases of the moon and help them figure out why the moon seems to look different to us at different times. The lessons will guide students through various hands-on experiment and activities, including a light bulb and a ball, and a cookie project. In the process, especially through their own observations of the moon, children will obtain facts about the phases of the moon, and learn how to make observations and discern patterns of natural objects in the sky. At the end, besides making their own science journal about their learning experiences, students will go back to the Carle book and identify different phases of the moon during the story. They will also reflect upon their own learning experience throughout this module.</p> <p>*爸爸，我要月亮 is used with permission from Eric Carle Studios.</p>	
Enduring Understanding: Students will understand that objects may appear to be different than they really are. We need to investigate before we can draw a conclusion.	
Essential Questions: What does the moon look like? Why does the moon look different at different times?	
Module Duration and Lessons: Five 30-minute lessons Depending on the length and frequency of classes per week, we suggest the five lessons in this module could be taught during a period of three to five weeks. On the average, each lesson may be taught over a week, with 30-minute classes, three to five times per week. Lesson 1 –爸爸，我要月亮 Lesson 2 –这就是为什么月亮看起来不一样 Lesson 3 –如果月亮是饼干 Lesson 4 –我們看到的月亮 在天上 Lesson 5 –我的月亮的故事	

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Standards Targeted	
5C – World Language Standards	5E – STEM Standards
<p>Communication</p> <ul style="list-style-type: none"> Students engage in exchanges about familiar and personal topics in the present, past and future in the target language (1.3 B) <p>Culture</p> <ul style="list-style-type: none"> Students identify and describe practices and perspectives of the cultures studied (2.1A) Describe and participate in school-based cultural activities such as games, songs, and holiday celebrations, which are representative of the cultures studied (2.1Ab) <p>Connections (sample below)</p> <ul style="list-style-type: none"> Students access new information and reinforce existing knowledge of other content areas through the target language (3.1A) 	<p>NGSS</p> <p>1.PC Patterns and Cycles</p> <p>Students who demonstrate understanding can:</p> <ol style="list-style-type: none"> Investigate and compare how some natural events occur quickly and other natural events occur slowly. Record and share observations about how some events have cycles; whereas, other events have a clear beginning and end. Obtain information and share observations to determine simple patterns of natural objects in the sky. Obtain information and communicate that there are tools that allow people to see more objects in the sky and in greater detail. <p>Math Common Core</p> <ul style="list-style-type: none"> G.3 Partition circles and rectangles into two or four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Knowledge: Students will know...	Skills: Students can...
<p>Vocabulary (both linguistic and content areas)</p> <p style="padding-left: 20px;">天空，太阳，地球，月亮</p> <p>Identify –</p> <p style="padding-left: 20px;">月相：</p> <p style="padding-left: 20px;">新月，上弦月，满月，下弦月</p> <p style="padding-left: 20px;">形状 - 圆形，半圆</p>	<ul style="list-style-type: none"> Identify and describe four phases of the moon. Express why the moon seems to change shape. Sequence the cyclic pattern of the four moon phases learned.

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<p>阳光，点亮 变化，不同的</p> <p>Expressions and patterns</p> <p>Sequence – 第一，下，然后，最后 更大，更小, 体积 黑，明亮 右，左</p>	<ul style="list-style-type: none"> • Make simple statements in TL. • Ask and answer simple questions in TL.
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Performance Assessment
Interpretive and Presentational Task
<p>Students create and read their own version of Carle’s book. Students walk around to view each other’s books. Each student will select another student’s book to read to the class.</p>
Interpretive Task
<p>My Science Journal Folder: They will develop their own mini-books based on the prompt from each station. Students’ Science Journals will be on display. Students will do a gallery walk and look at all books. When the time is up for gallery walk, they will identify the book they are assigned to review.</p>
Interpersonal Task
<p>The class will be divided into two groups – Group A: the authors and Group B: the reporters. Members of Group B will interview the author of the science journals. Then the roles are switched, and members of Group B are the authors and will be interviewed by members of Group A. Each interview will be conducted using prompts.</p>
Presentational Task
<p>Working in pairs, students will report on the scientists and the journals. They will talk about the scientists’ evaluation of their work, as well as their own comments about the scientists’ work.</p>

Materials/Resources
<p>Materials:</p> <ul style="list-style-type: none"> ○ Laptop/computer ○ LCD projector ○ USB Microphone ○ Speakers ○ Internet access to TeacherTube or video and a DVD player ○ Photos of the different phases of the moon, Worksheet 2a, cut apart (recommend

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- laminating for use in other lessons during this module)
- Photos of Moon, Earth and sun (recommend laminating for use)
- Pocket chart or magnets to hold photos for display
- Moon Phases Poem/Song- need transparency for overhead if there is no document camera
- Photo of empty paper plate for cookie moons
- Photo of paper plate with cookie moons on it. (one for each student for their Journal)
- Paper plates, prepared in advance as seen in Worksheet – with optional 2” Earth in center (one for teacher and one per student)
- Chocolate cookies with white cream filling, preferably miniature-sized, with one chocolate wafer already carefully removed (four per person) or regular chocolate cookie w/a can of frosting.
- Chocolate cookies with white cream filling, regular-sized, with one chocolate wafer already carefully removed (four, for teacher demonstration)
- Poster board pre-labeled with four moon phases in a circle, for placing demonstration cookies into cycle
- Craft stick (one per person)
- Lamp, with shade removed and picture of sun taped to it
- Tape
- Ball (for moon model), with face drawn on one half (suggest taping on a face)
- OR – Softball, with one side marked to indicate one fixed side of the moon
Permanent marker or pen, for drawing face on ball
- Document Camera or scanner, if available, to enlarge Moon Phases Poem/Song, and worksheet
- Paper clips or small plastic zip bags for pre-cut moon phase pictures, if using 2a. cloze version for individual students
- Glue
- Moon Phases calendars
- Colored pencils (yellow, black, gray)
- Printed paper
- Stapler

Resources:

- “Papa. Please Get the Moon for me” translated into target language. Teacher can cut and attach the sentence strips on top of the English version.
- **Worksheet 1a** – “爬，爬，爬，他往上爬”
 - **Worksheet 1b** – “下，下，下，他往下爬”
 - **Worksheet 1c** – “月亮一天天的变大”
 - **Worksheet 1d** – 月亮的月历
 - “Papa, please get the moon for me” <https://www.youtube.com/watch?v=EZE95KKingo>
 - Internet access to DVD and DVD player of Eric Carle’s Moon story
 - Arabic Moon Video and Song <http://www.youtube.com/watch?v=jU1nZq92pxw>
 - Ramadan Moon Video and Song (in English):
<http://www.youtube.com/watch?v=WwQjXWYaYEA>
 - Book – Moon game, by Frank Asch: A story about a little bear playing hide-and-seek with his friends. One of his friends is the moon, who hides behind some clouds, and can’t be found until the clouds move out of the way. This may be used to support the meaning of the words *hide*, and *hidden*. Teacher may find time to explain to students that sometimes

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- we cannot see the moon, even when it is not a New Moon, because of clouds.
- **Worksheet 2a** – 太阳，地球，月亮的相貌 (各阶段的照片)
 - **Worksheet 2b** – 太阳像一个大火球
 - **Worksheet 2c** – 转，转，转
 - **Worksheet 2d** – 转，转，转 Chant - for cloze version, with pre-cut pictures of moon phases.
 - Paper clips or small plastic zip bags for pre-cut moon phase pictures, if using **Worksheet 2d**. cloze version for individual students
 - **Worksheet 3a** – 月亮饼干 – preparing paper moon plate
 - **Worksheet 3b** – 天上的月亮 Chant
 - **Worksheet 3c** – 月亮和我 (cover & content)
 - **Worksheet 4a** – 太阳像一个红色的大火球
 - **Worksheet 4b** – 月亮的月历
 - **Worksheet 4c** – 中文翻译
 - **Worksheet 5a** – 学生的自我评估
 - **Worksheet 5b** – 我学了什么

Note:

Audio tape the story so students can read the book independently and repeat after it, similar to “read aloud activities” for elementary students. We recommend that teachers establish a recording station in the classroom for the rest of the module. When appropriate, find time during Lessons 2-4 so students can review and practice the language.

