

## Background Resources for Digitalis Education Solutions' Lesson Plans

### General Astronomy

<http://www.badastronomy.com>  
<http://www.nasa.gov>  
<http://amazing-space.stsci.edu/>  
<http://spacekids.hq.nasa.gov/>  
<http://www.windows.ucar.edu/tour/link=/windows3.html>  
<http://www.darksky.org>  
<http://antwrp.gsfc.nasa.gov/apod/astropix.html>  
<http://www.rivalquest.com/space/>  
[http://skyandtelescope.com/resources/internet/article\\_340\\_1.asp](http://skyandtelescope.com/resources/internet/article_340_1.asp)

### Current Events

<http://skyandtelescope.com>  
<http://www.lowell.edu/Public/LEARN>  
<http://www.spacetoday.org>  
<http://www.astronomy.com/home.asp>

### Constellation Legends

#### Websites:

<http://www.r-clarke.org.uk/constellations/constellations1.htm>  
<http://www.learnwhatsup.com/prc/space/constellations.html>  
<http://www.dibonsmith.com/data.htm>  
<http://www.ras.ualgary.ca/~gibson/starnames/starnames.html>  
<http://www.corvus.com/con-page/winter/ori-01.htm>  
<http://www.astro.wisc.edu/~dolan/constellations/>  
<http://www.cosmopolis.com/star-myths/menu.html>

#### Books:

*They Dance in the Sky*, Jean Guard Monroe and Ray A. Williamson.  
*The Constellations*, Chris Sasaki.  
*Beyond the Blue Horizon*, Dr. E.C. Krupp.

### Star Maps

<http://www.pacsci.org/planetarium/Starmaps/mapdefault.html> (for mid-northern latitudes)  
<http://www.hawastsoc.org/deepsky/allsky/allsky.html>  
<http://www.wunderground.com/sky/index.asp>

## **Posters of the Moon, Sun, etc.**

<http://www.nasa.gov/home/> (click on the "For Educators" heading)

## **Celestial Objects**

### **Moon/Moon Phases**

<http://www.nineplanets.org/luna.html>

[http://www.windows.ucar.edu/tour/link=/earth/moons\\_and\\_rings.html](http://www.windows.ucar.edu/tour/link=/earth/moons_and_rings.html)

[http://hea-www.harvard.edu/ECT/the\\_book/Chap6/Chapter6.html](http://hea-www.harvard.edu/ECT/the_book/Chap6/Chapter6.html)

[http://www.spacegrant.hawaii.edu/class\\_acts/MoonDoc.html](http://www.spacegrant.hawaii.edu/class_acts/MoonDoc.html)

[http://csep10.phys.utk.edu/astr161/lect/moon/moon\\_interior.html](http://csep10.phys.utk.edu/astr161/lect/moon/moon_interior.html)

[http://www.learner.org/teacherslab/pup/act\\_earthmoonintro.html](http://www.learner.org/teacherslab/pup/act_earthmoonintro.html)

<http://www.badastronomy.com/bad/misc/tides.html>

### **Planets, General**

<http://www.nineplanets.org>

<http://pds.jpl.nasa.gov/planets/welcome.htm>

<http://www.nasm.si.edu.ceps/etp/etp.htm>

### **Retrograde Motion**

<http://www.scienceu.com/observatory/articles/retro/retro.html>

<http://alpha.lasalle.edu/~smithsc/Astronomy/retrograd.html>

### **Comets**

<http://seds.lpl.arizona.edu/nineplanets/nineplanets/comets.html>

<http://cfa-www.harvard.edu/iau/Ephemerides/Comets/>

<http://seds.lpl.arizona.edu/nineplanets/nineplanets/halley.html>

<http://www.solarviews.com/eng/halley.htm>

### **Stellar Navigation**

<http://home.t-online.de/home/h.umland/>

<http://www.celestialnavigation.net/>

<http://www1.minn.net/~keithp/cn.htm>

<http://www.nav.org/cel/introduction.html>

### **Solstice/Equinox/Seasons**

<http://www.clarkplanetarium.org/FilesPermanent/SolsticeEquinox.html>

<http://www.attheoak.com/seasons.html>

<http://www-istp.gsfc.nasa.gov/stargaze/Sseason.htm>

[http://www.badastronomy.com/bad/misc/egg\\_spin.html](http://www.badastronomy.com/bad/misc/egg_spin.html)

