

## **The McCormick Observatory**

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Welcome to your tour of the McCormick Observatory, located on the campus of the University of Virginia. An **observatory** is a building that houses large telescopes, which can be used to study objects in space. Thomas Jefferson, who founded the university, always hoped to build an observatory on campus. Unfortunately, the observatory could not be built in Jefferson's lifetime. In 1885 Leander McCormick donated a telescope and an observatory to the university. At the time the observatory was built, its telescope was the second-largest in the world.

The observatory is still being used for scientific research. Many students and professors use the observatory to study celestial objects and the night sky. We are pleased to announce that the observatory is also open to the public. Our public viewing hours allow us to teach people about space. We want to give people a chance to see the night sky through our telescopes, and we hope that people will also enjoy learning about the projects we work on.

Our trained scientists are on hand to help teach visitors about space. Are you curious about what you might learn? Here's a quick sample. Let's talk about the moon.

Every 28 days the moon goes through eight phases. As it orbits Earth, the moon appears to change its shape. These changes in shape are called the moon's **phases**. Each phase of the moon is characterized by the amount of the moon's surface that is visible from Earth. Do you know any of the eight phases of the moon?

The first four phases are new moon, waxing crescent, first quarter, and waxing gibbous. The moon appears to grow larger during these phases. During the first quarter phase, we see the right half of the moon, and during the waxing gibbous phase, we see part of the left half as well. Then, the moon becomes full.

The moon appears to grow smaller during the next set of phases. During the waning gibbous phase, we see the entire left half of the moon but only part of the right half. During the third quarter phase, we see only the left half. The final



Observatories enable us to see distant objects in space.



Our telescopes will help you see the different phases of the moon. The phase shown here is known as the waxing crescent phase.

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phase is waning crescent, when we see only a tiny sliver of the left half. Then the moon seems to disappear, and the cycle begins anew.

Your visit to the observatory might also teach you about lunar and solar eclipses and the far side of the moon. You might also learn about human travel to the moon! Visit today to learn more!