

America Recycles Day November 15, 2006



Earn an America Recycles Day patch!

November 15th is America Recycles Day – a day when millions of Americans join to celebrate and make the commitment to keep recycling. Communities across the country, including our own here in Kansas and Missouri, plan events to encourage residents to recycle, and buy recycled.

The patch program is a fun way to reward children and teens that have shown an interest in recycling and other environmental issues. Hands-on learning is an effective way to develop environmentally responsible habits.

This packet contains all the information you'll need to put on the patch program in your school, scout troop, or youth group:

- Exercises for receiving a patch
- List of additional activities to choose from
- Patch and recycled-content product order information
- A list of local recycling resources
- Paper making instructions

To earn the America Recycles Day patch, it is recommended that youth complete the required exercises and three additional activities. If you want to participate in the online pledge, it is best to align your program deadline with the pledge deadline which you can find at the national ARD website www.americarecyclesday.org. Otherwise, you can set the program deadline for when ever you wish.

**Questions? Contact Matt Riggs at (816) 701-8313 or
mriggs@marc.org**

America Recycles Day Patch

Exercises 1 – 7

Name _____

1. 🗑️ List at least three different ways to reduce or reuse paper:

- 1.
- 2.
- 3.

2. 🗑️ List six different items that can be recycled:

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |

3. 🗑️ Explain why it is important to reduce, reuse, recycle, and buy recycled, OR older students may explain the difference between source reduction and reuse.

4. 🗑️ Name a way each of these items can be reused instead of throwing them away.

- ◆ Cardboard Box _____
- ◆ Plastic Milk Carton _____
- ◆ Glass Jar _____
- ◆ Wooden Board _____
- ◆ Plastic Bag _____
- ◆ Newspaper _____

5. 🗑️ Find out where your nearest recycling center is located and write the address below:

6. 🗑️ Find out what items are accepted for recycling at your recycling center.

- | | |
|----|-----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

7. 🗑️ If you have curbside recycling at home, list what items are accepted:

Now, it's time to choose three activities listed on the following pages.
Please share your results. Thank you.

HAVE FUN!



Additional America Recycles Day Patch Activities Listed By Grade Levels

Instructions: Each patch applicant can *choose and complete three activities*. Depending on age group and activity, parent, teacher or group leader may feel free to work with youth as a group to complete activities.

1. America Recycles Day Pledge Form - All Grades -

Note: This activity may not be available every America Recycles Day. Please verify at the national ARD website www.americarecyclesday.org before completing this activity.

Make a commitment to recycle and close the recycling loop by buying products with recycled content (buy recycled). Your name will be entered into a national drawing. Pledges can be made on-line at www.americarecyclesday.org. Please include a completed copy of the pledge form with patch submittal and be sure to postmark by date listed on website.

2. Do ONE of the following:

- | | |
|-------------------|---|
| All Grades | Make paper (see attached instructions) |
| All Grades | Create a recycled art sculpture from “trash” |
| 3-12 Grade | Write a poem about reduce, reuse, and recycling |
| 6-12 Grade | Create and display an environmental awareness exhibit at a local mall, school, library or community event |

ACTIVITIES 3-4 All Grades

3. List three ways you as an individual can help the environment in your community, at home, and at school.

- 1.
- 2.
- 3.

4. Visit one of the four following locations and describe your experience:

Landfill (find out where our trash goes when we throw away)

Recycling drop-off center (offer to volunteer at the center a few hours and learn a lot!)