Extension:

In Lessons 3 and 4, find time for groups of students to record their own reading of the book. Share this with the class for assessment and fun.

STEM Background for teachers: (identified and provided by a STEM teacher/resource person)

The Solar System

Our solar system includes the sun, planets and their moons, comets, asteroids, and meteoroids. Beyond our solar system are stars and galaxies. Space stretches beyond our solar system for at least 100 sextillion kilometers (numeral 1 followed by 23 zeros)!

The sun is a star at the center of our solar system. It is made of fiery hydrogen gas. It produces heat and light. Its heat and light travel 150 million kilometers through space to Earth. Everything in our solar system revolves around the sun and everything is kept in orbit by the pull of the sun’s gravity. The sun rotates on its axis and completes one rotation in 25 days. One rotation of the earth around the sun takes 24 hours.

Earth’s Rotation

Earth rotates on its axis every 24 hours. Earth’s axis is an imaginary line that passes through the center of the earth from the North Pole to the South Pole.

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One day equals one rotation of Earth. Half of the earth faces the sun; this half is daytime. The other half of the earth faces away from the sun; this half is nighttime.

Earth rotates from west to east. This makes the sun, moon, and stars look like they are moving from east to west. The sun, moon, and stars rise in the east and set in the west.

Daylight

In the Northern Hemisphere, the shortest amount of daylight is on the first day of winter (December 21). The longest amount of daylight is on the first day of summer (June 21). Places farthest from the equator are in daylight the longest. However, in the Southern Hemisphere, places farthest from the equator are in darkness the longest. On June 21, the area around the North Pole has 24 hours of daylight and the area around the South Pole has 24 hours of darkness. At the equator, daylight and darkness are about equal.

The length of daylight changes during the year. From June 21 to December 21, the days grow shorter and from December 21 to June 21, the days grow longer. This is caused by the Earth’s tilt on its axis and its revolution around the sun.

Moon Phases

From night to night, the shape of the moon looks different. These changes are called the moon’s phases. The moon is shaped like a golf ball; it never changes its shape. The moon does not have any light of its own. We see the part of the moon that reflects light from the sun to Earth, and this changes with the movement of the moon. The moon rotates on its axis and revolves around the earth. One rotation and one revolution take the same amount of time, about 28 days.

The shape of the part of the moon that reflects light depends on two things, the moon’s position in its orbit around Earth and the position of the sun. The same phase of the moon repeats about every 27 $\frac{3}{4}$ to 29 $\frac{1}{2}$ days. In some phases, you can see the moon during part of the day.

First quarter – 7 days before a full moon and the moon looks like a half circle

Full moon – moon look like a full circle

Last quarter – 7 days after a full moon and the moon looks like a half circle

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Lesson 1- Papa, Please Get the Moon for Me

爸爸，我要月亮

Lesson 1 of 5 -爸爸，我要月亮		Duration: 30 Minutes
<i>Objectives</i>	<p>I Can:</p> <p>Oral language:</p> <ul style="list-style-type: none">• House: house, window, door, ladder 房子，窗，门，梯子 <p>Literacy:</p> <ul style="list-style-type: none">• Recognize the words: 窗，门，梯子，月亮• Read aloud with teacher <p>STEM and Other Subject Areas:</p> <p>Students who demonstrate understanding can:</p> <ol style="list-style-type: none">a. Investigate and compare how some natural events occur quickly and other natural events occur slowly.b. Record and share observations about how some events have cycles; whereas, other events have a clear beginning and end.	
<i>Vocabulary and Expressions</i>	<p>Previous Learned:</p> <p>Family members:爸爸，妈妈，女儿，儿子，猫/狗</p> <p>Directional words: 上，下</p> <p>Nature: 星星，太阳，月亮</p> <p>Content obligatory language:</p> <p>梯子，一起玩, 跳舞,</p> <p>Content compatible language:</p> <p>大，小，不见</p> <p>首先，然后，终于，跟</p>	
<i>Materials/ Resources</i>	<ul style="list-style-type: none">○ laptop○ Video camera○ LCD projector○ speakers○ Internet access to YouTube or video of "Papa. Please Get the Moon for me"○ “Papa. Please Get the Moon for me” in target language. If necessary the teacher can cut and fasten translated sentence strips on top of the English version.○ Worksheet 1a – 爬，爬，爬，他往上爬○ Worksheet 1b – 下，下，下，他往下爬○ Worksheet 1c – 月亮一天天的变大○ Worksheet 1d -月亮的月历	

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	<p>Note: If you do not have internet access, a laptop, LCD projector (with connector cables), and speakers, you may download and burn a copy of the YouTube video prior to class on a DVD and bring a DVD player (with some way to display the DVD) into the classroom. There are many videos of this story; you may choose one that you prefer instead of the one suggested here.</p>
<p><i>Lesson Storyline and Core Text</i></p>	<p>Teacher begins this module by reading Eric Carle’s book, “Papa, Please Get the Moon for Me.” As the children access this piece of literature during the rest of this lesson, and as they learn key words and expressions in the book, they become motivated to explore the changing phases of the moon and the moon’s relationship to the sun and the earth.</p> <p style="text-align: center;">同学们，我们一起来看看这本书。</p> <p style="text-align: center;">爸爸，我要月亮。 爸爸拿了一把好长好长的梯子， 放在一座好高好高的山上， 爬，爬，爬，他往上爬 最后，爸爸爬到月亮那儿。 爸爸说：我的女儿小茉莉想要跟你玩， 可是你太大了！ 月亮说：我每天晚上都会变小一点儿， 等到我大小合适的时候，你就可以把我带回家。 当月亮的大小刚好合适的时候，爸爸就把月亮带回家了。</p> <p style="text-align: center;">“这儿”，爸爸说：“我把月亮带回来给你了” 小茉莉和月亮一起跳舞 她有时抱着月亮，有时把它丢到空中。 可是月亮越来越小，最后月亮不见了。 有一天晚上， 小茉莉看到天上出现了一个小小的月亮。 月亮一天天的变大了。。。</p>

<p>Key Elements</p>	<p>Lesson 1 Procedures – <i>Papa, please get the moon for me</i></p>
<p><i>Engagement</i></p> <ul style="list-style-type: none"> ● <i>Object, event or question used to engage students.</i> ● <i>Connections</i> 	<p>Read Carle’s book; What does Monica want?</p> <p>T: 早，同学们，我们一起来看看这本书。</p> <p>Teacher shows the book and asks students to predict what the book is about.</p> <p>T: 你看到什么？我们来一起看看。(Pointing)</p>

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<p><i>facilitated between what students know and can do</i></p>	<p>这是一个关于一个。。。 (Wait for student response. If they do not provide the word, then ask) 这是太阳还是月亮？ 这是一个... (Wait and prompt, if necessary.) 这是个女孩，还是个男孩？他们住在。。。 (Wait and prompt, if necessary.) 她住在一个房子里，这是一个关于一个小女孩的故事。 她有一个宠物，你们谁知道是只狗还是猫？... (Wait and prompt, if necessary.) 你们谁知道这个故事里小女孩的名字？让我们一起来看看。</p> <p>Students respond.</p> <p>Note: The purpose of this activity is to provide the necessary vocabulary to students while activating their prior knowledge and building their interest. It doesn't have to be very extensive.</p> <p>Teacher reads the story (TL).</p> <p>T: 这个故事有一个英文的录像带，你们想不想看？ (This video can be purchased or teacher also can read the book to students)</p> <p>Note to Teacher:</p> <p>About using English and the target language on the first day of this module: Our philosophy is to tap into students' bi-literacy as a resource. By exposing students with the English video first, we prime them to building or activating their prior knowledge. Throughout the module, only the target language (TL) is used.</p> <p>T: 现在 we 再继续月亮的故事 (Read the story with animation and interpretation, while pointing at pictures.)</p> <p>Ask simple comprehension questions:</p> <ul style="list-style-type: none"> • 故事里的人是谁？ • 小女孩的名字是什么？ • 她有宠物吗？ • 她有什么样的宠物？ • 小茉莉想要什么？ <p>Closing Routine (to be used every day) :</p> <p>Say thank you, goodbye to the teacher and fellow students.</p> <p>Adding different things daily, based on the new vocabulary or concepts introduced that day. For this day, lead the students to say good-bye to Monica, papa, cat, and the moon.</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> • <i>Objects and phenomena are</i> 	<p>What does Papa do?</p> <p>Use the book up to the page that reads, “Up and up and up, he climb.</p> <p>T: (Pulls out the Papa book which already has TL strips covering the English</p>

