



Marvelous Moon Unit

Materials Needed For Each Student

- white construction-paper copy of page 45
- pencil
- yellow and black crayons (or markers)
- scissors
- glue

Background For The Teacher

Phases Of The Moon

As the Moon moves around Earth, it keeps the same side facing Earth. On Earth we see a varying amount of this side, depending on how much of the side is being lit by the Sun. These apparent changes in the Moon's shape are called the *phases of the Moon*. The Moon orbits Earth once every 29 1/2 days. During this *lunar month*, the Moon changes from a *new moon* (no reflection of sunlight) into a *full moon* (the entire side of the Moon is lit by the Sun), then back to a new moon. After a new moon, the Moon *waxes*, or grows, into the *crescent phase* (less than half of the side is lit), to the *first quarter phase* (half of the side is lit), to the *gibbous phase* (more than half of the side is lit). The next Moon phase is the *full moon* which means the entire side of the Moon is lit. A full moon occurs about 14 or 15 days into a lunar month. Next the Moon appears to *wane*, or shrink. During this time the Moon phases appear in reverse order—gibbous, last quarter, and crescent phase—until the Moon completely disappears, which indicates another new moon. The Moon phases' process then begins again.

How To Use Page 45

1. To explain and illustrate the phases of the Moon, draw a horizontal row of nine circles on the chalkboard. Then, using the information in "Background For The Teacher: Phases Of The Moon," explain, illustrate, and label the phases as shown below.
2. Distribute the activity and have each student personalize the cover (titled "Moon Phases") and color the Moon shape yellow. Then have each child color each Moon phase by using her yellow crayon to show the part of the Moon that is reflecting sunlight and her black crayon to show the part of the Moon that is not.
3. Then have each student assemble her booklet.

Booklet Assembly Directions For The Student

1. Cut out each pattern piece along the bold lines. Do not cut on the thin lines.
2. To create one long pattern piece, lay the cutouts end-to-end so that the Moon's phases are in the correct order.
3. Glue the cutouts together where shown to create one long strip.
4. Using the thin lines as guides, accordion-fold the pages. (Demonstrate this step and provide assistance as needed.)

