

NASA Resources for Educators

NASA Educational Materials

NASA publishes a variety of education resources suitable for classroom use. Educational materials are available from the NASA Educators' Resource Center Network (ERCN). Posters, lithographs, and some other printed materials are in limited supplies; the publication of new materials is ongoing. Contact the Educator Resource Center in your area, or NASA Central Operation of Resources for Educators (CORE), for the current list of available resources. (See next page for CORE and ERCN addresses.)

NASA Television

NASA Television (NTV) features Space Shuttle mission coverage, live special events, live interactive educational shows, electronic field trips, aviation and space news, and historical NASA footage. Programming has a 3-hour block—Video (News) File, NASA Gallery, and Education File beginning at noon Eastern and repeated three more times throughout the day.

The NASA Education File features programming for educators and students highlighting science, mathematics, geography, and technology-related topics. Viewers are encouraged to tape the programs.

The NTV Education File can be accessed at
<http://spacelink.nasa.gov/education.file>

Via satellite—GE2, Satellite, Transponder 9C at 85 degrees West longitude, vertical polarization, with a frequency of 3880.0 megahertz (MHz) and audio of 6.8 MHz—or through collaborating distance learning networks and local cable providers.

Please visit
<http://www.nasa.gov/ntv/ntvweb.html>
to learn about NTV on the web.

Live feeds preempt regularly scheduled programming. Check the internet for program listings at:

NTV Home Page:
<http://www.nasa.gov/ntv>

Select “Today at NASA” and “What’s New on NASA TV”:
<http://www.nasa.gov>

Select “TV Schedules”:
<http://spacelink.nasa.gov/NASA.News/>



NASA Educator Resource Center Network

To make additional information available to the education community, the NASA Education Division has created the NASA Educator Resource Center (ERC) network. ERC's contain a wealth of information for educators: Publications, reference books, slide sets, audio cassettes, videotapes, telelecture programs, computer programs, lesson plans, and teacher guides with activities. Because each NASA Field Center has its own areas of expertise, no two ERC's are exactly alike. Phone calls are welcome if you are unable to visit the ERC that serves your geographic area. A list of the centers and the geographic regions they serve starts on the next page.

Regional Educator Resource Centers (RERC's) offer more educators access to NASA educational materials. NASA has formed partnerships with universities, museums, and other educational institutions to serve as RERC's in many states.

Teachers may preview, copy, or receive NASA materials at these sites. A complete list of RERC's is available through CORE.

ERC and regional ERC locations:
<http://spacelink.nasa.gov/ercn>

NASA CORE was established for the national and international distribution of NASA-produced educational materials in audiovisual format. Educators can obtain a catalog and an order form by one of the following methods:

- **NASA CORE**
Lorain County Joint Vocational School
15181 Route 58 South
Oberlin, OH 44074
- Phone (440) 774-1051, Ext. 249 or 293
- Fax (440) 774-2144
- E-mail: nasaco@lecca.org
- Home Page: <http://core.nasa.gov>





If you live in:	Precollege Officer:	Educator Resource Center:
Alaska Arizona California Hawaii Idaho Montana Nevada Oregon Utah Washington Wyoming	Mr. Garth A. Hull Special Assistant, Educational Programs NASA Ames Research Center Mail Stop 204-12 Moffett Field, CA 94035-1000 Phone: (650) 604-5543	NASA Research Center: NASA Ames Educator Resource Center NASA Ames Research Center Mail Stop 253-2 Moffett Field, CA 94035-100 Phone: (650) 604-3574
California (Regions near NASA Dryden Flight Research Center)	Dr. Marianne McCarthy Education Specialist NASA Dryden Flight Research Center Mail Stop D4839A P.O. Box 273 Edwards, CA 93523-0273 Phone: (661) 258-2281	NASA Dryden Flight Research Center: NASA Dryden Educator Resource Center 45108 N. 3rd Street East Lancaster, CA 93535 Phone: (661) 948-7347
Connecticut Delaware District of Columbia Maine Maryland Massachusetts New Hampshire New Jersey New York Pennsylvania Rhode Island Vermont	Dr. Robert Gabrys Chief, Education Office NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 Phone: (301) 286-7207	NASA Goddard Space Flight Center: NASA Goddard Educator Resource Center Mail Code 130.3 NASA Goddard Space Flight Center Greenbelt, MD 20771-0001 Phone: (301) 286-8570
Colorado Kansas Nebraska New Mexico North Dakota Oklahoma South Dakota Texas	Ms. Billie A. Deason Education Team Lead Education & Community Support Branch NASA Johnson Space Center Mail Code AP2 2101 NASA Road One Houston, TX 77058-3696 Phone: (281) 483-8646	NASA Johnson Space Center: NASA JSC Educator Resource Center 1601 NASA Road One Houston, TX 77058-3696 Phone: (281) 244-2129

