

## Astronomy for the Modern Era

Great Escape - September 2015

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### Constellations - Star Finders

- Make the Star Finders we used:  
<http://www.skyandtelescope.com/observing/make-a-star-wheel/>
- Print a view of the current night sky (scroll to the bottom under Educator Resources):  
<http://www.mos.org/public-events/astronomy-after-hours>
- Constellation overview and explanation  
[http://www.polaris.iastate.edu/NorthStar/Unit9/unit9\\_sub1.htm](http://www.polaris.iastate.edu/NorthStar/Unit9/unit9_sub1.htm)

### Circumpolar Constellations (All Year Stars)

- North Star & Navigation
  - Directly in line with the North Pole so all other stars appear to revolve around the North Star. The North Star is the only thing in the sky that doesn't "move" making it useful in navigation.
- Ursa Major (The Big Bear, contains the Big Dipper)
- Ursa Minor (The Little Bear, contains the Little Dipper and the North Star)
- Draco (The Dragon)
- Cassiopeia (queen on her throne, W shaped, The Seven Sisters)
- Cepheus (king in his crown)

### Seasonal Constellations

- Winter: Orion, Canis Major, Canis Minor, Gemini, Auriga, Taurus
- Spring: Hercules, Corona Borealis, Bootes, Leo
- Summer: Cygnus, Lyra, Aquila, Sagittarius, Scorpius
- Fall: Perseus, Andromeda, Pegasus

### Other Objects in the Sky

- Moon - Reflects light from the Sun -  
[http://www.moonconnection.com/moon\\_phases\\_calendar.phtml](http://www.moonconnection.com/moon_phases_calendar.phtml)
- Visible Planets
- Satellites - ISS tracking - very close to Earth and moves very fast so easy to find.
- Meteor Showers - Viewable the same part of the year, highly affected by light pollution from the Moon <http://www.amsmeteors.org/meteor-showers/meteor-shower-calendar/>  
(The Southern Taurids are technically currently happening but only a few per hour)
- Eclipses -  
LUNAR ECLIPSE TOMORROW NIGHT Sunday 9/27  
starts 9:07pm, peak 10:11-11:23
- Check <http://www.skyandtelescope.com/observing/sky-at-a-glance/>

Public Observatories in Eastern Mass

<http://www.bostonastronomy.net/Public%20Viewing.html>

#### Free Apps

- Sky View Free
- Star Tracker
- GoISSWatch (iPhone only)
- ISS Detector (Android only)