

Observing Notebook Checklist for 2006-2007.

You need to have 75 total observations by the end of the year, 40 by the end of 1st semester. Of the items listed below, you need to have about 3/4 of them by the end of the year.

Telescopic Observations

Ten of your observations should be made through a telescope. Mark these with a T.

Photographic Observations

In general, these are allowed; however, do not share the photo files with other students. Each picture should be unique. If you are working together shift the field of view or angle slightly; or wait for another day in the case of the moon. *Everyone should have at least one photograph taken through home or school equipment in the observing notebook.*

“ Landmarks in the sky”

- Summer Triangle
- Pointer Stars on the Big Dipper
- Arc to Arcturus
- Spike to Spica

Atmospheric Phenomena

- Rainbows
- Sunsets
- Light Pollution
- Sun Dogs
- Moonbows

Solar System

- Mercury
- Venus
- Earth's moon
- Cycle of Phases of moon
- Major surface features of moon

Mars

- Asteroids (challenging)
- Jupiter + moons
- Saturn + rings
- Comet (if lucky)
- Meteor Shower

Deep Sky

- Messier Objects (any)
- NGC Objects (any)
- Galaxies: Andromeda
- Globular Clusters: M13
- Open Clusters: Pleiades
- Emission Nebulas: Orion Nebula, Lagoon Nebula
- Supernova Remnants: Crab Nebula
- Planetary Nebulas: Ring Nebula
- Double Stars: Alberio, Double-double in Lyra, or Mizar/Alcor
- Variable Stars: Algol
- Stars with known planets (planets will NOT be visible)
- Stars with known black holes (black holes not visible)

Constellations, Stars and Asterisms

- Circumpolar (visible all year)
- Ursa Major (Big Dipper)
- Ursa Minor (Little Dipper)
- Polaris
- Dubhe
- Merak
- Mizar, Alcor
- Cassiopeia

Fall

- Cygnus, Lyra, Aquila
- Pegasus, Hercules
- Sagittarius, Scorpius
- Deneb
- Vega
- Altair
- Antares

Winter

- Orion
- Gemini
- Taurus,
- Perseus
- Betelgeuse
- Rigel
- Capella
- Castor
- Pollux
- Procyon
- Sirius
- Aldebaran

Spring

- Leo
- Libra
- Bootes
- Hercules
- Corona Borealis
- Gemini
- Regulus
- Arcturus
- Spica
- Denebola

Miscellaneous Observations

- Length of shadow stick (up to 10 observations)
- Moon phase project (counts up to 14 observations!)
- Milky Way
- meteors
- Light pollution
- North at DVHS
- Size of the sun
- Rotation rate of the sun
- Distance of school flagpole to H3
- Spectra of various gasses
- Altitude of a rocket+ appearance of blastoff
- Fraunhofer lines
- any digital or film photos you make

Satellite, Space Shuttle, or Space Station
Optics lab (lenses)
Mirror burns paper
Illusion that moon looks larger on horizon