Material Recovery Facility-MRF (find out how what happens to your recyclables)

Reuse Store (Visit a local reuse center or thrift shop in your community)

ACTIVITY 5 1-8 Grade

5. Complete math problems for appropriate grade. Show work. (See pages 9-10.)

ACTIVITIES 6-7 3-12 Grade

6. If your school has a recycling program, develop ways to educate the school and increase participation in the program.

List some ideas or things you did:

7. For one day pick up litter from a local park, school, or other common area.

Separate the trash from the recyclables. Describe your experience:

ACTIVITIES 8-11 6-12 Grade

8. Complete the America Recycles Day Crossword Puzzle. (See page 11.)

9. Develop a project plan that would help solve an environmental problem.

Reduce an environmental impact or increase environmental awareness in your community. Include plans for a specific project that *could* be done by your class or troop. Describe the project:

10. Imagine you manage your own supermarket.

What are some things you can do to reduce the amount of waste caused by the products you sell?

Visit your local supermarket and see what things they do such as recycle cardboard or compost produce waste. List five things you observed.

- 1.
- 2.
- 3.
- 4.
- 5.

11. Visit a local supermarket or office supply store and find fifteen items that contain recycled-content. List percentage and type of recycled-content material.

Item	Percentage (%) Recycled Content	Type of Material
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- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.

12. Identify and briefly describe the work of three organizations through which you could volunteer to benefit our environment. Volunteer at least one hour with one of these organizations.

- 1.
- 2.
- 3.

13. Perform a recycling or waste reduction experiment. Directions to conduct a fun, hands-on experiment can be found at www.kcpt.org/olin.

Name your experiment and describe the results:

14. Identify and discuss three possible careers in the field of environmental science.

Describe the type of education you would need to pursue these careers.

- 1.
- 2.
- 3.

America Recycles Day Patch

Math Problems for Grades 1-8

Easy (first grade)

1. Tom has 10 cans. He takes six to the recycling center. Draw a picture and write a number sentence to show how many cans Tom has left.
2. Molly had eight pounds of newspapers. She took half of them to the recycling center. Draw a picture and write a number sentence to show how many pounds of newspapers were recycled.

Easy (second grade)

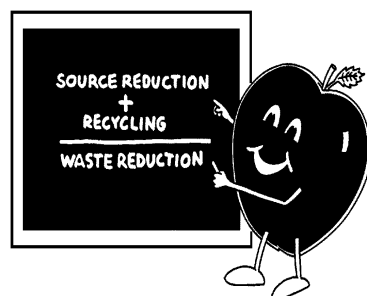
1. Kevin has 27 glass jars. Eleven of them are brown, four are green, and 12 of them are clear. The recycling center only accepts brown and clear glass for recycling. Draw a picture and write a number sentence to show how many glass jars Kevin can take to be recycled.
2. Sally and Dan are sorting their recyclables. They take the aluminum cans to the recycling center. The man at the recycling center pays them \$1.50 for their cans. They decide to share the money evenly. How much money does each person receive?

Easy (third grade)

1. The recycling center pays 25 cents per pound for aluminum cans. Jan took seven pounds of aluminum cans to be recycled. How much money did Jan earn at the recycling center?
2. If the average person throws away four pounds of garbage every day, how many pounds of garbage does one person throw away in one year (365 days)?

Easy (fourth grade)

1. If 10 percent of the money you spend on groceries is for packaging and you spend \$75 at the grocery store, how much money was spent on packaging?
2. Bob made \$1.60 by recycling aluminum cans. He wants to buy a drink and a candy bar at the store. A drink costs 50 cents and a candy bar costs 45 cents. How much money will Bob have left?



Moderate (fifth grade)

1. Monica pays \$9.50 per month for trash service. She is allowed to have two barrels of trash per week. Monica decides to start recycling and only sets out one barrel of trash each week. By having only one barrel of trash each week, the cost of her trash service decreases by 30 percent. How much does Monica pay for trash service now?
2. Stan, Frank, and Tony are on the baseball team. They need to raise \$150 for new uniforms. They have an aluminum can collection at their school. Each week they make \$25 at the recycling center from the cans they collect. How long will it take them to raise enough money for their new uniforms?

Moderate (sixth grade)

1. Approximately 30 percent of our garbage is paper or paper products. If the average person throws away 1,460 pounds of trash a year, how many pounds of this trash is paper or paper products?
2. Americans throw away 2.5 million plastic bottles every hour. How many plastic bottles are thrown away in one day in America?