If you live in:	Precollege Officer:	Educator Resource Center:
Florida Georgia Puerto Rico Virgin Islands	Dr. Steve Dutczak Chief, Education and Services Branch NASA Kennedy Space Center Mail Code AB-G1 Kennedy Space Center, FL 32899-0001 Phone: (407) 867-4444	NASA Kennedy Space Center: NASA KSC Educator Resource Center Mail Code ERC Kennedy Space Center, FL 32899-0001 Phone: (407) 867-4090
Kentucky North Carolina South Carolina Virginia West Virginia	Dr. Bill Williams Precollege Officer NASA Langley Research Center Mail Stop 400 Hampton, VA 23681-0001 Phone: (757) 864-9728	NASA Langley Research Center: NASA Langley Educator Resource Center Virginia Air and Space Center Hampton, VA 23669-4033 Phone: (757) 727-0900 Ext.757
Illinois Indiana Michigan Minnesota Ohio Wisconsin	Ms. Jo Ann Charleston Chief, Office of Education Programs NASA Lewis Research Center Mail Stop 7-4 21000 Brookpark Road Cleveland, OH 44135-3191 Phone: (216) 433-2957	NASA Lewis Research Center: NASA Lewis Educator Resource Center Mail Stop 8-1 21000 Brookpark Road Cleveland, OH 44135-3191 Phone: (216) 433-2017
Alabama Arkansas Iowa Louisiana Missouri Tennessee	Alicia Beam Education Program Specialist NASA Marshall Space Flight Center Mail Code CD60 Huntsville, AL 35812-0001 Phone: (256) 544-8811	NASA Marshall Space Flight Center: NASA Marshall Educator Resource Center One Tranquility Base Drive Huntsville, AL 35807-7015 Phone: (256) 544-5812
Mississippi	Wanda F. DeMaggio Education Programs Manager NASA Stennis Space Center Bldg. 1100 Mail Code AA10 Stennis Space Center, MS 39529-6000 Phone: (228) 688-1107	NASA Stennis Space Center: NASA Stennis Educator Resource Center Building 1200 Stennis Space Center, MS 39529-6000 Phone: (228) 688-3338
The Jet Propulsion Laboratory (JPL) serves inquiries related to space and planetary exploration and other JPL activities.	Mr. David M. Seidel Manager, Educational Affairs Office NASA Jet Propulsion Laboratory Mail Code T1709 4800 Oak Grove Drive Pasadena, CA 91109-8099 Phone: (818) 354-9313	NASA Jet Propulsion Laboratory: NASA JPL Educator Resource Center Mail Code 601-107 NASA Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109-8099 Phone: (818) 354-6916



On-Line Resources for Educators

NASA Education Home Page

NASA's Education Home Page serves as a cyber-gateway to information regarding educational programs and services offered by NASA for educators and students across the United States. This high-level directory of information provides specific details and points of contact for all of NASA's educational efforts and Field Center offices.

Educators and students utilizing this site will have access to a comprehensive overview of NASA's educational programs and services, along with a searchable program inventory that has cataloged NASA's educational programs.

NASA Education Home Page:
<http://education.nasa.gov>

NASA Spacelink

NASA Spacelink is one of NASA's electronic resources specifically developed for the educational community. Spacelink is a "virtual library" in which local files and hundreds of NASA World Wide Web links are arranged in a manner familiar to educators. Using the Spacelink search engine, educators can search this virtual library to find information regardless of its location within NASA. Special events, missions, and intriguing NASA web sites are featured in Spacelink's "Hot Topics" and "Cool Picks" areas.

Spacelink may be accessed at: <http://spacelink.nasa.gov>

NASA Spacelink is the official home to electronic versions of NASA's Educational Products. NASA educator guides, educational briefs, lithographs, and other materials are cross-referenced throughout Spacelink with related topics and events. A complete listing of NASA Educational Products can be found at the following address:

<http://spacelink.nasa.gov/products>

"Educator Focus" is comprised of a series of Spacelink articles, which offers helpful information related to better understanding and using NASA educational products and services. Visit "Educator Focus" at the following address:

<http://spacelink.nasa.gov/focus>

Join the NASA Spacelink EXPRESS mailing list to receive announcements of new NASA materials and opportunities for educators. Our goal is to inform you as quickly as possible when new NASA educational publications become available on Spacelink:

<http://spacelink.nasa.gov/express>



NASA Aeronautics Centers' Education Home Pages

NASA Marshall Space Flight Center
<http://www.msfc.nasa.gov/education>

NASA Ames Research Center
<http://www.arc.nasa.gov/kids.html>

NASA Dryden Flight Research Center
<http://trc.dfrc.nasa.gov/trc/>

NASA Langley Research Center
<http://edu.larc.nasa.gov>

NASA Lewis Research Center
<http://www.grc.nasa.gov/www/oep>

Light, Color, and Their Uses



List of Catalogs for Science Equipment K–12

Carolina Biological Supply Co.
2700 York Road
Burlington, NC 27215
1-800-334-5551

