



# The STARLAB Moon Cylinder

for the Standard and FiberArc Projectors

## About the Moon Cylinder

The most prominent feature in the night sky, to even the youngest children, is the Moon. The Moon is the only night-sky object beyond the clouds that appears larger than a dot. Yet, it is greatly misunderstood. Why it changes its phase, how it moves through the heavens, what the surface features really are — these are all aspects of the Moon that can be readily observed but that are plagued with misconceptions.

The Moon Cylinder, in conjunction with its curriculum guide, will help you teach your students about phases, eclipses, the Moon's motion through the heavens, and features on the Moon's surface. You will be able to examine and compare sites of the Apollo Moon landings, compare the near and far sides of the lunar surface, and distinguish between such surface features as highlands, maria, craters, mountains, ejecta rays, and rilles.

The cylinder comes with a masking cover, which can be used to obscure parts of the cylinder from view, thus keeping your students on task. With the phase identification activity, the wall mask is designed to allow viewing of only one phase at a time. This allows you to unveil the correct phase once your students' phase predictions have been cast. Recommended for elementary and middle school students.

## The Major Features Found on the Moon Cylinder

- On the top of the cylinder is a diagram of the Earth, Sun, and Moon's orbit. The position of the Moon at each major phase point is marked. The Moon's phase positions are not illustrated with pictures of each phase, instead it shows the Moon as half lit, half dark.
- At the top of the cylinder walls are a series of small pictures of the Moon during each phase. These pictures align with the top diagram. There is no picture of the New Moon as this cannot be seen. Instead, there is a picture of a total solar eclipse. Total solar eclipses only occur at the new moon phase when the alignment is very exact (which usually only happens twice per year).
- Centered around the main cylinder walls, just below the phase pictures mentioned above, are four large images of the Moon. There are three pictures of the near side of the Moon and one picture of the far side of the Moon. The three pictures of the near side of the Moon consist of one without labels; one with labels of the seas (or maria), and mountains; and one that depicts significant craters. The fourth picture is of the far side of the Moon with only major features labeled.

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STARLAB Lesson 1: The Moon's Motion through the Sky

STARLAB Lesson 2: Phases and Eclipses

STARLAB Lesson 3: Topography: What's on the Moon

Bibliography:

Books

DVD/Videos

Web Sites

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