## **How We Can Tell That Earth is in Motion**

[http://www.astro.queensu.ca/~hanes/p014/Notes/Topic\\_012.html#PART%202](http://www.astro.queensu.ca/~hanes/p014/Notes/Topic_012.html#PART%202)  
<http://www.physlink.com/Education/AskExperts/ae240.cfm>  
<http://curious.astro.cornell.edu/question.php?number=190>

## **History of Astronomy**

### **Aristotle**

<http://csep10.phys.utk.edu/astr161/lect/retrograde/aristotle.html>  
<http://www.utm.edu/research/iep/a/aristotl.htm>

### **Ptolemy**

<http://www.seds.org/billa/psc/theman.html>  
<http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Ptolemy.html>  
[http://es.rice.edu/ES/humsoc/Galileo/Things/ptolemaic\\_system.html](http://es.rice.edu/ES/humsoc/Galileo/Things/ptolemaic_system.html)

### **Galileo**

<http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Galileo.html>  
<http://scienceworld.wolfram.com/biography/Galileo.html>  
<http://es.rice.edu/ES/humsoc/Galileo/>

### **Sir Isaac Newton**

<http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Newton.html>  
<http://csep10.phys.utk.edu/astr161/lect/history/newtongrav.html>  
<http://www.newton.cam.ac.uk/newton.html>

### **Albert Einstein**

<http://www.westegg.com/einstein/>  
<http://www.pbs.org/wgbh/nova/einstein/>

### **Edwin Hubble**

<http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Hubble.html>  
<http://www.pbs.org/wgbh/aso/databank/entries/bahubb.html>  
<http://www.edwinhubble.com/>

### **History of rocketry**

<http://www.thespaceplace.com/history/rocket2.html>  
<http://mirkwood.ucs.indiana.edu/space/rocketry.htm>

### **Timelines/Overviews**

[http://www.windows.ucar.edu/tour/link=/the\\_universe/uts/timeline.html](http://www.windows.ucar.edu/tour/link=/the_universe/uts/timeline.html)  
<http://www.spacetoday.org/History/History.html>  
<http://astroinfo.port5.com>

<http://www.physics.sfsu.edu/~gmarcy/cswa/history/history.html>

### **Determining the speed of light**

<http://www.physlink.com/Education/AskExperts/ae22.cfm>

<http://www.what-is-the-speed-of-light.com/>

<http://hyperphysics.phy-astr.gsu.edu/hbase/relativ/lighthist.html>

### **Determining Distance to/Composition of Stars**

#### **Cassini**

<http://www-gap.dcs.st-and.ac.uk/~history/Mathematicians/Cassini.html>

#### **Henrietta Leavitt**

[http://www.physics.ucla.edu/~cwp/Phase2/Leavitt,\\_Henrietta\\_Swan@871234567.html](http://www.physics.ucla.edu/~cwp/Phase2/Leavitt,_Henrietta_Swan@871234567.html)

<http://www.pbs.org/wgbh/asof/databank/entries/baleav.html>

#### **Cepheid variables**

<http://zebu.uoregon.edu/~soper/MilkyWay/cepheid.html>

[http://imagine.gsfc.nasa.gov/docs/science/mysteries\\_l1/cepheid.html](http://imagine.gsfc.nasa.gov/docs/science/mysteries_l1/cepheid.html)