Central Scientific Co. (CENCO)
11222 Melrose Avenue
Franklin Park, IL 60131
1-800-262-3626

Delta Education, Inc.
P.O. Box 950
Hudson, NH 03051
1-800-442-5444

Dick Blick Art Materials
P.O. Box 1267
Galesburg, IL 61401
1-800-447-8792

Edmund Scientific Company
*(Specialty Optics)
101 E. Gloucester Pike
Barrington, NJ 08007-1380
1-609-5647-8880

Flinn Scientific, Inc.
(Chemical Catalog)
P.O. Box 219
131 Flinn Street
Batavia, IL 60510-9906
1-708-879-6900

Fisher Scientific Co.
Educational Materials Division
4901 W. LeMoyne Street
Chicago, IL 606512
1-800-621-4769

Frey Scientific Co.
P.O. Box 8101
905 Hickory Lane
Mansfield, OH 44901-8101
1-800-25-FREY

Hubbard
P.O. Box 104
Northbrook, IL 60065
1-800-323-8368

NASCO
901 Janesville Avenue
Fort Atkinson, WI 53538
1-800-558-9595

Oriental Trading Company, Inc.
P.O. Box 3407
Omaha, NE 68103
1-800-875-8480

Science Kit and Boreal Labs
777 E. Park Drive
Tonawanda, NY 14150
1-800-828-7777

Scienceware
Grau-Hall Scientific
6501 Elvas Avenue
Sacramento, CA 95819
1-800-331-4728

S&S Arts and Crafts
Colchester, CT 06415
1-800-243-9232

Stumps Decorations for
Special Occasions
Box 305
South Whitley, IN 46787-0305
1-800-992-9251

Triarco Arts & Crafts
14650 28th Avenue N.
Plymouth, MN 55447
1-800-328-3360



Light, Color, and Their Uses





Educator Reply Card

Optics—An Educator's Guide with Activities in Science, Mathematics, and Technology Education

To achieve America's goals in Educational Excellence, it is NASA's mission to develop supplementary instructional materials and curricula in science, mathematics, geography, and technology. NASA seeks to involve the educational community in the development and improvement of these materials. Your evaluation and suggestions are vital to continually improving NASA educational materials.

Please take a moment to respond to the statements and questions below. You can submit your response through the internet or by mail. Send your reply to the following internet address:

http://ehb2gsfc.nasa.gov/edcats/educator_guide

You will then be asked to enter your data at the appropriate prompt.

Otherwise, please return the reply card by mail. Thank you.

1. With what grades did you use the educator's guide?

Number of Teachers/Faculty: _____
_____ K-4 _____ 5-8 _____ 9-12 _____ Community College
College/University: _____ Graduate _____ Undergraduate

Number of Students: _____
_____ K-4 _____ 5-8 _____ 9-12 _____ Community College
College/University: _____ Graduate _____ Undergraduate

Number of Others: _____
_____ Administrators/Staff _____ Parents _____ Professional Groups
_____ General Public _____ Civic Groups _____ Other

2. What is your home 5- or 9-digit zip code? _____ - _____ - _____

3. This is a valuable educators guide. Strongly Agree Agree Neutral Disagree Strongly Disagree
4. I expect to apply what I learned in this educator's guide. Strongly Agree Agree Neutral Disagree Strongly Disagree
5. What kind of recommendation would you make to someone who asks about this educator's guide? Excellent Good Average Poor Very Poor

6. How did you use this educator's guide?

- Background Information Critical Thinking Tasks
- Demonstrate NASA Materials Demonstration
- Group Discussions Hands-On Activities
- Integration Into Existing Curricula Interdisciplinary Activity
- Lecture Science and Mathematics
- Team Activities Standards Integration
- Other: Please specify: _____

7. Where did you learn about this educator's guide?

- NASA Educator Resource Center
- NASA Central Operation of Resources for Educators (CORE)
- Institution/School System
- Fellow Educator
- Workshop/Conference
- Other: Please specify: _____

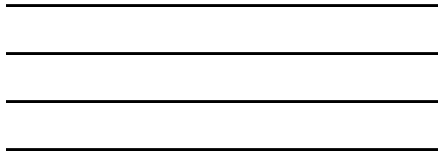
8. What features of this educator's guide did you find particularly helpful?

9. How can we make this educator's guide more effective for you?

10. Additional comments:

Today's Date: _____

Fold along the line and tape closed



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Postage

National Aeronautics and Space Administration
Education Division
Mail Code FE
Washington DC 20546-0001

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