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<p><i>explored.</i></p> <ul style="list-style-type: none">• <i>Hands-on activities, with guidance.</i>	<p>in the book and reads the story once in the TL up to the page that states, “爬，爬，爬，他往上爬。 Then go back to the first page and engage students in answering comprehension questions page by page. Point at the pictures while asking questions.)</p> <p>小茉莉想跟月亮做什么？ 小茉莉跟她的父亲要什么？ 小茉莉的父亲有一个很长的梯子，他用梯子做什么？ 小茉莉的父亲把梯子拿去哪儿了呢？谁知道梯子去哪儿了？ 对了，他去了一个好高高高的山！</p> <p>Text in the book up to this page: Worksheet 1a</p> <p>小茉莉上床睡觉时，往窗外一看，看到了月亮。 月亮看起来是那么的近。 我希望我能和月亮一起玩，小茉莉想着。 但不管她怎么伸长她的手，她还是碰不到月亮。 小茉莉对爸爸说，“爸爸，请把月亮拿给我” 爸爸拿了一把好长好长的梯子， 放在一座好高高高的山上， 爬，爬，爬，他往上爬</p> <p>As you read the book, lead students in pantomiming the actions in the story. Afterwards read the text again, with the entire class joining in, especially by supplying key words in the target language.</p> <p>Lead students to recite (with motion)::</p> <p>我希望我能和月亮一起玩。 但不管我怎么伸长我的手，还是碰不到月亮。 爸爸，请把月亮拿给我。</p> <p>T: Have you ever looked at the moon, like Monica did? What did the moon look like? Let’s all draw a picture of the moon. 你们有没有像莫尼卡一样看过窗外的月亮？月亮是什么样子？我们来画我们看过的月亮。(Have students draw pictures of the moon and have them hold them up for everyone to see. Those pictures will likely look different from one another.) 大家画的月亮看起来都不太一样，我们看的是同一个月亮吗？让我们来看看。</p> <p>T: (Distribute Moon Calendar to students, Worksheet 1d) 同学们，今天回家的作业是要你们画今天晚上天上的月亮。我先画一个给你们看。</p> <p>T: 昨天晚上的月亮像这个样子 (Teacher models by drawing a shape of the moon on the calendar. Repeat the modeling a few times so students understand how to complete the assignment. Teacher can check online</p>

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	<p>moon calendar or looked at moon on the previous night.)</p> <p>T: 每天晚上我们把看到的月亮画下来。我们上课时，把我们看到的月亮画在我们班上的大日历上。我们一起来看月亮的变化，好不好？</p> <p>Note: Have students fill in every day of their calendars, based on class discussion. For days when they actually see the moon themselves, ask them to put a star in the corner of that day of the calendar, so they can keep track of how many times they saw the moon.</p> <p>Closing: Lead the students in the refrain of what Monica says in the book (with motion):</p> <p style="padding-left: 40px;">我希望我能和月亮一起玩。 但不管我怎么伸长我的手，还是碰不到月亮。 爸爸，请把月亮拿给我。</p>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> ● <i>Students explain their understanding of concepts and processes.</i> ● <i>New concepts and skills are introduced as conceptual clarity and cohesion are sought.</i> 	<p>What did you see last night? Read and discuss Carle’s book</p> <p>T: (After daily routines, greetings, calendar, weather, etc.)你们谁昨晚看到月亮？有没有画下来？可不可以给大家你画的月亮？</p> <p>Students show each other what they drew the night before.</p> <p>T: (Walks around the classroom, making comments such as the following) 很漂亮，(or “非常好”), 昨天晚上的月亮看起来好大 (or 很小, 胖, 瘦, 半圆, <u>Student’s name</u>), 你的呢？</p> <p>T: (Showing Internet picture of the moon) 我昨天晚上没有看到月亮，但是我从网上找到这张昨天晚上月亮的图片，是不是和你的很像？</p> <p>Students comment.</p> <p>T: 我们把它画在我们的日历上。(Either the teacher draws or invites a student to draw it on the class calendar poster.)</p> <p>T: 现在，我们再来看故事。</p> <p>Teacher leads students in reading the passage up to “爬，爬，爬，他往上爬。”</p> <p>Teacher continues to read the following page:</p> <p style="padding-left: 40px;">最后，爸爸爬到月亮那儿。 爸爸说：我女儿小茉莉想要跟你一起玩，可是你太大了。 月亮说：我每天会变小一点儿， 等我大小合适的时候，你就可以把我带回家了。 月亮真的一天天的变小。</p>

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Key Elements	Lesson 1 Procedures – <i>Papa, please get the moon for me</i>
	<p>当月亮的大小刚好的时候，爸爸把月亮带回家了。 下，下，下，他往下爬。</p> <p>Teacher asks and students answer comprehension questions.</p> <p>小茉莉想要什么？ 小茉莉要爸爸做什么？ 小茉莉的爸爸跟月亮说什么？ 小茉莉的爸爸为什么不能马上带月亮回家？ 月亮跟小茉莉的爸爸说什么？ 爸爸把带月亮回家了吗？</p> <p>Follow the procedures for reading and comprehending the story suggested in Explanation. Additionally, lead students to imitate the following passage from the story, modeled in short phrases:</p> <p>我的女儿小茉莉想要跟你一起玩， 可是你太大了。 月亮说：我每天会变得小一点儿， 等到我的大小合适的时候，你就可以把我带回家了。 月亮真的一天天的变小。</p> <p>T: 今天我们学到这儿，明天我们继续月亮的故事 (At the end, remind students about their homework assignment – Moon Calendar homework.) 同学们，别忘了回家作业一画今天晚上的月亮。</p> <p>Extension: Follow similar closing procedures as the previous day. Recite the dialogue from the story.</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> • <i>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</i> 	<p>The Moon?</p> <p>Do the calendar and moon routine. Make sure to do the class calendar daily. T: 现在，我们再来看月亮的故事。</p> <p>Teacher leads students in reading the passage up to “Down, down, and down he climbed.”</p> <p>Teacher continues reading the following section –</p> <p>“这儿”，爸爸说：“我把月亮带给你” 小茉莉和月亮一起跳舞 她抱着月亮，把它丢到空中。 和月亮一起玩 但是月亮越来越小，越来越小，最后月亮不见了。 有一天晚上， 小茉莉看到天上出现了一个小小片的月亮。</p>

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月亮的不同月相

Key Elements	Lesson 1 Procedures – <i>Papa, please get the moon for me</i>
	<p style="text-align: center;">月亮一天天的变大</p> <p>Ask and lead students answer comprehension questions, including learning the text from the book:</p> <p style="padding-left: 40px;">“我把月亮带给你” (in Papa’s voice). “谢谢，爸爸” (in Monica’s voice). 小茉莉和月亮一起跳舞 她抱着月亮，把它丢到空气中。 但月亮越来越小，最后月亮不见了。 有一天晚上，一片小小片的月亮又出现在空中了。 月亮一天天的变大了。</p> <p>Note: If there is time, prepare a gift pack and have students practice gift giving and taking by using the language and gesture described in the story and chant.</p> <p>T: (At the end, remind students about their homework assignment – Moon Calendar homework.)别忘了画今天晚上月亮的形状。</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> ● <i>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</i> 	<p>For students who are not yet independent readers:</p> <p>Let’s read and perform the story: Teacher guides students in re-reading the story in its entirety. Divide the class into three groups. Distribute Worksheet 1a - 1c to each child. Assign one of the worksheets to each group to act out as it is read. Read the story line by line, and the class repeats, and the designated group pantomimes the lines in the story.</p> <p>For students who are already readers:</p> <p>Let’s Read and Perform the Story Together Teacher guides students in re-reading the story in its entirety. Divide the class into groups. Distribute Worksheet 1a - 1c, one to each group. The group will read the section as assigned from the worksheet. Each group will volunteer to read its section to the class. In this way, three groups will complete the reading of the entire book.</p> <p>Note: Provide assistance to any group that needs help. Make sure they can read the story accurately. At the end, remind students about their homework assignment – Moon Calendar homework.</p>

