

## HOT READING SKILLS

Close Reading | Socratic Seminars | Fluency Passages

**Title:** Extraordinary Astronomical Observatories of the World **Word Count:** 532

*CCSSR ELA Reading Writing: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.*

1. The preeminent astronomical observatories of the world are responsible for many of the awe-inspiring astronomical discoveries of the twentieth century. Telescopic photography, radio astronomy, and infrared imaging are among the many different techniques observatories have been able to employ to learn about the heavens.
2. The Palomar Observatory may be the most famous of all observatories. With five telescopes operated by Cal-Tech's graduate and post-doctoral students, the 200-inch Hale telescope is the most famous of all Palomar's telescopes. Built in 1949, it was intended to overcome the onset of the southern California smog problem. Other noteworthy telescopes operated at Cal-Tech include a telescope to search for supernovae, a comet hunter, a trio of sky cameras looking for planetary and other celestial phenomena, an interferometer capable of detecting the slightest wobble in the orbits of a planet, and a sixty inch telescope responsible for spotting the first brown dwarf circling a companion star.
3. Cal Tech is also directly involved in the operation of the Keck and Lick Observatories. The Keck Observatory, located on top of Hawaii's dormant Mauna Kea volcano contains the world's largest optical and infrared telescopes. Its twin Keck telescopes stand eight stories high and weigh 300 tons each. Lick Observatory is located on 4200 foot Mount Hamilton east of San Jose, California. It contains nine research telescopes with the largest being the Shane 3-meter Reflector. This telescope is used to observe everything from our local solar system to faraway galaxies.
4. The Griffith Observatory in Los Angeles is known for its 12-inch Zeiss Refracting telescope. This telescope's fame is largely due to the fact that it has been used to allow public viewing of the universe since 1935. More than five million people have looked through its lenses since under the guidance of experienced Telescope Demonstrators. The Griffith Observatory was also known for its laserium light shows in previous years although they have been discontinued at present.
5. The Hayden Planetarium in Boston is more than just a planetarium. It is also a museum. Along with its Gilliland Observatory, laser-light shows and a rotating star simulator are among some of the different multi-media astronomical experiences available to the public.
6. The Greenwich Observatory in Cambridge, England was established in 1675 by King Charles II in order partially to fix longitude readings. It currently fixes the origin of the worldwide time reference point of Greenwich Mean Time. An observatory in Portland Maine is being restored as a famous architectural monument. Another observatory of note is the University of Chicago's Yerkes Observatory with its five telescopes.
7. All of these observatories have added to the vast array of knowledge now known about the universe. Their importance to the history of astronomy, as well as their continuing usefulness, can not be overemphasized.

In the article "Extraordinary Astronomical Observatories of the World" what is the author's purpose for writing this article?

- A. to persuade that the astronomical observatories of the world are fascinating places to learn about the universe
- B. to increase the number of visitors to laserium light shows, planetariums and astronomical observatories
- C. to demonstrate astronomical observatories are responsible for many of the awe-inspiring astronomical discoveries
- D. to share information about extraordinary astronomical discoveries in the universe