Moderate (seventh grade)

1. Considering that one tree produces 117 pounds of paper, if your school sends 5,850 pounds of paper to the recycling center, how many trees would be saved by recycling?
2. Twice a month, Carol takes 24 pounds of aluminum cans to the recycling center. The recycling center pays 28 cents a pound. How much money will Carol earn in a year?

Moderate (eighth grade)

1. Approximately 11 percent of municipal solid waste is yard waste (grass clippings, branches, leaves). If the average household throws away 5,520 pounds of solid waste each year, how much trash would it throw away each year by composting yard waste?
2. The average American uses 580 pounds of paper each year. If you recycle 4.5 pounds of newspapers each week, 11 pounds of magazines each year, and 23 pounds of paper each month, how many pounds of paper will you send to the landfill in one year after recycling?

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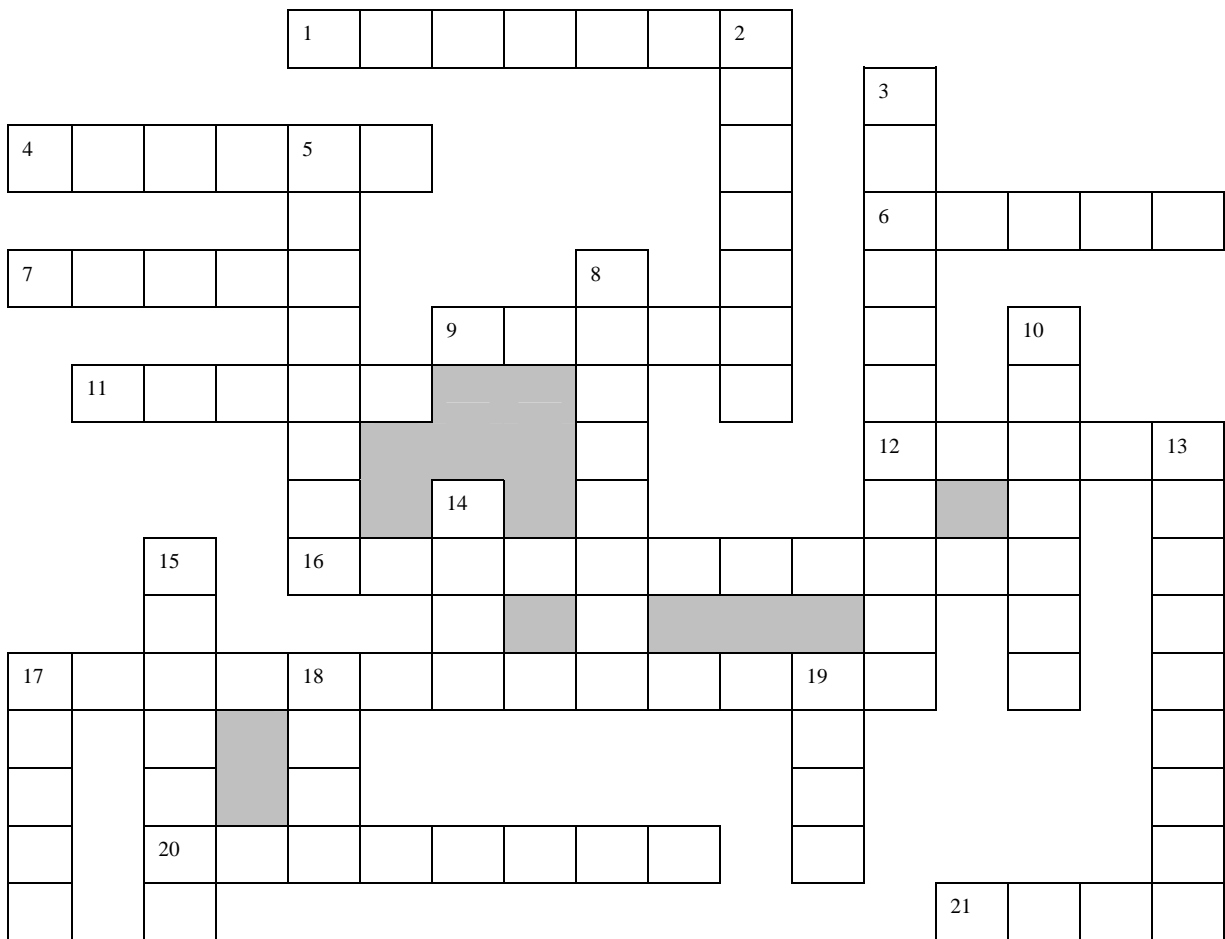
Solid Waste Crossword Puzzle for Grades 6-12