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Teacher Reflection Lesson 1- <i>Papa, please get the moon for me</i>	
<i>What worked well?</i>	
<i>What did not work well?</i>	
<i>What would I do differently?</i>	
<i>Other comments or notes</i>	

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Lesson 2 – This is How the Moon Looks at Different Times

这是为什么月亮看起来不一样

Lesson 2 of 5 – <i>This is How the Moon Looks at Different Times</i>		Duration: 30 Minutes
Objectives	<p>I Can:</p> <p>Oral language:</p> <ul style="list-style-type: none"> • 月相：新月，上弦月，满月，下弦月 • 词汇：月亮，太阳，地球，阳光，亮，暗 • 打开，形状，变化，不同的 <p>Literacy:</p> <ul style="list-style-type: none"> • Identify the written words for the 4 four moon phase: 新月，上弦月，满月，下弦月 Point to the words in the Moon Phases Chant. • (Track the written words while reading the chant chorally with the class.) <p>STEM and Other Subject Areas:</p> <ul style="list-style-type: none"> • Name and identify the 月亮，太阳，地球. • Tell the different moon phases that I can see lighted by the ‘sun’ on the moon model. • Tell that Earth and the moon both turn. Identify the bright side and a dark side of the moon model. • Partition circles and rectangles into two or four equal shares, describe the shares using the worlds halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. 	
<i>Vocabulary and Expressions</i>	<p>Content obligatory language:</p> <p>月相: 新月，上弦月，满月，下弦月 太阳，地球，阳光，照亮，光明，黑，打开，形状，变化，不同的</p> <p>Content compatible language:</p> <p>真实的，火，看起来，头，实验，志愿者 圈，半圈，有多少，变化，复习，哪一组</p>	
<i>Materials/Resources</i>	<ul style="list-style-type: none"> ○ Computer, LCD projector, USB microphones and speakers ○ Earth & Sun photos (printed in color and laminated, if possible) ○ Lamp, with shade removed and picture of sun taped to it ○ Tape ○ Ball (for moon model), with face drawn on one half ○ Permanent marker or pen, for drawing face on ball ○ Turn! Turn! Chant complete version (one per person) 	

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Lesson 2 of 5 – <i>This is How the Moon Looks at Different Times</i>	Duration: 30 Minutes
	<ul style="list-style-type: none">○ Use scanner or projector, if available, to enlarge Sun, Earth, Moon phases photos.<ul style="list-style-type: none">- OR – Overhead Projector and teacher-made transparency of worksheet 2a. Turn! Turn! Chant- OR – Teacher-created large poster of worksheet 2a. Turn! Turn! Chant <p>Worksheets:</p> <ul style="list-style-type: none">○ Worksheet 2a – 太阳，地球，各种月相的照片○ Worksheet 2b – 太阳像一个火球○ Worksheet 2c – 转，转，转○ Worksheet 2d – 转，转，转 - for cloze version, with pre-cut pictures of moon phases.○ Paper clips or small plastic zip bags for pre-cut moon phase pictures, if using Worksheet 2d. cloze version for individual students○ Glue
<i>Lesson Storyline and Core Text</i>	<p>The teacher begins this lesson by reviewing Eric Carle’s book, “Papa, please get the moon for me.” Continue with a hands-on experiment involving a light bulb, a student volunteer and a ball or an orange. Guide and inform students about the relationship between the moon, earth, and sun through the experiment. Students will understand that objects may be different than how they appear to the naked eye. Students will understand the need to investigate before a conclusion can be drawn. In this lesson, students will not only learn the four basic moon phases but also why the moon’s appearance changes.</p> <p><i>Core Text:</i></p> <p>太阳像一个火球， 它给我们热量和阳光， 当我们看到太阳时， 天空是亮的，这是白天。 当我们看不到太阳时， 天空是黑的，这是晚上。 我们在晚上可以看到月亮。</p> <p>这个灯是太阳。 这个球是月亮 我们转一转，球跟着我们转。 转，转，转，月亮有4个月相， 新月，上弦月，满月，下弦月。</p>

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Key Elements	Lesson 2 Procedures – <i>This is How the Moon Looks at Different Times</i>
<p><i>Engagement</i></p> <ul style="list-style-type: none"> ● <i>Object, event or question used to engage students.</i> ● <i>Connections facilitated between what students know and can do</i> 	<p>The Facts about the Sun, Moon and Earth; Review the Carle’s Book</p> <p>T: 让我们一起来念“爸爸，我要月亮”这本书。谁要跟我一起念？</p> <p>Invite different students to read with teacher.</p> <p>T: (differentiating fantasy from reality.) 你觉得小茉莉真的可以和月亮一起玩吗？这可能吗？爸爸会帮小茉莉拿到月亮吗？为什么不可能？月亮在哪里？</p> <p>Students respond.</p> <p>T: 月亮会越来越小吗？月亮也会越来越大吗？</p> <p>T: (Show pictures of the sun, the moon, and the earth. Point at the moon) 同学们，这是月亮还是太阳？ (Point at the pictures randomly to introduce the vocabulary for each until students understand.)</p> <p>T: (Pointing at or showing the picture of the sun) 太阳像一个火球，它给我们热量和阳光，当我们看到太阳时，白天时天空明亮的，这是白天。(Putting the hand over the eyebrows and blinking the eyes as if the sun is too bright. Also fan with the hand as if for relief from the heat. Gesture students to follow the motions and repeat the utterances.) 当我们看不到太阳时，天空是黑的，这是晚上。我们可以在晚上看到月亮。</p> <p>T: (Pointing at the picture of the earth) 我们住在地球。我们需要从太阳那儿得到热量和阳光 (Showing the motion of waking up and getting up.) 晚上时我们看不到太阳 (Yawning and putting hands together as if to sleep.)</p> <p>T: (Showing the picture of the moon) 小茉莉看到月亮，是白天，还是晚上？</p> <p>Teach the chant (Worksheet 2b) one line at a time, having students repeat after the teacher, in rhythm.</p> <p style="text-align: center;">太阳像一个火球， 它给我们热量和阳光， 当我们看到太阳时， 天空是亮的，这是白天。 当我们看不到太阳时， 天空是黑的，这是晚上。 我们在晚上可以看到月亮。</p> <p>Do the closing routine. Remind students of their moon watching.</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> ● <i>Objects and phenomena are</i> 	<p>Relationship among the sun, the moon, and the earth</p> <p>After the opening routine, begin by reminding students of the story, perhaps</p>

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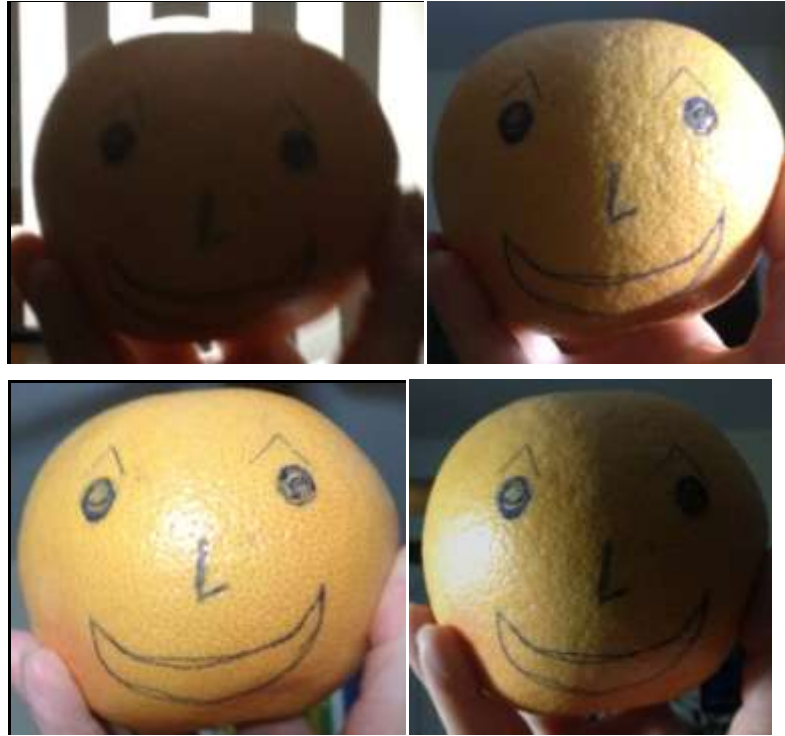
月亮的不同月相

