



FAIRFAX COUNTY PUBLIC SCHOOLS PLANETARIA

2008 ASTRONOMICAL CALENDAR

PLANETARIUM WEBSITE: <http://www.fcps.edu/planetarium>

| 1 SEASONS (Local Time) | | | | |
|------------------------|------------------|----------|----------|----------------|
| LENGTH OF DAY | SEASON | DATE | HOUR | SUN'S MAX. |
| 12 hours 07 mins. | VERNAL EQUINOX | 03/20/08 | 01:48 AM | 51.0° ALTITUDE |
| 14 hours 54 mins. | SUMMER SOLSTICE | 06/20/08 | 07:59 PM | 74.5° ALTITUDE |
| 12 hours 10 mins. | AUTUMNAL EQUINOX | 09/22/08 | 05:18 PM | 51.0° ALTITUDE |
| 09 hours 26 mins. | WINTER SOLSTICE | 12/21/08 | 07:04 AM | 27.5° ALTITUDE |

| 2 PHASES OF MOON FOR 2008 | | | | |
|---|------------------------------------|----------------------------------|-----------------------------------|----------------------------------|
| 2008 MOON PHASE | RISE AT SUNRISE SETS AT SUNRISE | RISE AT NOON SETS AT MIDNIGHT | RISE AT SUNSET SETS AT SUNRISE | RISE AT MIDNIGHT SETS AT NOON |
| WAXING=INCREASING BRIGHTNESS | NEW MOON | 1ST QUARTER | FULL MOON | 3RD QUARTER |
|  1ST QUARTER WAXING | Jan 08 | Jan 15 | WAXING | Jan 22 |
| | Feb 06 | Feb 13 | WAXING | Feb 20 |
| | Mar 07 | Mar 14 | WAXING | Mar 21 |
| | Apr 05 | Apr 12 | WAXING | Apr 20 |
| | May 05 | May 11 | WAXING | May 19 |
|  WANING=DECREASING BRIGHTNESS 3RD QUARTER | Jun 03 | Jun 10 | WAXING | Jun 18 |
| | Jul 02 | Jul 10 | WAXING | Jul 18 |
| | Aug 01 | Aug 08 | WAXING | Aug 16 |
| | Aug 30 | Sep 07 | WAXING | Sep 15 |
| | Sep 29 | Oct 07 | WAXING | Oct 14 |
| | Oct 28 | Nov 05 | WAXING | Nov 13 |
| | Nov 27 | Dec 05 | WAXING | Dec 12 |
| Dec 27 | | | Dec 19 | |

| 3 LARGEST MOONS IN SOLAR SYSTEM | | | |
|---------------------------------|---------|-----------------|---------------------------------|
| NAME | PLANET | DIAMETER | REMARKS |
| GANYMEDE | JUPITER | 5262 KM/ 3270 M | DISCOVERED BY GALILEO IN 1610 |
| TITAN | SATURN | 5150 KM/ 3200 M | MOON WITH THICKEST ATMOSPHERE |
| CALLISTO | JUPITER | 4800 KM/ 2983 M | HEAVIEST CRATERED GALILEAN MOON |
| IO | JUPITER | 3630 KM/ 2256 M | MOON WITH ACTIVE VOLCANOES |
| MOON | EARTH | 3476 KM/ 2160 M | 1969-1ST U.S. ASTRONAUTS LANDED |

| 4 USE THE MOON TO FIND THE PLANETS IN 2008 | | | | |
|---|----------------|-----------------|-----------------|-----------------|
| THE MOON IS CLOSE TO THE FOLLOWING PLANETS ON THE DATES LISTED: | | | | |
| MERCURY | VENUS | MARS | JUPITER | SATURN |
| NOT VISIBLE | NOT VISIBLE | Jan 19 evening | NOT VISIBLE | Jan 24 evening |
| NOT VISIBLE | NOT VISIBLE | Feb 15 evening | NOT VISIBLE | Feb 20 evening |
| NOT VISIBLE | NOT VISIBLE | Mar 14 evening | Mar 30 morning | Mar 18 evening |
| NOT VISIBLE | NOT VISIBLE | Apr 11 evening | Apr 27 morning | Apr 15 evening |
| May 06 evening | NOT VISIBLE | May 09 evening | May 24 morning | May 12 evening |
| NOT VISIBLE | NOT VISIBLE | June 07 evening | June 20 morning | June 08 evening |
| Jul 01 morning | NOT VISIBLE | July 07 evening | July 16 evening | July 07 evening |
| NOT VISIBLE | NOT VISIBLE | NOT VISIBLE | Aug 08 evening | NOT VISIBLE |
| NOT VISIBLE | NOT VISIBLE | NOT VISIBLE | Sep 09 evening | NOT VISIBLE |
| NOT VISIBLE | NOT VISIBLE | NOT VISIBLE | Oct 06 evening | NOT VISIBLE |
| NOT VISIBLE | NOT VISIBLE | NOT VISIBLE | NOT VISIBLE | NOT VISIBLE |
| NOT VISIBLE | Dec 31 evening | NOT VISIBLE | NOT VISIBLE | NOT VISIBLE |

| 5 MAIN METEOR SHOWERS FOR 2008 | | | | |
|--------------------------------|-------------------------|----------------|---------------------------|-------------------------------------|
| SHOWER NAME | DATE OF NEAR MAXIMUM | HOURLY RATE | CONSTELLATION LOCATION | SPEED & SOURCE OF METEOR SHOWERS |
| QUADRANTIDS | Jan. 03 EVENING | 40 | Bootes | 3 COMET MACHHOLZ |
| LYRIDS | Apr. 22 EVENING * | 12 | Hercules | 2 COMET THATCHER |
| ETA AQUARIDS | May 05 MORNING * | 20 | Aquarius | 1 COMET HALLEY |
| DELTA AQUARIDS | Jul. 28 MORNING | 15 | Aquarius | 3 |
| PERSEIDS | Aug. 12 MORNING * | 50 | Cassiopeia | 2 SWIFT-TUTTLE |
| ORIONIDS | Oct. 21 MORNING | 25 | Orion | 1 COMET HALLEY |
| SOUTH TAURIDS | Nov. 05 MORNING * | 10 | Taurus | 4 COMET ENCKE |
| LEONIDS | Nov. 19 MORNING | 12 | Leo | 1 TEMPLE-TUTTLE |
| GEMINIDS | Dec. 14 MORNING * | 50 | Gemini | 3 ASTEROID 3200 |

KEY * MOON INTERFERES WITH VIEWING METEOR SHOWER (DARK SKIES ARE EXTREMELY HELPFUL)
 1= VERY SWIFT 2= SWIFT 3=MEDIUM 4=SLOW D METEOR STORM MAY OCCUR