

Astro4Girls online notebook

Astro4Girls Collaborators

A. NASA Astrophysics Buddies

Harvard/Smithsonian Center for Astrophysics
"Observing With NASA" Program
<http://mo-www.cfa.harvard.edu/OWN/>

Hubble Space Telescope Education Program
<http://amazing-space.stsci.edu/>

NASA Goddard Astrophysics E/PO Program
<http://science.gsfc.nasa.gov/660/outreach/index.php>

SETI Institute Education Program
<http://www.seti.org/node/89>

Sonoma State University Educator Ambassador Program
<http://epo.sonoma.edu/ea/>

B. Library Buddies

Drake Community Library, Grinnell, IA
<http://grinnell.lib.ia.us/>

Cottage Grove Public Library, Cottage Grove, OR
<http://www.cottagegrove.plinkit.org/>

Weber County Library, Ogden, UT
<http://www.weberpl.lib.ut.us/>

Holly Springs Community Library, Holly Springs, NC
<http://www.wakegov.com/images/library/locations/hsp/>

Mobile Public Library, Mobile, AL
<http://www.mplonline.org/>

Ridgefield Library, Ridgefield, CT
<http://www.ridgefieldlibrary.org/>

West Unity Branch Library, West Unity, OH
<http://www.mywcpl.org/westunity>

Sunnyvale Public Library, Sunnyvale, CA
<http://sunnyvale.ca.gov/Departments/SunnyvalePublicLibrary.aspx>

Varnum Memorial Library, Jeffersonville, VT

C. Coordinators

NASA Astrophysics Education and Public Outreach Forum

smdepo.org

American Library Association Public Programs Office
<http://www.ala.org/offices/ppo/>

Astronomy Education Resources (mainly NASA-related)

A: General

NASA Astrophysics Education and Public Outreach programs
<http://asterisk.apod.com/viewtopic.php?f=30&t=26458>

Astronomy resource list from the ALA:
<http://www.ala.org/offices/ppo/programming/visions/visions-ssn-toc>

Family ASTRO
<http://www.astrosociety.org/education/family/involve/families.html>

Astronomy Behind the Headlines
<http://www.astrosociety.org/abh/index.html>

Explore! Discussion Boards (for librarians, afterschool providers and informal educators)
<http://www.lpi.usra.edu/forum/education/>

Stop For Science (poster)
<http://chandra.harvard.edu/edu/stop>

B: Exhibits

From Earth to the Solar System (FETTSS)/From Earth to the Universe (FETTU) traveling exhibits
<http://www.fromearthtotheuniverse.org>

Visions of the Universe: Four Centuries of Discovery
<http://www.ala.org/offices/ppo/programming/visions/visionsuniverse>

C: Astro4Girls "Exploring the Universe Beyond Our Eyes" Specific Resources

Telescopes from the Ground Up
<http://amazing-space.stsci.edu/resources/explorations/groundup/>

Star Light, Star Bright
<http://amazing-space.stsci.edu/resources/explorations/light/>

Myths vs. Realities: Light & Color
<http://amazing-space.stsci.edu/resources/myths/light.php.p=Teaching+tools%40%2Ceds%2Ctools%2C%3EMyths+vs.+realities%40%2Ceds%2Ctools%2Ctype%2Cmyths.php%3EOverview%3A+Light+%2Aamp%2Aamp%3B+color+myths%40%2Ceds%2Coverviews%2Cmyths%2Clight.php&a=%2Ceds>

Myths vs. Realities: Hubble & Space Technology
<http://amazing-space.stsci.edu/resources/myths/tech.php.p=Teaching+tools%40%2Ceds%2Ctools%2C%3EMyths+vs.+realities%40%2Ceds%2Ctools%2Ctype%2Cmyths.php%3EOverview%3A+HST+myths>

%40%2Ceds%2Coverviews%2Cmyths%2Ctech.php&a=%2Ceds

Graphic Organizer: Comparing the Hubble & James Webb Space Telescopes
<http://amazing-space.stsci.edu/resources/organizers/telescope-compare.php.p=Teaching+tools>
%40%2Ceds%2Ctools%2C%3EGraphic+Organizers%40%2Ceds%2Ctools%2Ctype
%2Corganizers.php%3EOverview%3A+Telescopes+organizer%40%2Ceds%2Coverviews
%2Corganizers%2Chst_v_jwst.php&a=%2Ceds

Astronomical Observing Resources and Partners

Global Telescope Network
<http://gtn.sonoma.edu/>

MicroObservatory Robotic Telescope Network
<http://mo-www.cfa.harvard.edu/MicroObservatory/>

Night Sky Network (of astronomy clubs)
<http://nightsky.jpl.nasa.gov/>

Monthly sky maps
<http://www.skymaps.com>

Kepler Star Wheels
<http://kepler.nasa.gov/education/starwheel/>

Meta-resources on Science, Technology, Engineering, and Mathematics (STEM) education and girls

Women in Astronomy: An Introductory Resource Guide to Materials in English
http://www.astrosociety.org/education/resources/womenast_bib.html

