



# Ronald McDonald House Charities of the Miami Valley Region

Pop Tab Collection Program  
Ideas and Resources for Teachers



A resource guide to use in collaboration  
with your classroom curriculum.



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# Mathematics

## Measurement:

### Project 1

Fill a jar with pop tabs.

- a. Have the students guess how many pop tabs are in the jar.
- b. Have the students compare several small containers: box, cylinder, bottle, etc. Which one contains the most pop tabs? Why?

### Project 2

Break students into co-op learning groups, teams or partners. Give each a number of pop tabs.

- a. How many pop tabs are in 1 foot? One cup?
- b. How many pop tabs does it take to cover a piece of paper?
- c. With a scale, how many pop tabs weigh an ounce? A pound?

## Some Common Measurement Equivalents:

1 inch = 1 pop tab

2 1/2 centimeters = 1 pop tab

1 foot = 12 pop tabs

1 kilometer = 40,000 pop tabs

1 meter = 40 pop tabs

1 mile = 63,360 pop tabs

1 pound = 1,552 pop tabs

## Word Problems

1. Sally has 3,000 pop tabs. The recycler will give her \$.47 for every 1,500 pop tabs. How much will she get for this delivery?
2. A recycler gives \$.47 per pound of pop tabs. How much will Sam receive for 500 pounds?
3. If Chris has 300 pop tabs and Tommy has 465 pop tabs, how many pop tabs will they have when their collections are combined?
4. Shannon has collected 890 pop tabs in her container. She knows it takes 2,995 tabs to fill the container. How many more tabs will she need to make her container full?

# GEOGRAPHY

## United States & Ohio Maps

- A. There are 7 Ronald McDonald Houses in Ohio; Akron, Cincinnati, Cleveland, Columbus, Dayton, Toledo & Youngstown. Mark them on the map with a sticker or star.
- B. Can you find cities with the same name in different states that a Ronald McDonald House is located? Example: Columbus: Ohio & Georgia  
Springfield: Massachusetts & Illinois
- C. Can you find (fill in a specific city where a House is located)?
- D. Which states do not have a Ronald McDonald House?

## International Map

- A. How many continents contain Ronald Houses?
- B. How many Ronald McDonald Houses are in Australia?
- C. Internationally, how many Ronald McDonald Houses are there?
- D. The Switzerland House is located on what continent?
- E. The Hong Kong House is located on what continent?
- F. How many Ronald McDonald Houses are in South America?



# History

- A. The first Ronald McDonald House was built in 1974. What other events happened during that year?
- B. Who invented the pop tab?
- C. What popular Dayton amphitheater is named after the inventor of the pop tab?
- D. When was the pop tab invented? What other events occurred the year the pop tab was invented?
- E. What year did the Ronald McDonald House of Dayton open?

# Science

- A. Pop tabs are made from which metal?
- B. Why does the Ronald McDonald House collect only the tabs and not the whole can?
- C. What other things can you recycle?
- D. What is the elemental symbol for aluminum?