#### **Spectroscopy**

<http://web.mit.edu/spectroscopy/history/history-classical.html>

#### **Redshift/blueshift**

<http://www.astro.ucla.edu/~wright/doppler.htm>

<http://zebu.uoregon.edu/~soper/Light/doppler.html>

<http://www.ucolick.org/~bolte/AY4/notes4/node2.html>

<http://alpha.lasalle.edu/~smithsc/Astronomy/retrograd.html>

<http://csep10.phys.utk.edu/astr161/lect/retrograde/aristotle.html>

#### **Parallax**

<http://www.eso.org/outreach/spec-prog/aol/market/collaboration/solpar/>

<http://zebu.uoregon.edu/~js/glossary/parallax.html>

<http://www.ast.cam.ac.uk/~mjp/astroparallax.html>

<http://www.badastronomy.com/bitesize/parallax.html>

### **The Electromagnetic Spectrum**

#### **Diagrams**

- <http://imagers.gsfc.nasa.gov/ems/waves3.html>
- <http://hyperphysics.phy-astr.gsu.edu/hbase/ems1.html>

## **Information**

- [http://imagine.gsfc.nasa.gov/docs/science/know\\_l1/emspectrum.html](http://imagine.gsfc.nasa.gov/docs/science/know_l1/emspectrum.html)
- <http://hyperphysics.phy-astr.gsu.edu/hbase/ems1.html>
- <http://www.purchon.com/physics/electromagnetic.htm>

## **Dark matter, dark energy, black holes**

<http://www.astro.queensu.ca/~dursi/dm-tutorial/dm0.html>  
<http://astron.berkeley.edu/~mwhite/darkmatter/dm.html>  
[http://chandra.harvard.edu/xray\\_astro/dark\\_matter.html](http://chandra.harvard.edu/xray_astro/dark_matter.html)  
<http://archive.ncsa.uiuc.edu/Cyberia/NumRel/BlackHoles.html>  
<http://cosmology.berkeley.edu/Education/BHfaq.html>  
<http://physicsweb.org/article/news/7/12/8>  
<http://universe.gsfc.nasa.gov/science/darkenergy.html>

## **Cosmology**

[http://www.astro.ucla.edu/~wright/cosmology\\_faq.html](http://www.astro.ucla.edu/~wright/cosmology_faq.html)  
[http://map.gsfc.nasa.gov/m\\_uni.html](http://map.gsfc.nasa.gov/m_uni.html)  
[http://www-gap.dcs.st\\_and.ac.uk/~history/HistTopics/Cosmology.html](http://www-gap.dcs.st_and.ac.uk/~history/HistTopics/Cosmology.html)  
<http://cfa-www.harvard.edu/~jcohn/tcosmo.html>

## **Space Telescopes**

### **HST**

<http://hubblesite.org>  
<http://hubble.nasa.gov>  
<http://www.seds.org/hst/hst.html>  
<http://heritage.stsci.edu/>

### **James Webb Space Telescope**

<http://www.stsci.edu/jwst/>  
<http://ngst.gsfc.nasa.gov/science/Starsandplanets.html>

### **Spitzer Space Telescope**

<http://sirtf.caltech.edu/>

### **Chandra X-ray Observatory**

<http://chandra.harvard.edu/>  
<http://chandra.nasa.gov/>

### **Compton Gamma-Ray Observatory**

<http://coss.gsfc.nasa.gov/cgro/index.html>

## **Debunking Astrology**

<http://www.astrosociety.org/education/astro/act3/astrology.html>  
<http://www.badastronomy.com/bad/misc/zodiac.html>  
<http://www.astrology-and-science.com/portal.htm>  
<http://www.astrosociety.org/education/publications/tnl/11/11.html>  
<http://users.erols.com/thestewarts/astrology.html>

## **Sources for Daily Horoscopes (to use to debunk astrology)**

<http://horoscopes.astrology.com>  
<http://www.free-daily-horoscopes.com>  
<http://www.horoscope.com>  
<http://astrology.yahoo.com>  
<http://astrology.msn.com>