ACROSS

1. decomposition which occurs in the presence of oxygen
4. cut down the amount of waste created
6. a recyclable material
7. a recyclable material
9. a recyclable material
11. to use a product again without remanufacturing
12. dry waste
16. everything that surrounds us
17. a microscopic living thing
20. a way to dispose of waste by burying it in a carefully prepared area of land
21. a recyclable, used with 7 across

DOWN

2. a mixture of decomposing organic matter used to improve the soil
3. the flow of trash: from the source to its final end use or disposal
5. term for collecting recyclables in front of homes
8. single-celled organisms
10. a material that is recycled in some places
13. waste that is harmful is _____
14. how long some waste lasts, for _____
15. to process waste material for manufacturing use
17. a group of recyclable materials including steel and aluminum
18. unsafe method of disposal, _____ dump
19. upper layer of earth



America Recycles Day Patch Solid Waste Crossword Puzzle Answers

Across: 1 aerobic
4 reduce
6 steel
7 paper
9 glass
11 reuse
12 trash
16 environment
17 microorganism
20 landfill
21 news

Down: 2 compost
3 waste stream
5 curbside
8 bacteria
10 plastic
13 hazardous
14 ever
15 recycle
17 metal
18 open
19 soil

Patch and Recycled-Content Product Order Information

Signature Marketing is the only vendor that sells ARD patches at this time. If you decide you don't want to use patches to recognize kids for completing the packet, you can choose from the many other recycled-content products offered by the following vendors.

MORNINGSTAR TRADING, INC.

210 Newman Road
Lake Park, FL 33403
Phone: 800-861-5067 (toll free)
Fax: 561-844-4314
Email: mitch@mstartrading.com
Website: www.mstartrading.com

RECYCLEDPRODUCTS.COM

Weisenbach Specialty Printing
437 Holtzman Avenue
Columbus, OH 43205-1604 USA
Phone: 800-778-5420 (toll free) or 614-251-8585
Fax: 614-251-8440
Email: sales@weisenbach.com
Website: www.recycledproducts.com

SIGNATURE MARKETING

To order patches: 1. Visit www.signaturemarketing.com, 2. Click on the ARD logo, and 3. Click on "Toys & Miscellaneous Things".

You must order a minimum of 100 patches. Patches cost \$2.25 a piece. If this is too many, consider splitting your order with other groups or saving them for future years. The patch design remains the same from year to year.

134 West Street
Simsbury, CT 06070
Phone: 877-658-7172 (toll free) or 860-658-7172
Fax: 800-841-7826 (toll free) or 860-651-8376
Email: sigcycle@aol.com
Website: www.signaturemarketing.com

STAN MILLER & ASSOCIATES

25955 Aurora Road
Cleveland, OH 44146
Phone: 800-211-5850 (toll free)
Fax: 440-232-1732
Email: info@millerpromotions.com
Website: www.millerpromotions.com

Local Recycling Resources

www.RecycleSpot.org - This web site is a one-stop shop for recycling and waste reduction information in the Kansas City metro area. If you can't find it on RecycleSpot.org or have other questions, call (816) 474-TEAM (8326).