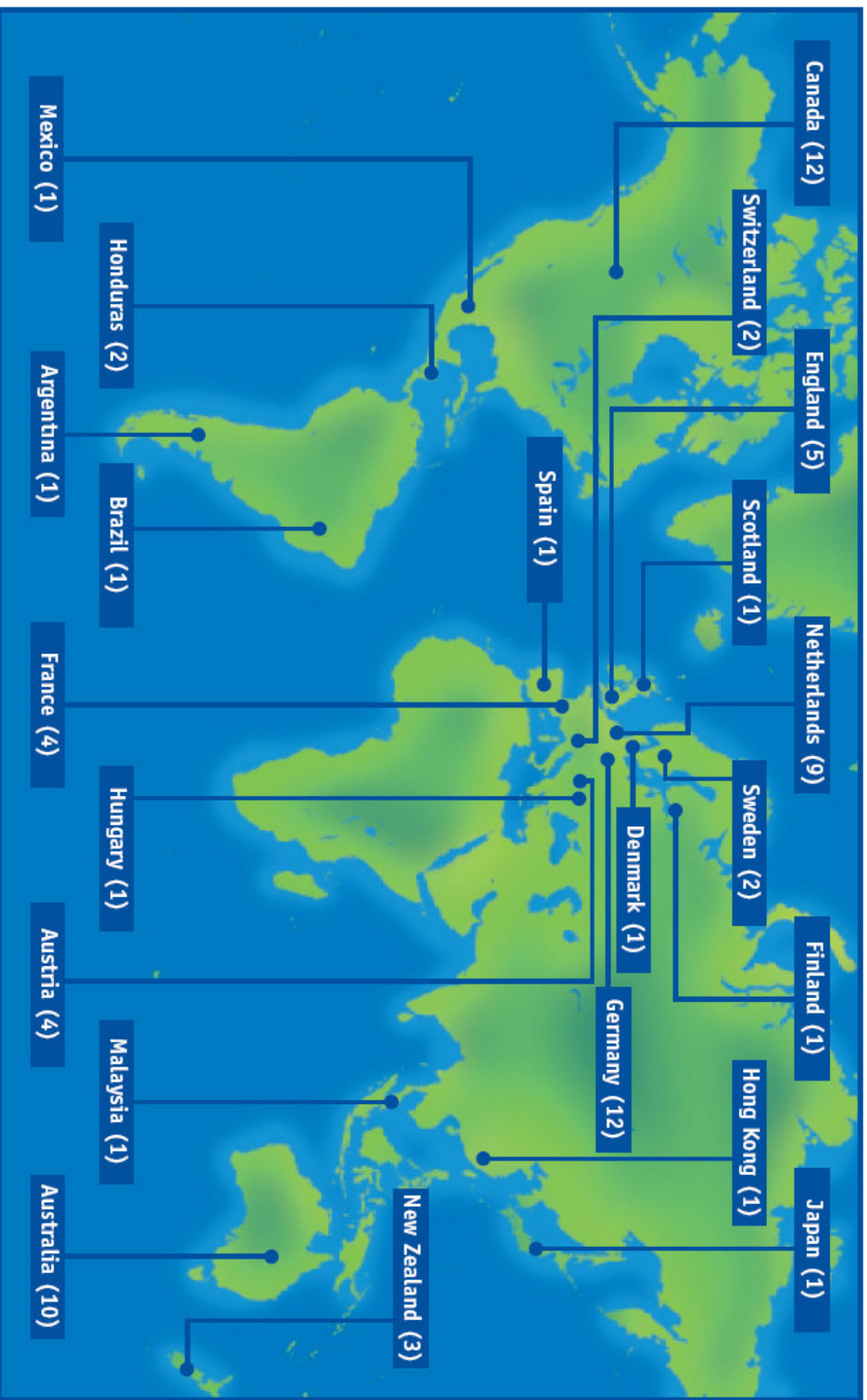
## Did You Know?

A pop tab withstands up to 110 pounds of tension exerted against it by the carbon dioxide in the soda. But only 3-4 pounds of pull on the tab causes the tab to rupture, releasing the contents inside.