<p><i>explored.</i></p> <ul style="list-style-type: none">• <i>Hands-on activities, with guidance.</i>	<p>asking:</p> <p>月亮怎么了？ 小茉莉跟月亮一起玩吗？ 它变得越来越小吗？ 月亮真的变得更小和更大的吗？ 这是一本关于月亮还是太阳的书？ 月亮变来变去，是不是很有趣？ 很多人都喜欢看月亮的月相吗？ 我们要学月亮为什么有四个月相。</p> <p>Show four pictures of the phases of the moon. Tell students what they are called: New Moon, First Quarter Moon, Third Quarter Moon, and Full Moon. Put the pictures up on the board in the order they appear. Have students point to pictures as you name them, and then invite volunteers to name phases as another student points to them.</p> <p>T: 我们来看看月亮的不同形状。(Bring out a lamp and a ball. Showing the lamp) 你看看我手上是什么？这是一个灯。</p> <p>T: 今天这个灯是太阳。(Ceremoniously tape a picture of the sun on the lamp.)大家跟太阳说“好”。</p> <p>Ss: 你好，太阳。</p> <p>T: 这个灯是月亮。(Ceremoniously tape a small picture of the moon on the ball.) 大家跟月亮说“好”。</p> <p>Ss: 你好，月亮。</p> <p>T: 我的头是地球 (Ceremoniously tape a picture of the earth on teacher’s own forehead.) 大家跟地球说好。</p> <p>Ss: 你好，地球。</p> <p>T: 我们现在要看看月亮，太阳和地球的运行。</p> <p>T: (Teacher dims or turns off lights in the room. Try to make the room as dark as possible. Turn on the “sun” lamp.) 亮光是太阳带来的。你们说看看，太阳带给我们亮的或是黑的？</p> <p>Ss: 太阳带来亮光。</p> <p>T: (Turns off lamp for a moment.)是的，太阳为我们带来阳光，如果没有太阳，没有阳光，没有光亮，那世界会变成怎么样？</p> <p>Ss: 黑的。</p> <p>T: (Turn the lamp back on.) 现在，我们又看到阳光了。</p>
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T: 现在，让我们做一个实验。你还记得我是谁？我是太阳或地球？
(Pointing the picture of the earth on the forehead.)

Ss: 地球。

T: 我需要一名志愿者。Select a volunteering student, Michael (or any volunteer's name).

T: Michael, 你的头是地球。(Put the picture of the earth from Teachers' forehead to Michael's forehead.)

T: Michael, 你拿的球是月亮。对着灯，把手臂伸直，提高一点。记住，你的头是地球，球是月亮 (Be sure the child holds the ball slightly above her/his head, so the head does not cast a shadow on the ball.)

T: (Turn to class) 同学们，谁知道，Michael 的头是什么？Michael 的手有什么？是太阳，月亮，还是地球。

T: 哦，我忘了，地球一面总是朝着月亮。所以，让我们把那一方的球，画上个脸。(Draw a happy face on the ball.) 记得，Michael, 当你转时，记得总是朝着同一面转。

T: (Motion Michael to turn and stop, about a quarter turn) 现在我们看看月亮会怎么样？

Call on a few students to stand behind Michael.

T: 同学们，你看到了什么？太阳照的光，使月亮有不同的相貌，有新月/上弦月/满月/下弦月？

Students respond.

Continue the turn and identification of the phases of the moon. Call on

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different students to be the volunteer and identifiers.

For example:

T: 你看！我可以看到太阳的光照在月亮上！太阳使这一侧的月亮明亮的。它看起来就像一个圆环，像满月！你可以看到满月吗？

Ss: 我看到满月

T: 很好，满月是亮的还是黑的

Ss: 满月很亮

T: 现在我们再转一下

T: 看，我们看到什么？我们可以看到月亮很亮。月亮看起来像个半圆。这时候的月相就叫做下弦月。（show two pictures）这是满月还是下弦月？

Ss: (volunteering) 下弦月

T: 现在我们再转一下。

T: 我们可以看到太阳照到月亮的部分吗？不行，我们看不到。亮的部分在另一面，可是我们看不到。我们看到的这面，月亮是黑的。所以这个时候的月相就叫新月。（Show pictures of various phases of the moon, including the new moon）这个月相叫什么？

Ss: (volunteering) 新月。

T: 新月是黑的还是亮的？

Ss: 黑的。

T: 很好，太阳照不到新月的这一面，所以新月是黑的。

Ss: 新月是黑的。

T: 现在我们再转一下

T: 我看到太阳又找到月亮了，我看到半圆月。谁能告诉我这叫什么？

Ss: (volunteering) 上弦月

T: 上弦月是圆形还是半月形？

Ss: 上弦月是半月形。

T: 答对了，上弦月看起来是半月形。所以今天我们学了月亮的四个月相。谁记得哪四个月相？

Ss: respond

Do the closing routine and remind students of the moon calendar work.

T: 同学们，我们学了月相。别忘了今晚看看天空的月亮是什么形状。

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Different “Faces” of the Moon





月亮的不同月相

<p><i>Explanation</i></p> <ul style="list-style-type: none">• Students explain their understanding of concepts and processes.• New concepts and skills are introduced as conceptual clarity and cohesion are sought.	<p>Moon Phases Chant - Turn! Turn! What Can You See?</p> <p>Do the opening routine. Ask students if they can figure out which phase the moon was, also using the picture from the Internet as part of the discussion.</p> <p>Note: Although the moon phases cycle continuously, astronomers consider the New Moon to mark the beginning of the moon cycle which lasts between 27 1/3 to 29 1/2 days</p> <p>Get a calendar and post several months on a wall or the white board of the classroom. Cut several sets of phases of the moon: New Moon, First Quarter Moon, Last Quarter Moon, and the Full Moon. (Note: many calendars already show the phases of the moon, so it should be possible to use an existing calendar for this activity.)</p> <p>Start with several months’ calendar that shows three moon cycles: http://www.moonconnection.com/moon_phases_calendar.phtml.</p> <p>T: (Invite a student to identify where the New Moon is on a calendar.) 同学们，现在我们知道了月亮是怎么改变它的月相的。让我们再来看看哪一个是新月？</p> <p>T: 太好了。让我们来算算从一个新月到下一个新月要多少天。</p> <p>T: (Count with the students, starting from a New Moon) 1, 2, 3... 28. 很好，差不多要多少天？（二十八天）</p> <p>Note: Record one Moon Phase. Repeat with other months. Students will see that each moon phase is slightly different, but it’s between 27-29 days.</p> <p>T: 好，现在我们知道，当月球绕地球一次，它大概要 28 天或 29 天。月亮大概每 7 天会有一个新的月相。</p> <p>Note: Repeat the process starting with the first quarter moon. Have them first predict how many days there will be from one first quarter moon to the next, and then count them. Then find the number of days between each of the phases. Once this is done, put a couple of blank calendar posters on the white board or a wall. Invite volunteer students to paste pictures of different phases of the moon on the appropriate days. Start with a New Moon.</p> <p>T: 我们来学个月咏 Worksheet 2c</p> <p>Teacher says while making the motion. This is how the chant goes:</p> <p>转，转，转，你看到什么？</p>
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	<div style="text-align: center;">  <p>我们看不到</p> <p>新月</p> <p>因为亮光被遮住了</p> <p>转，转，转，你看到什么？</p> </div> <div style="text-align: center;">  <p>我看到 在看着我</p> <p>上弦月</p> <p>转，转，转，你看到什么？</p> </div> <div style="text-align: center;">  <p>我看到 在看着我</p> <p>满月</p> <p>转，转，转，你看到什么？</p> </div> <div style="text-align: center;">  <p>我看到 在看着我</p> <p>下弦月</p> </div> <p>Note: When students are comfortable with the chant, Teacher may randomly point at a moon phase on the calendar poster, and invite a volunteer student to do the chant for that phase of the moon.</p> <p>Do the closing routine.</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> • <i>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</i> 	<p>How the Moon Looks at Different Times 月亮的不同月相</p> <p>Do the opening routine.</p> <p>T: 我们来复习一下我们学了什么. (Pointing at each of these). 我们用灯/球/我们自己。灯是什么？(The sun and so on.)</p> <p>T: 谁记得我们做什么，让月亮上的光看起来不同？</p> <p>T: (Calls on one or more Ss.)我们做了什么？</p> <p>Ss: 我们转，转，转</p> <p>T: 很好! 我们转! 我们/地球转! 球/月亮也转吗?</p>