Kansas City Freecycle™ - Members of Kansas City Freecycle are free to post requests for items that they need or ads for items that they'd like to get rid of at www.kcfreecycle.org. Everything listed on KCFreecycle™ must be 100% free.

Bridging The Gap (BTG) – Kansas City's local environmental organization, BTG operates local recycling centers, litter cleanup efforts and many other environmental projects. They offer many volunteer opportunities.

Location: 435 Westport Rd., #23, Kansas City, Mo., 64111

Phone: (816) 561-1087

Web: www.bridgingthegap.org

Habitat ReStore - Accepts donations of new and used building materials. Contributors avoid disposal costs while customers receive useable materials at deep discounts.

Location: 4701 Deramus, Kansas City, Mo., 64120

Phone: (816) 231.6889

Web: www.restorekc.org

The Children's Museum of Kansas City - The Children's Museum of Kansas City provides art, cultural, educational and interactive exhibits and programs for children. Their Recycled Materials Center has a wide variety of useful materials suitable for art and craft work.

Location: Indian Springs Marketplace, 4601 State Avenue, Kansas City, Kans., 66102

Phone: (913) 287-8888

Web: www.kidmuzm.org

Surplus Exchange – The Surplus Exchange has an electronics recycling center and accepts and sells used office equipment and furniture.

Location: 518 Santa Fe, Kansas City, Mo., 64105

Phone: (816) 472-0444

Web: www.surplusexchange.org/index.htm

To set up recycling at your school or church, contact:

Abitibi Consolidated

Location: PO Box 3246, Kansas City, Kans., 66103

Phone: (913) 722-9022

Web: www.paperretriever.com

Deffenbaugh Recycling

Location: 8905 Kaw Drive, Kansas City, Kans., 66111-1729

Phone: (913) 441-9660

Web: www.deffenbaughdisposal.com/recycling.asp

Making Recycled Paper

Materials Needed:

- Waste paper of various grades and colors (white or colored bond, construction, crepe, notebook)
- Screens – any window screen (nylon works the best), cut into the size of your choice (tape the edges for safety)
- Sponges and rags
- Blender
- Plastic tub or bucket
- Stack of old newspapers, divided into sections
- Additives (optional) – Dryer lint, seeds, feathers, string, dried flowers, etc. can be pressed into the pulp when pressing out the water.

Making the Paper:

1. About two 8 ½ x 11" sheets equal one piece of recycled paper. Tear waste paper into small strips and tear small strips into small squares. Fill a blender about ½ full with the paper scraps and then cover them with water (an inch or two past the top of the paper).
2. Run the blender on high until the contents are well blended and mushy. The wet paper pieces are called pulp, and the mixture is called a slurry.
3. Place the screen over the plastic tub and pour the slurry from the blender onto the screen. Shake the screen back and forth a bit to distribute the slurry evenly. Then, lift the screen up by spreading your hand underneath it, and let the water drain in the tub for a few seconds.
4. If you will be pressing items into the paper, add them now. Place another piece of screen over the paper pulp and press the two screens together between your hands, squeezing the water into the tub. Dab a sponge over the screen to help squeeze the excess water out.
5. Lay the screens enclosing the paper pulp on a section of newspaper. The newspaper will help absorb water out of the new piece of paper. With the sponge on top of the screen, press water out of the paper, flattening the pulp as you go. You can also use the edge of the sponge (or your fingertips) to shape the paper onto the screen.

6. When you have pressed most of the water out of your paper with the sponge, carefully lift off the top screen and, with a flat hand supporting the entire screen, hold the bottom screen with pulp as you turn the newspaper stack over, exposing the dry side. Set the screened unit, pulp side down, on the dry side of the newspaper stack.
7. Carefully peel away the screen from the new paper. Allow paper to air dry overnight or in a sunny place for a few hours.

Enjoy your recycled paper by using it to make cards, picture mats or other beautiful craft projects!