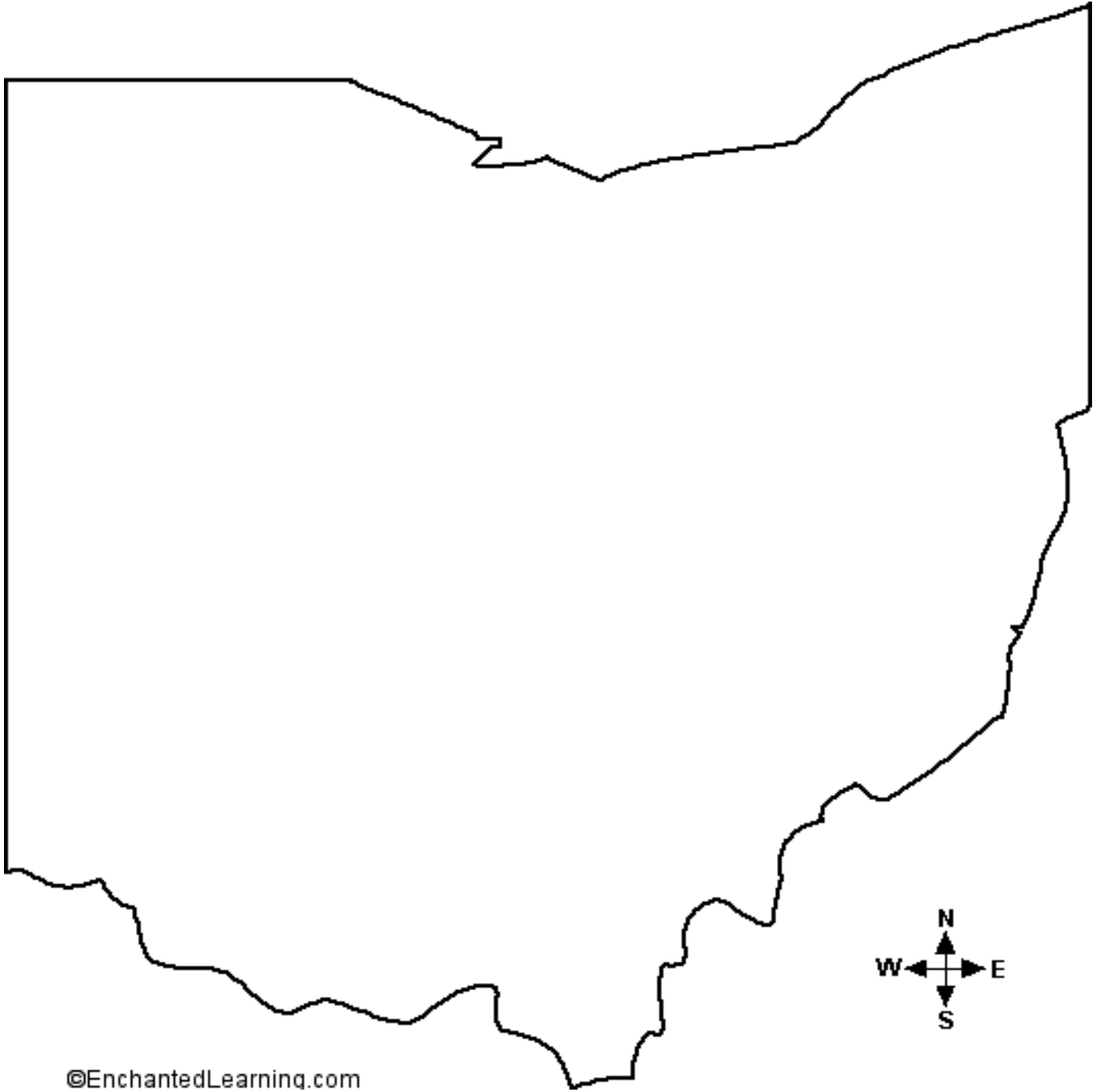
Source: Scientific American. [Http://www.sciam.com/1296working.html](http://www.sciam.com/1296working.html)

# Ronald McDonald Houses - International

Total - 75







Ohio - The Buckeye State

# ANSWER SHEET

## MATHEMATICS

### Project 1

- A. Answers may vary
- B. Answers may vary

### Project 2

- A. 1 foot = 12 pop tabs, 1 cup = Approx. 196 pop tabs,
- B. It takes approx. 154 pop tabs to cover a 8 1/2 x 11 sheet of paper.
- C. 1 ounce = approx. 97 pop tabs, 1 pound = 1552 pop tabs

### Word Problems

- 1. \$.94
- 2. \$235
- 3. 765 pop tabs
- 4. 2,205 more tabs

## History

- A. Some examples of events that occurred in 1974:
  - President Nixon resigned.
  - Violence breaks out in Boston due to integration in the busing systems
  - Dr. Henry Heimlich introduced the Heimlich Maneuver
  - Happy Days* premiered it's first episode
  - The Album of the Year Grammy was awarded to Stevie Wonder for "Innervisions"
- B. Ermal Frazee
- C. Kettering's Frazee Pavilion
- D. The ring pull can was invented in 1962. The following are some examples of events that occurred in 1962:
  - John Glenn was the first American astronaut in space.
  - Marilyn Monroe died on August 5, 1962.
  - Lawrence of Arabia* won best picture.
  - Telstar successfully transmitted transatlantic television signals for the first time
  - Cuban Missile Crisis occurred on October 28, 1962.
  - The Beatles appear on *The Ed Sullivan Show*.