Online Resources for Women and Girls
<http://www.aauw.org/connect/ngcp/NGCResources.cfm>

A: STEM-oriented girl-serving organizations, collaboratives:

National Girls Collaborative Project
<http://www.ngcproject.org/index.cfm>

Great Science for Girls
<http://www.greatscienceforgirls.org/>

Sally Ride Science
<https://www.sallyridescience.com/>

Expanding Your Horizons
<http://www.expandingyourhorizons.org/>

GirlsGoTech (Girls Scouts)
<http://www.girlsgotech.org/>

B: Professional Societies for Women and STEM:

Committee on the Status of Women in Astronomy
<http://www.aas.org/cswa/>

Association for Women in Science
<http://awis.org/>

Women in Physics (American Physical Society)
<http://aps.org/programs/women/index.cfm>

National Center for Women & Information Technology
<http://ncwit.org/>

Society of Women Engineers
<http://www.swe.org>

Best practices

A: Engaging girls and families in STEM:

SciGirls Seven: Proven Strategies for Engaging Girls in STEM
<http://www.pbs.org/teachers/scigirls/philosophy/>

Why So Few? Women in Science, Technology, Engineering, and Mathematics
<http://www.aauw.org/learn/research/whysofew.cfm>

Where the Girls Are: The Facts About Gender Equity in Education
<http://www.aauw.org/learn/research/WhereGirlsAre.cfm>

Doing What Works - Girls in Math & Science
http://dww.ed.gov/topic/?T_ID=18

STEM Out-of-School Time Programs for Girls
<http://www.hfrp.org/publications-resources/browse-our-publications/research-update-5-stem-out-of-school-time-programs-for-girls>

Effective STEM Practices | Great Science for Girls
<http://www.greatscienceforgirls.org/resources-research/effective-stem-practices>

NSF - New Formulas for America's Workforce 2: Girls in Science and Engineering
<http://www.nsf.gov/ehr/hrd/Newformulas/newformulas.jsp>

Guide to Evaluating Promising Practices in Informal Science, Technology, Engineering, and Mathematics Education for Girls
http://www.girlscouts.org/research/resources/informal_education.asp

B: Science education and special needs:

Science Education for Students With Disabilities
<http://www.sesd.info/resources.htm>

Special Needs (Archive of NASA sponsored program)

<http://serch.cofc.edu/special/overview.htm>

STEM Careers

A: Profiles of Women (and Men) in STEM:

Women in Astronomy: An Introductory Resource Guide to Materials in English
http://www.astrosociety.org/education/resources/womenast_bib.html

Women@NASA
<http://women.nasa.gov/>

Amazing Space - Career of the Day
http://amazing-space.stsci.edu/sm4/careers/career_12.php.p=Servicing+Mission+4%40%2Csm4%2C

Advice for Young Women Interested in Science | The White House
<http://www.whitehouse.gov/photos-and-video/video/2011/10/21/advice-young-women-interested-science>

FabFems Role Model Directory
<http://www.fabfems.org/>

Women's Adventures in Science
<http://www.iwaswondering.com/>

Be What I Want To Be
<http://www.bewhatiwanttobe.com/>

B: Reading List / Books about women scientists:

You Can Be a Woman Astronomer by Andrea Ghez and Judith Cohen (2006, Cascade Press)

Women Astronomers: Reaching for the Stars by Mabel Armstrong (2008, Stone Pine Press)

African American Women Chemists by Jeannette Brown

Astronomy through Art

Poetry by:
Diane Ackerman (e.g.: The Planets: A Cosmic Pastoral) -- <http://www.dianeackerman.com/>
Rebecca Elson (e.g.: A Responsibility to Awe)

Astronomy & the Arts (links for the film "Seeing in the Dark")
<http://www.pbs.org/seeinginthedark/resources-links/astronomy-and-the-arts.html>

Benefits of Astronomy to Society

Astronomy in Society (from: the National Academies' New Worlds, New Horizons in Astronomy and Astrophysics 2010)
http://www.nap.edu/openbook.php?record_id=12951&page=103

Benefits to the Nation from Astronomy (from: the National Academies' Astronomy and Astrophysics in the New Millennium 2001)

http://www.nap.edu/openbook.php?record_id=9839&page=137

Benefits of Astronomy (from WikiAnswers)

http://wiki.answers.com/Q/How_does_astronomy_benefit_society

Value of Radio Astronomy

<http://www.nrao.edu/index.php/learn/radioastronomy/radioastronomyvalue>

Top Ten unexpected benefits of astronomy

<http://ecogirlcosmoboy.wordpress.com/2011/01/09/top-ten-unexpected-benefits-of-astronomy/>

What is the point of astronomy?

<http://www.strudel.org.uk/blog/astro/000537.shtml>

Women's History Month

Library of Congress website about Women's History Month

<http://womenshistorymonth.gov/>

National Women's History Month

<http://nwhp.org/whm/index.php>

Women's History Month (on the National Register of Historic Places)

<http://www.nps.gov/nr/feature/wom/>