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	<p>Ss: 是的，球/月亮跟着 我们/地球转。</p> <p>T: 很好！我们转，球也转。这表示月亮和地球都在转。(Teacher picks up ball, and quickly demonstrates how Earth turned, and also how the moon turned around Earth.)</p> <p>T: 但是，我们看到的月亮，都是同一面，还是不同的一面？(Remind students of the “happy face” if they can’t remember it.)</p> <p>Ss: 同一面。</p> <p>T: 没错，我们总是看到月亮的同一面。当地球和月亮转，阳光会照在地球和月球的不同部分。但是，我们只能看到月亮的同一面，所以，我们看到的一面是亮的话，月亮看起来就是光亮的。如果我们看到的一面是黑暗的，我们看到的就是一个黑暗月亮。这就是为什么月亮有许多月相的原因。</p> <p>T: 你们记不记得有哪四个月相？</p> <p>Ss: 新月，上弦月，满月，下弦月</p> <p>Note: Earth <i>rotates</i> on its axis, and <i>revolves</i> around the sun. The moon also <i>rotates</i> on its axis and <i>revolves</i> around Earth. (Its rotations are in sync with Earth’s rotations, which is why we only see one side of the moon.) For purposes of this demonstration with young children, it is best to keep the explanation simple.</p> <p>T: 让我们一起来学月相。(Repeat the chant with the class, using the motions.)我们组成几个小组，大家来吟唱‘月相咏’。</p> <p>Divide the class into groups of four. Distribute a phase to a student. That student will be responsible for chanting the phase of the moon. Give them a few minutes to practice, and then call on groups to perform.</p> <p>Literacy time: Do the Worksheet 2d. Have students do peer editing. Collect worksheets.</p> <p>Do closing routine.</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> ● <i>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</i> 	<p>Assessment: Students can</p> <ul style="list-style-type: none"> ● Identify and name different phases of the moon ● Tell the relationship among the sun, the moon, and the earth ● Students perform one of the chants they learned <ul style="list-style-type: none"> ➢ The sun is like a ball of fire ➢ Turn! Turn! Chant

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Teacher Reflections on Lesson 2 – <i>This is How the Moon Looks at Different Times</i>	
<i>What worked well?</i>	
<i>What did not work well?</i>	
<i>What would I do differently?</i>	
<i>Other comments or notes</i>	

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Lesson 3 – If the Moon Were Cookies

如果月亮像饼干

Lesson 3 of 5 – <i>If the Moon Were Cookies</i>		Duration: 30 Minutes
<i>Objectives</i>	<p>I can:</p> <p>Oral language:</p> <ul style="list-style-type: none"> • <i>Cookie, week, month, appear</i> <p>Literacy:</p> <ul style="list-style-type: none"> • Label the phases of the Moon on the calendar and find the cycle patterns of the moon phases on the calendar. <p>STEM and Other Subject Areas:</p> <ul style="list-style-type: none"> • Observe moon calendar and name and label the phases of the moon. • Obtain information and communicate that there are tools that allow people to see more objects in the sky and in greater detail. 	
<i>Vocabulary and Expressions</i>	<p><i>Calendar, week, month, appear, phase, moon, and cycle</i></p> <p><i>Change, plate, moon phases, cookie</i></p>	
<i>Materials/ Resources</i>	<ul style="list-style-type: none"> ○ Moon Phases calendars ○ Colored pencils ○ Printed paper ○ Paper plates, enough for entire class ○ Popsicle sticks ○ Cream-filled sandwich cookies, enough for each student to have 4+ ○ Internet access to Google for Moon Phases calendar ○ photos of the different phases of the moon ○ Worksheet 2a – Use Moon Phases Photographs ○ Worksheet 3a – Cookie Moon Plate – preparing paper moon plate ○ Worksheet 3b – “The MOON we all see up in the SKY” Chant ○ Worksheet 3c – My Moon Journal Folder (cover & content) 	
<i>Lesson Storyline and Core Text</i>	<p>In this lesson, teacher begins with a hands-on experiment, my cookie plate, and guides student review if the relationship among the moon, Earth, and the sun through the cookie activity. Students learned the moon, Earth, and sun relationship in earlier lessons. Students also learned a chant to help them to remember the lesson.</p> <p>Core Text:</p> <p style="text-align: center;">我们要做的另一个活动！ 我们要做“我的月亮盘。” 但是我需要你们的帮忙。</p>	

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Different “Faces” of the Moon

月亮的不同月相

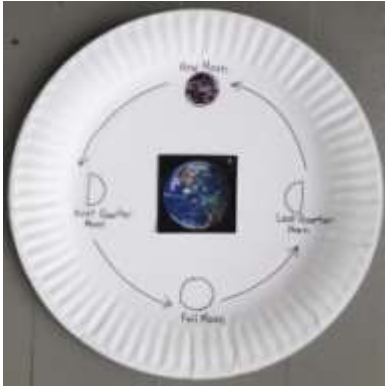
	<p>月亮高高挂天上 它的形状为什么一直在改变？ 有时它像一个大圆球， 有时它又不见了！</p> <p>我们看到满月，可是满月越来越小， 过了几天满月变成左半圆， 我们叫它下弦月。 又过了几天，月亮好像不见了！ 看不到的时候叫新月。 再过了几天，月亮变成右半圆， 我们叫它上弦月。 又过了几天， 满月又出现了。 月亮高高挂天上</p>
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Key Elements	Lesson 3 Procedures – <i>If the Moon Were Cookies</i>
<p><i>Engagement.</i></p> <ul style="list-style-type: none"> ● <i>Connections facilitated between what students know and can do</i> 	<p>My Moon Plate</p> <p>Do the opening routine and identify the current phase of the moon, from student observations and from the Internet picture.</p> <p>T: 我们要做的另一个月亮活动！我们会做“我的月亮盘。”但我需要你们的帮忙。</p> <p>Note: Prepare paper/Styrofoam plates, preferably in black to represent the night sky. Prepare plain chocolate cookies, a can of plain vanilla cake frosting and a craft stick to spread frosting on the cookies, and a stick of glue to paste cookies to the plate. (or you may use cream-filled chocolate cookies instead)</p> <p>Put a picture of the earth in the center of the plate, as shown in the picture below. Tell students that we'll put the New Moon on the top of the circle, as shown.</p>

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Key Elements	Lesson 3 Procedures – <i>If the Moon Were Cookies</i>
	 <p>Note: Be sure to determine if any of the students are gluten-intolerant. For those students provide pictures of the cookies, or find a gluten-free alternative (parents can be helpful here).</p> <p>T: (Reviews each phase with Ss by pointing to the plate and saying) 这是我的月亮盘，我把新月放在这儿 (Invite a student to find the picture of the New Moon and post it at the spot or as suggested by Teacher.)</p> <p>T: 这儿应该是什么呢？ (In counter-clockwise direction)? (Invite another student to find the picture of the next phase of the moon and post it on the plate. Ask the student or the class to name the phase. Repeat the process until all phases are done.)</p> <p>T: 大家看这儿，我用饼干做成不同的月相 (Show students a chocolate cookie as the New Moon. Place it at the 12:00 position on the paper plate. Spread vanilla frosting on another cookie to make different phases of the moon. Repeat statements and glue/paste the moon phase cookies counter-clockwise on the prepared plate.)</p> <p>Students watch as the teacher uses the cookies to depict the four phases of the moon. Involve students during the process.</p> <p>T: 大家要记得我们所学的月相喔。明天你们每个人都要用饼干做一个月盘。</p>

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Different “Faces” of the Moon