# ANSWER SHEET CONT.

## SCIENCE

- A. Aluminum
- B. The Ronald McDonald House collects only the tabs and not the can because of cleanliness and storage space. Also, the aluminum alloy is more pure in the tab than in the can. This enables you to recycle the cans for your self or another organization.
- C. Answers may vary. Some examples are newspapers, plastic bottles, and glass containers.
- D. AL

## GEOGRAPHY:

### UNITED STATES MAP:

- A. Check map
- B. Answers will vary
- C. Answers will vary
- D. New Hampshire, Wyoming, Alaska

### INTERNATIONAL MAP

- A. 5
- B. 10
- C. 76
- D. Europe
- E. Asia
- F. 2



# Fun Crafts

## It's a Bad Hair Day



You need a pop can tab, some thick, brightly colored yarn, a small circle of felt (any color), 2 googly eyes. Cut 6 pieces of thick yarn about 6 cm. in length ( 3 pieces of each color) Half hitch the yarn into the round hole of the pop tab & unravel the yarn to make the "bad hair". Cut a small circle of felt & glue it to the bottom of the pop tab, add the googly eyes.



## The Friendly Lion

This is made from a pop can tab, a small piece of yellow felt, 2 small googly eyes, & yellow yarn. Cut pieces of yarn about 6-7 cm long. Half hitch the yarn inside the round pop tab hole. Keep going until it is completely full (about 20 pieces). Glue on a small circle of yellow felt for the face, add the eyes & use a marker for the smile. Into the smaller pop tab hole put 6 strands of yarn about 30 cm in length, half hitch into place, then braid to make the lion's tale. Tie with a bow at the bottom. Fray the yarn open to make the mane of the lion & the bottom of the tail.

## Snake



This craft uses pop tabs & felt. The snake itself, cut from any color felt, is approx. 20 cm long in total. The body is about 15 cm long & 1 cm wide. The head, in a pear shape, (or heart shaped for Valentine's Day) is 4 cm at the widest part. Make a cardboard pattern & cut all in one piece. Add a piece of forked tongue out of red felt, 2 large googly eyes, & thread the felt through 6 pop tabs to create an undulating body. If you begin over & under through one pop tab, the next one can be under & over, then over & under, etc. This gives the length an undulating effect. Make sure rough & sharp edges are filed down to avoid cuts. All ages enjoy this one!

# Ronald McDonald House of Dayton

## Word Search

Find the hidden words from the List provided below.

The words can be vertical, horizontal, or diagonal.

X X P Y H F R I E N D O F R D A R  
D J O L O A I G X A W B E L K E J  
X O U I S C L D G J X C A H E G J  
G R N M P E H N J B Y N C T Q M I  
S S D A I Q B I U C O L N N P G K  
E B W F T D U Y L R A U L V H O L  
H S U I A I M E S D L T N E R A P  
E V I G L K O A U O X W A R C P G  
O T U H X M O N V M V R H S J K E  
N X H N V H I B L B T O B O G I T  
U A V U B I W H B X O Z U S W N H  
E T D W G B E P K G N G V D R M A  
B R J W D T N V Q L F F M H T W J  
S S N Z H Z Y G O D V P V C E C X  
O V E R N I G H T L J Z W I H A Y