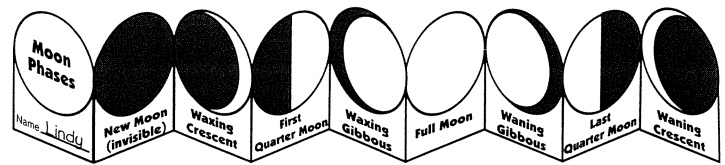
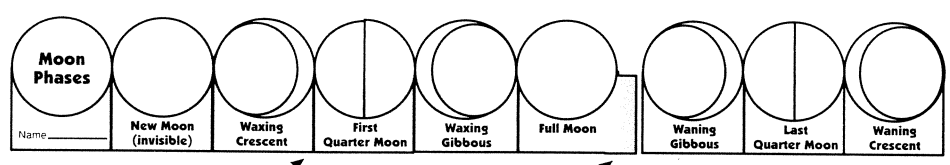
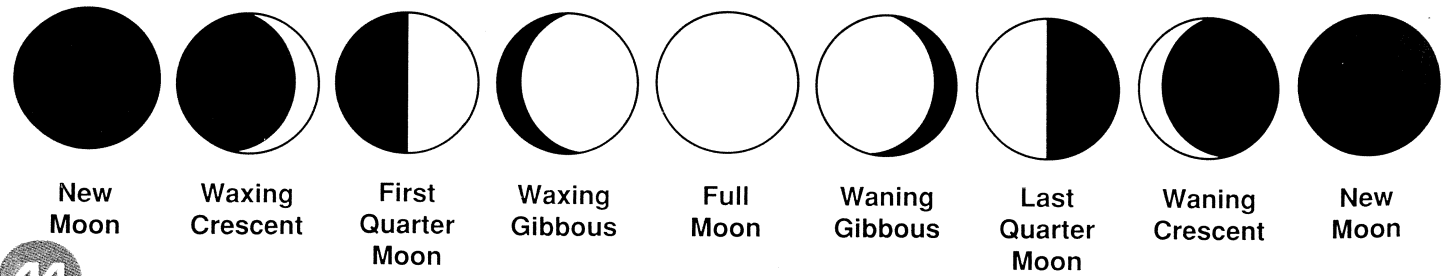
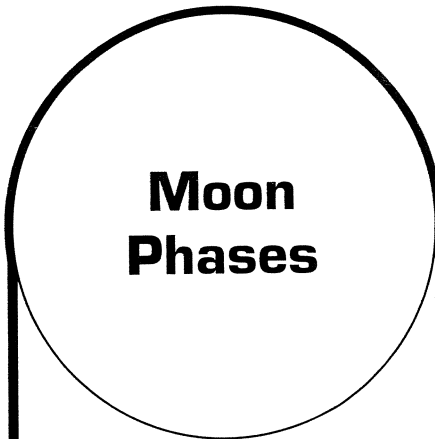
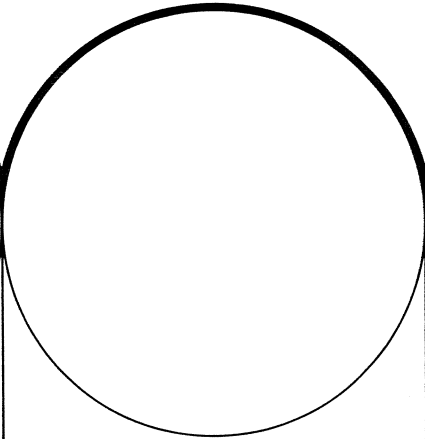
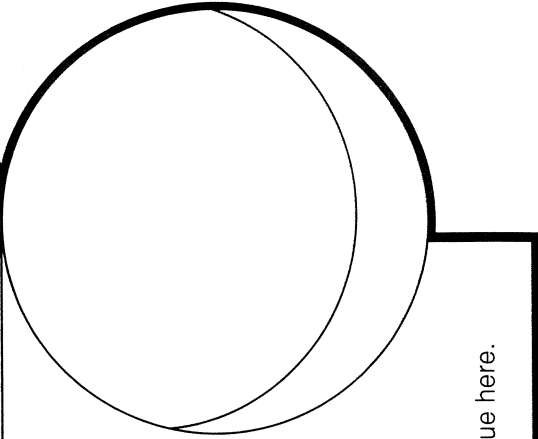
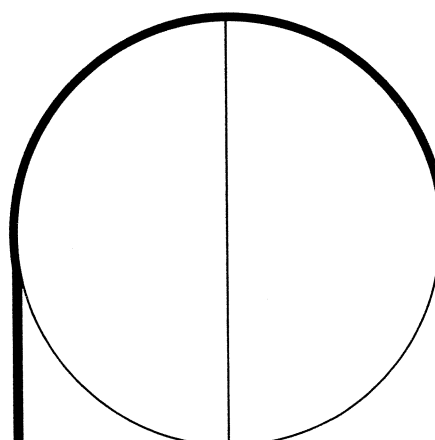
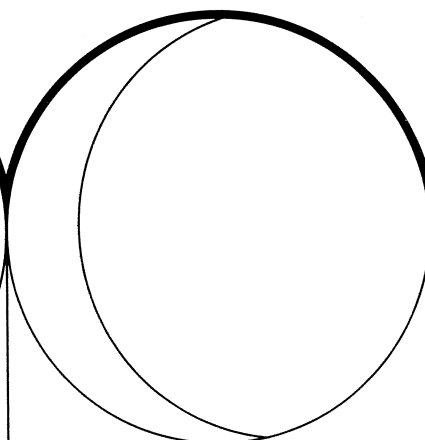
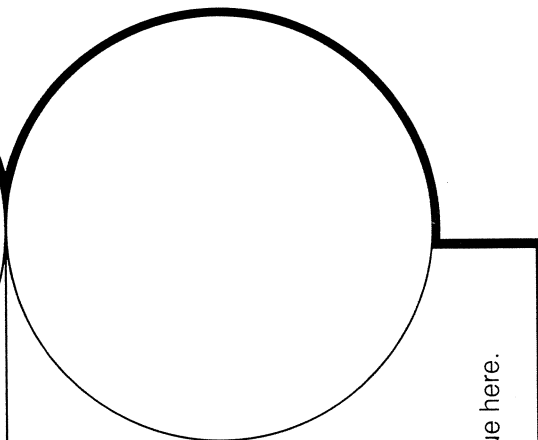
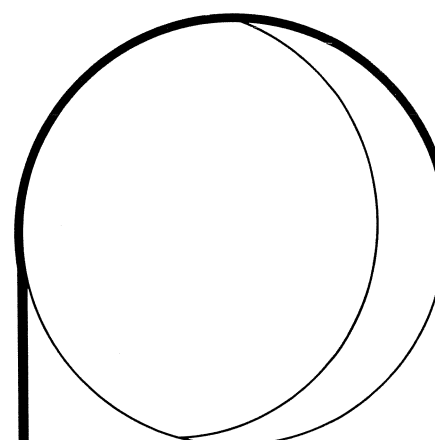
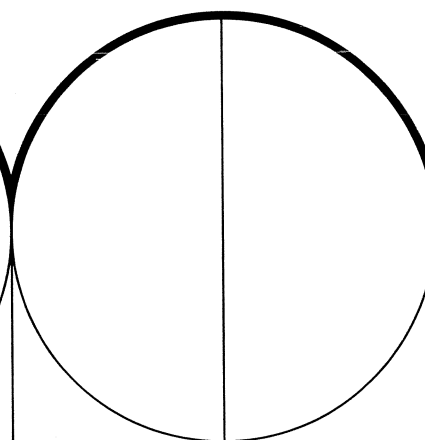
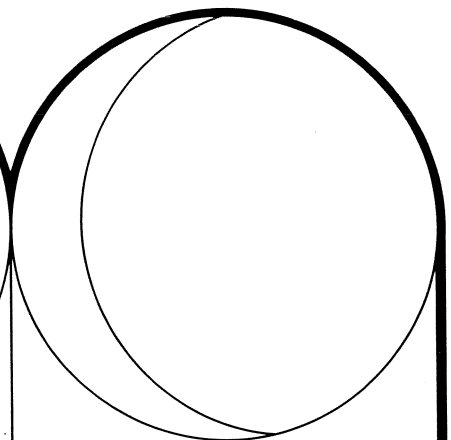


Illustration Of Moon Phases



 <p>Moon Phases</p> <p>Name _____</p>	 <p>New Moon (invisible)</p>	 <p>Waxing Crescent</p>	Glue here.
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 <p>First Quarter Moon</p>	 <p>Waxing Gibbous</p>	 <p>Full Moon</p>	Glue here.
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 <p>Waning Gibbous</p>	 <p>Last Quarter Moon</p>	 <p>Waning Crescent</p>
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