

## BYA Class 7

- Constellations IV - Summer
  - Cygnus the Swan aka Northern Cross
    - Deneb
  - Summer Triangle: Deneb, Vega, Altair
    - (Cygnus, Lyra, Aquila)
    - Forbidden Planet, Contact
  
- Eclipses
  - Solar (*total = spectacular*)
    - Previous total solar eclipses; eclipse path
    - total, partial, annular
    - geometry (0 - 170 mile spot)
    - duration (0 - 7.5 minutes), events (prominences, chromosphere, corona)
    - safe viewing: pinhole camera, welder's goggles, eclipse shades, eyepiece projection, solar filters
    - Upcoming Total Solar Eclipses (<http://eclipse.gsfc.nasa.gov/eclipse.html>)
      - 2009 - July 22<sup>nd</sup> (Far East)
      - 2010 - July 11<sup>th</sup> (South Pacific)
      - US Eclipses:
        - 2017 - August 21<sup>st</sup> (US, just south of Indiana)
        - 2024 - April 8<sup>th</sup> (Indianapolis!)
  - Lunar
    - total (to 1hr 40min), partial
    - color (red - copper - grey), duration
    - Upcoming Total Lunar Eclipses:
      - 2010 - Dec 21<sup>th</sup>
      - 2014 - April 15<sup>th</sup>
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  - Eclipse Seasons - twice a year