月亮的不同月相

Key Elements	Lesson 3 Procedures – <i>If the Moon Were Cookies</i>
	<div style="text-align: center;">  </div> <p>(See Worksheets 3c)</p> <p>Do the closing routine and the Moon Phase chant. Workbook 2d</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> ● <i>Objects and phenomena are explored.</i> ● <i>Hands-on activities, with guidance.</i> 	<p>My Own Cookie Moon Plate</p> <p>T: (After the opening routine.) 谁记得今天我们要做什么？</p> <p>Ss: 月盘饼干</p> <p>T: 你记得怎么做? (Show the Cookie Moon Plate made yesterday and asks students to identify and name each phase.)</p> <p>Prepare enough plates and craft sticks, one for each student. Prepare a can of plain vanilla cake frosting and several sticks of glue for students to use. Distribute a picture of the earth and four chocolate cookies per student.</p> <p>Tell students that they must finish the task in 5 minutes. Once students are finished, show them how to label the phases. (Write the captions on the board or project them on a transparency.) Provide students with more cookies if they need them. Walk around to provide the necessary assistance and guidance.</p> <p>Note: Use self-adhesive address labels to write captions for the phases of the moon, one on each label. Peel the label from its backing and paste it on the Cookie Moon Plate under the appropriate moon phase. Involve students to help. This is an excellent literacy activity. Distribute 4 labels per student.</p> <p>Once students are finished, ask them to do peer editing with a partner. If there are mistakes, students may ask for more labels and paste the new one on top of the one with errors.</p> <p>Distribute cookies for the students to enjoy.</p> <p>Note: Be sure to supply an alternative snack for students who are gluten-intolerant. While eating, they can show of their products and practice telling</p>

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Different “Faces” of the Moon

月亮的不同月相

Key Elements	Lesson 3 Procedures – <i>If the Moon Were Cookies</i>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> • <i>Students explain their understanding of concepts and processes.</i> • <i>New concepts and skills are introduced as conceptual clarity and cohesion are sought.</i> 	<p>about them. Do the closing routines afterward.</p> <p>For students with independent literacy skills: Write a Science Journal about My Own Moon Cookie</p> <p>Do the opening routine.</p> <p>T: 你喜欢我们昨天的活动吗? (Invite students to reflect why they like it. Provide vocabulary such as fun, delicious, like, remember)</p> <p>Show the class a copy of the Worksheet 3d. Ask students to help with completing the project. Distribute a copy of the Worksheet 3d to each student.</p> <p>Note: Tell the students that this is going to be their moon journal folder. Have them write their names and then draw pictures of the phases of the moon, leaving room to add labels. Remind them to put the phases in the correct order, starting with the New Moon. Circulate as they draw their pictures, and then have them do the labeling, using the model you have written on the board.</p> <p>Ask students to practice writing the labels on a separate sheet of paper. Do peer editing to ensure accuracy on the drawing, phases, and the writing. After each student receives the check from the teacher, he/she may write the labels on the worksheet.</p> <p>Do Gallery-Walk of the class to review the work.</p> <p>Do the closing routine, the Moon Chant.</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> • <i>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</i> 	<p>The MOON We All Can See Up In The SKY.</p> <p>Do the opening routines, calendar work, and review what they did yesterday (my Science Journal).</p> <p>T: 我们今天学一个月相咏，叫“月亮高高挂天上”让我们一起来学。</p> <p>Verse 1:</p> <p>REFRAIN:</p> <p>月亮高高挂在天上 你知道为什么它的形状一直在改变 有时，它像一个又大又圆的球， 有时，它又不见了！</p> <p>我们可以说，地球和月亮转动。 月亮有些部分我们看不到。 我们看不到有些阳光照到月亮部分</p> <p>Verse 2:</p>

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Key Elements	Lesson 3 Procedures – <i>If the Moon Were Cookies</i>
	<p>REFRAIN: 月亮高高挂在天上 你知道为什么它的形状一直在改变 有时，它像一个又大又圆的球， 有时，它又不见了！</p> <p>我们可以看到新月，一开始我们看不到它 然后，它只有一点点 过了一段时间，它慢慢的变大，像半个球 后来，半个球变成一个又大又圆的球 月亮高高挂在天上看着你，看着我。 后来，大圆球又慢慢的变小 过了一段时间，它慢慢的变小，像半个球 有时，它又不见了。。。 新月，上弦月，满月，下弦月，是我们学的四个月相。</p> <p>Note: You may divide the class into several groups; each group is responsible for only two or three stanzas. For example, for Verse 1: Group A: 月亮高高挂天上 它的形状为什么一直在改变？</p> <p>Group B: 有时，它像一个又大又圆的球， 有时，它又不见了！</p> <p>In this choral recital way, each time a group recites, children need to remember only two lines instead of the entire verse. Once students have practiced and become comfortable with the verses, you may switch groups or lines so at the end, each student will have the opportunity to recite the entire chant.</p> <p>Tell students to practice the chant as homework in addition to observing the moon if they can.</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> • <i>Activities permit evaluation of student development and lesson effectiveness.</i> 	<p>We can chant the Moon we all can see up in the Sky.</p> <p>Give students time to practice. In small groups, students perform the <i>Chant: The MOON we can all see up in the SKY</i></p>

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Teacher Reflections on Lesson 3 – <i>If the Moon were Cookie</i>	
<i>What worked well?</i>	
<i>What did not work well?</i>	
<i>What would I do differently?</i>	
<i>Other comments or notes</i>	

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Lesson 4 – The Moon we can all see up in the Sky

月亮高高掛在天上







Lesson 4 of 5 – <i>The Moon We Can All See Up in the Sky</i>		Duration: 30 Minutes
<i>Objectives</i>	<p>I Can:</p> <p>Oral language:</p> <ul style="list-style-type: none"> • Ask yes/no questions about the moon phases in the target language. • Answer yes/no questions in complete sentences about the moon phases in the target language. <p>Literacy:</p> <ul style="list-style-type: none"> • Recognize the words: <i>moon phases, sun, earth, full moon, first quarter moon, last quarter moon, new moon, circle, half circle, semi-circle, and calendar</i> <p>STEM and Other Subject Areas:</p> <ul style="list-style-type: none"> • Partition circles and rectangles into two or four equal shares, describe the shares using the worlds halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. • Record and share observations about how some events have cycles; whereas, other events have a clear beginning and end. • Obtain information and share observations to determine simple patterns of natural objects in the sky. 	
<i>Vocabulary and Expressions</i>	<p>Content obligatory language:</p> <ul style="list-style-type: none"> • 有多少。。。？ • 你怎么知道。。。？ • 你能说说看吗...？ • 你能标出来吗。。。？ • 什么...？ <p>Content compatible language:</p> <ul style="list-style-type: none"> • 下一个是。。。？ 	
<i>Materials/ Resources</i>	<ul style="list-style-type: none"> ○ A calendar ○ strings or tape to hang photo on back ○ Sentence strips for students (Worksheet 4c) and large strips to be read, sorted and put in order on the magnet board or in the circle. (Note: this could also be done on a Smart Board.) ○ computer ○ USB microphones and speakers ○ LCD projector ○ speakers ○ internet access to YouTube or DVD and DVD player of cookie monster 	

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	<p>video from day one</p> <ul style="list-style-type: none"> ○ Worksheet 2a – Prepare several sets of pictures of <i>the sun, earth, and moon, day, night, New Moon, First Quarter Moon, Last Quarter moon</i> ○ Worksheet 4a – Chant: 太阳是个大火球 (expand) ○ Moon Calendar with Captions
<i>Lesson Storyline and Core Text</i>	In this lesson, the teacher will help students summarize what they have learned from the moon module. Teacher guides students through the chants, experiments, nightly moon observations, and mini book making. At the end, each student will have a completed Moon Journal folder to review and keep.

