

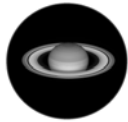
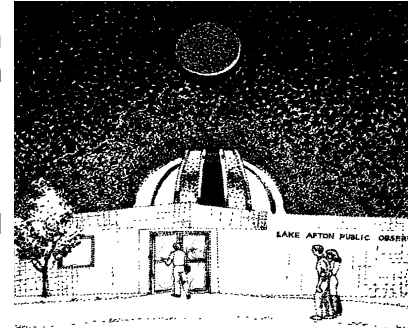
Lake Afton Public Observatory

Astronomy Resources for Teachers

Observatory Field Trips

Daytime or evening – there is a trip to the Observatory that is right for almost every class. Each Observatory program centers on a specific theme. During the day the program themes are the sun and/or a scale model of the solar system. During the evening, the theme can be the life of a star, the objects which make up our Milky Way galaxy, or the features on the planets and our Moon. Details on each of these trips are described below.

As your students see different views through the telescope, we discuss what they are seeing and how it relates to the theme. The level of the discussion is tailored to the level of your class.



Gazing at the Moon and Planets

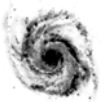
An exploration of the solar system awaits your class. Your students will see in crisp detail the Moon's rugged impact craters, mountains, and smooth plains. They will then compare our nearest neighbor, the Moon, to one of our solar system's planets or their moons.

Visibility dates for bright planets during the 2011-12 school year are:

Venus: February 1 - May 15
Mars: February 15 - May 15
Jupiter: October 15 - March 15
Saturn: April 15 - September 1

(Recommended for all grade levels)

Evening Programs



Exploring the Milky Way

Imagine a vast pinwheel of seemingly countless stars more than a hundred thousand light years across. Peppered amongst the stars are huge clouds of gas and dust. This is our Milky Way galaxy.

Your students will explore the Milky Way by taking a telescopic journey across the light years to the objects that compose it: stars, star clusters, and gas clouds. They will then view a distant spiral galaxy, showing how our own Milky Way galaxy might look from the distance of a few million light years!

(Recommended for grades four and above.)

Life Story of a Star

The lifetimes of stars are measured in millions and *billions* of years. Because human lifetimes – and Observatory field trips – are much shorter, we'll view various stars in different stages of their lives to capture the full life story of a star.

In this program your class will observe a star-forming nebula, a cluster of middle-aged stars and the gaseous remnant of a dead star. As your students look at these fascinating objects through the telescope, they will hear about the role each plays in the story of stellar evolution.

(Recommended for grades four and above.)

When Can We Go?

Evening school programs are held Tuesday and Thursday evenings (by reservation only). Program times are given below. Each program lasts about an hour and a half.

September	8:00 p.m.	March	8:00 p.m.
October	7:30 p.m.	April	8:30 p.m.
November - February	7:00 p.m.	May - August	9:00 p.m.

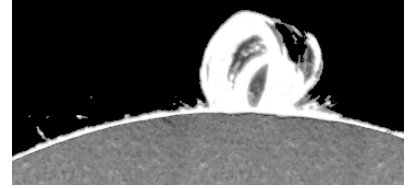
Daytime Programs:

Our Sun The Nearest Star

The Sun is our source for light and life, yet few people have ever had a good look at it. During *Our Sun - The Nearest Star*, your students will safely study sunspots on our Sun. A demonstration of the dangers of looking at the Sun without proper precautions is also an important part of this program.

Scale Model Solar System

Students can also explore the entire solar system here on Earth! The sizes of the planets and the distances between them have been reduced in scale to fit on the Observatory grounds. With *A Scale Model Solar System* students will experience first-hand the true vastness of our solar system as they must find and identify the nine planets in this outdoor model.



Our Sun - The Nearest Star and *A Scale Model Solar System* are available by reservation only (individually or together) at the following times:

Selected Wednesdays at
10:00 a.m. or 1:00 p.m.
(Available only to grades four
and above.)

Reservations / Admissions

To reserve the Observatory for a field trip call (316) 978-3191 weekdays between 9:00 a.m. and 4:00 p.m. **Reservations must be made at least two weeks in advance.** Admission to all Observatory school programs is \$2.00 per person (with a \$40.00 minimum). The Observatory is located about 20 miles southwest of downtown Wichita in Lake Afton County Park. Maps will be sent with your reservation confirmation. More information on can be found online at our website:

webs.wichita.edu/lapo/

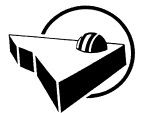
Astronomy Resource Materials

The Observatory can come to your classroom! Through astronomy games, learning centers and classroom presentations, the wonder of space can come into your room before or after a visit to the Observatory.

Classroom Presentations include: the Moon, the Solar System, Life of a Star and Ask an Astronomer. Other topics are available at your request.

Learning Centers come with a classroom presentation by a member of the Observatory staff. The Learning Centers include the necessary materials for in-depth studies. Each Learning Center includes a full set of instructions and activity books and can be reserved for a two-week period. The Learning Centers are *Make Your Own Telescope*, *Solar System Treasure Hunt*, *Fun With Light* and *Meteorites*.

With **Astronomy Games** your students can learn astronomy without really trying! You can reserve a game for a two week checkout or purchase a set to keep. Available games are Solar System Bingo, Moon Phase Bingo and Stellar Bingo. Also available are Astronomy Card Games – where younger students can use decks of *Astronomy Cards* or *Moon Phases Cards* to learn terms that are used in astronomy or about the Moon and its phases.



Call 316-978-3191 for reservations and grade level recommendations.