**CHILD  
VOLUNTEER  
DONATION  
FAMILY  
FRIEND  
GIVE  
HEART**

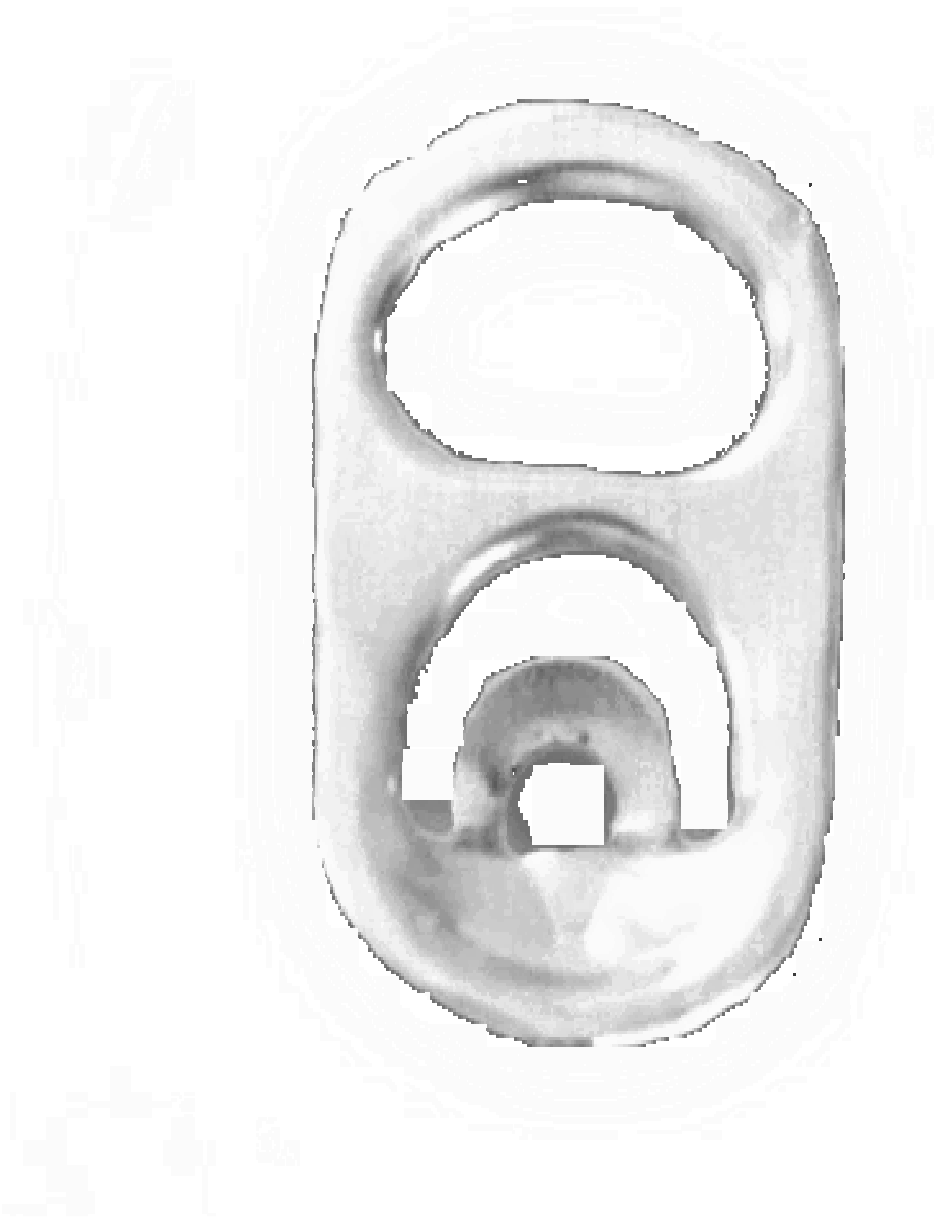
**OVERNIGHT  
PARENT  
POP TAB  
POUND  
HOSPITAL  
RECYCLE  
RONALD  
LOVE**

# COLOR OUR



Ronald McDonald House Charities of the Miami Valley Region, 555 Valley Street, Dayton, OH, 45404

## Use Your Imagination . . .



Create a person, face, animal, musical instrument, or Christmas Tree. Or let your own fantastic imagination create an object using the pop tab above. Try using markers, crayons, cotton balls, Q-tips, pasta shells, dried beans, yarn, or anything else you need.