Key Elements	Lesson 4 Procedures – <i>The Moon we can all see up in the Sky</i>
<p><i>Engagement</i></p> <ul style="list-style-type: none"> ● <i>Object, event or question used to engage students.</i> ● <i>Connections facilitated between what students know and can do</i> 	<p>What Can I Tell Others about the Sun, the Moon, and the Earth?</p> <p>After the opening routine, do the expanded “<i>The sun is like a ball of fire</i>” chant, Worksheet 4a</p> <p>Prepare several sets of pictures of <i>the sun, earth, and moon, day, night, New Moon, First Quarter Moon, Last Quarter Moon, and the Full Moon</i> as in PPT (or examples as seen below). Show corresponding pictures as reciting the chant:</p> <div style="text-align: center;">   <p>Sun Earth</p> </div> <p style="text-align: center;"> 太阳像个大火球， 它给我们热量和阳光， 当我们看到太阳时， 是白天，天空明亮的。 当我们看不到太阳， 是晚上，天空是黑的。 我们可以在晚上看到月亮。 </p> <div style="text-align: center;">     </div> <p>New: 地球跟着太阳转 月亮跟着地球转 转转转，太阳照在月亮上，</p>

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Key Elements	Lesson 4 Procedures – <i>The Moon we can all see up in the Sky</i>
	<p>有时光亮有时黑， 月亮高高挂天上 四个月相都不同， 新月，上弦月，满月，下弦月。</p> <p>Note: Randomly give pictures of these objects to students, one picture per student. Ask these students to stand in front of the class. When the class recites, the student with the picture of the object named will stand forward, preferably doing the motion as described.</p> <p>Distribute the rest of the pictures to other students. In this way, there will be several groups of students who can perform together. Have students practice and tell them that they will perform this the next day.</p>
	<p>Collect the pictures and attach pictures to students’ backs, without showing the picture or telling them what picture they represent. Then the students circulate to try to find out who they “are.” They may ask only one question of each person they talk with, going from person to person until they find out who they are. Before the activity begins, have the class brainstorm what questions they might ask: Am I the sun? Am I the moon? Am I the Earth? Am I a first-quarter moon? And so forth.</p> <p>Once the children find out who they are, they get a group together that consists of Earth, sun, full moon, last quarter, new moon, first quarter. When all the groups are formed, have each group member tell who they are for the class.</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> ● <i>Objects and phenomena are explored.</i> ● <i>Hands-on activities, with guidance.</i> 	<p>Work on My Moon Calendar</p> <p>After the opening routines. Do the chant performance and work on My Moon Calendar. The students should have all the days filled in, since the teacher has provided a picture of the moon every day and discussed it.</p> <p>Lead students to answer the following questions orally:</p> <ol style="list-style-type: none"> 1。月亮运转一次要多少天？ 2。我们学了几个月相？ 3。你的日历上有几个新月/上弦月/下弦月/满月？ 4。你可以在你的的日历上标出月相吗？ <p>A Star (bonus) question:</p> <ol style="list-style-type: none"> 5。你可以猜得出下个月相是哪一个吗？ <p>Instruct students to do Worksheet 4b. Keep their worksheet in their science journal folder.</p> <p>Do the closing routine.</p>

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Key Elements	Lesson 4 Procedures – <i>The Moon we can all see up in the Sky</i>
<p><i>Explanation</i></p> <ul style="list-style-type: none">• <i>Students explain their understanding of concepts and processes.</i>	<p>Make My Own “Papa, Please Get the Moon for Me” Book. Lead students to read the book again. Invite different students to co-read.</p> <p>Task A: Ask students to identify each phase of the moon in the story.</p> <p>Task B: Make My Own <i>Papa</i> Book. Workbook 4c Bring out the large sentence strips for retelling the story, and give each student an envelope with the same sentence strips cut up. They will use these strips to create their own Papa book.</p> <p>Put the sentence strips in random order on the board (or in the center of the circle). Ask the students to take out their sentence strips and spread them out so they can look at them. Each student should also have a pencil.</p> <p>Read each sentence strip aloud, pointing to it on the board, but NOT in the correct order. Have students find the same strip in front of them and point to it. Continue until all the strips have been read. Then ask students: <i>Now, which thing comes first in our story?</i> (Have students agree or disagree and finally settle on the correct segment—with teacher help, if necessary. After the correct segment is identified, have students put the number 1 on the back of the strip.) <i>Now, what comes next in our story?</i> (Continue with each segment, always numbering on the back of the segment, so students will be confident as they arrange their books.)</p> <p>After reading, tell students that they will make their own Papa book. They are to paste the sentences in the correct order in their little books, one on a page. Then they are to choose four of their favorite parts of the story and draw a picture on those pages. They may draw more pictures if they wish, but they must draw at least four.</p> <p>The sentences are:</p> <ol style="list-style-type: none">1. 我希望我能和月亮一起玩，2. “爸爸，请把月亮拿给我”3. 爸爸拿了一把好长好长的梯子，4. 爬，爬，爬，他往上爬5. 我的女儿想要跟你一起玩，可是你太大了6. 月亮说：我每天会变得小一点儿，7. 当月亮的大小刚好的时候，爸爸把月亮带回家了。8. 小茉莉和月亮一起跳舞9. 但月亮越来越小，最后月亮不见了。

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月亮的不同月相

Key Elements	Lesson 4 Procedures – <i>The Moon we can all see up in the Sky</i>
	10. 有一天晚上，天上出现了一个小小片的月亮。
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> • <i>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</i> 	<p>Continue to finish the Papa book. Go through peer editing. Go around ensure accuracy.</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> • <i>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</i> 	<p>Put “My Moon Journal folder” together</p> <p>Lead students to reflect what they have done so far in this module:</p> <p>爸爸，我要月亮。 月相日历 灯的实验 我的月盘 歌咏：太阳像一个火球 转，转，转 月亮高高挂在天上 我的月亮</p>

Teacher Reflections on Lesson 4 – <i>The Moon we can all see up in the Sky</i>	
<i>What worked well?</i>	
<i>What did not work well?</i>	
<i>What would I do differently?</i>	
<i>Other comments or notes</i>	

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月亮的不同月相

Lesson 5 – My Moon Story

Lesson 5 of 5	Duration: 30 Minutes
<i>Objectives</i>	<p>I Can:</p> <p>Oral Language:</p> <ul style="list-style-type: none"> • Ask and answer questions to name and tell about the moon phases, Earth and the sun. <p>Literacy:</p> <ul style="list-style-type: none"> • Read labels on pictures of moon phases (while matching them to drawings of moon shapes.) <p>STEM And Other Subject Areas:</p> <ul style="list-style-type: none"> • Record and Share observations about how some events have cycles: whereas, other events have a clear beginning and end • Obtain information and share observations to determine simple patterns of natural objects in the sky.
<i>Materials/Resources</i>	<ul style="list-style-type: none"> ○ Moon Phases Photos, physically displayed in random order, ○ Pencils, one per student ○ Glue for each student ○ Worksheet 5a – Student’s Self Check ○ Worksheet 5b – What Did I Learn? ○ Worksheet 5c - Student’s Interview
<i>Review</i>	<p><i>Moon Calendar</i></p> <p>爸爸，我要月亮(Worksheet 1a,1b,1c)</p> <p>我的月亮 (Worksheet 4c)</p> <p>Chant: 太阳像个大火球(Worksheet 2b)</p> <p>Chant: 转，转，转 (Worksheet2d)</p> <p>Chant: 月亮高高挂天上 (Worksheet 3b)</p> <p>My Science Experiment #1 –灯的实验</p> <p>My Science Experiment #2 –我的月盘</p> <p>我的月亮饼干</p> <p>我的月亮盘</p> <p>我的月相</p>

Performance Assessment
Interpretive and Presentational Task
<p>Creation of their own Papa book and reading the pages they illustrated: Students walk around to view each other’s books. Each student will select another student’s book to read to the class (illustrated segments only).</p>

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Interpretive Task
<p>My Science Journal Folder: Students’ Science Journals will be on display. Students will do a gallery walk and look at all the journals. When the time is up for the gallery walk, they will identify the partners for the Interpersonal Task.</p>
Presentational Task
<p>Each pair will report on the authors and the journals. They will talk about their interviews and their own work.</p>
<p>Rubrics for assessment: <i>T: I want you take a moment now to think about what you did! You sequenced the 4 moon phases and you talked about the moon phases. Put an X in the box under the face that shows how you feel about your work today. Did you do it by yourself, did you need a little help, or do you need more practice to do it? (Guides students as needed to complete the self-assessments.)</i> Ss: (Complete self-assessments.) Worksheet 5b</p>
Interpersonal Task
<p>Partners will take turns interviewing each other about their journals, using the prompts from Worksheet 5c.</p> <p>What is the best part of your journal? What are you proud of? What will you show your family? How many times did you watch the moon?</p> <p>The teacher will first model the interview several times with volunteer students.</p>

Teacher Reflections on Lesson 5 – Assessment Task	
<i>What worked well?</i>	
<i>What did not work well?</i>	
<i>What would I do differently?</i>	
<i>Other comments or notes</i>	