

### **IMPORTANT: PLEASE READ BEFORE CONTINUING**

This portion of the Aeros Education Day curriculum has been provided by various organizations throughout the Greater Akron community. This portion of the curriculum is designed to empower students in a civic manner and encourage them to take an interest in their community as a whole.

These lesson plans have been added to our Baseball IS Education curriculum, to help students realize that they are an integral part of the future of their community and to develop an awareness of a variety of community initiatives. **For your convenience, Grade Level Bands and Benchmarks are listed within the curriculum.** Regardless of the activity, the procedures and methods can easily be substituted to fit the appropriate grade level.

*This curriculum and this portion of the curriculum has been organized with the following in mind:*

- a) Educators tailor their lesson plans to meet the needs of their students.
- b) Educators may use bits and pieces of a lesson plan to create their own lesson plan.
- c) Educators have the flexibility to use this curriculum and lesson plans to integrate ideas into current studies.

Also, this curriculum guide was created to provide you with a learning “compass” to help guide your students through a truly rewarding “out-of-class” experience. The ideas and lesson plans included within stand to serve as a *guide* for educators to create appropriate, educational ideas to assist in the “Education Days” at Canal Park (April 16, May 1, May 8, and May 22, 2008).

Each of the organizations that have provided additional lessons will be at Canal Park for each of the Education Days and will have interactive Education Stations on the concourse for students to visit.

For more information on any of these organizations please visit their respective websites:

Akron Beacon Journal: [www.ohio.com](http://www.ohio.com)

Character Counts! Akron: [www.charactercountsakron.org](http://www.charactercountsakron.org)

Humane Society of Greater Akron: [www.summithumane.org](http://www.summithumane.org)

Keep Akron Beautiful: [www.KeepAkronBeautiful.org](http://www.KeepAkronBeautiful.org)

Please address any questions, comments, concerns or ideas regarding the Baseball IS Education curriculum guide to:

Akron Aeros Education Day  
Canal Park  
300 South Main Street  
Akron, OH 44308-1204

# Community-1



**“Kids Care for Critters”****Reference to Ohio Academic Content Standards:**

Social Studies: K-2/Citizenship Right and Responsibilities: A., B.

K-2/Social Studies Skills and Methods: B., C., D.

Science: K-2/Life Sciences: A., B.

Mathematics: K-2/Number, Number Sense and Operations: D., E.

**Objectives:**

Students will gain an awareness of community involvement, an understanding and respect for living things and work on their presentation and money counting skills.

**Materials:**

Chart paper, markers. Materials to create a bank in the likeness of an animal; plastic bottle, scissors, glue, felt or fabric.

**Preparation:**

Discuss with students what the Humane Society is and the role that it serves within the community.

The Humane Society has animals that lack basic needs and without those needs being met the animals will not survive. Brainstorm and create a list of basic needs for the animals and for the Humane Society itself. (Ideas on how to help may be found on the Humane Society of Greater Akron’s web site: [www.summithumane.org](http://www.summithumane.org)).

From that list, create another list of what the students may do themselves to help the animals.

**Procedure:**

1) Collect Pet Supplies. Students may create posters and share the created list of needed supplies and how to help the animals with the rest of the school. Students may go to other classrooms at their school and make a presentation on why these animals need their donations and help. Students may even make a short movie or commercial to explain their cause to those that they are not able to personally address.

2) Create a donation bank for change in the likeness of an animal. Place the banks in the classroom and throughout the school community and collect, sort and count the money raised weekly or monthly.

**Assessment:** The students overall participation in authentic experiences through their presentations, community involvement, and the counting of the money raised.





## “Fishing for Litter Habits”

Students will “fish” for litter habits in a fishing game using a pole made from a ruler, string and a magnet. When students “catch” a litter habit they will read it and *infer* whether to place it in the good habit or bad habit section. Students will then *graph* the habits at the end of the activity.

### Reference to Ohio Academic Content Standards:

Language Arts: K-3/Reading Applications: D. Acquisition of Vocabulary: D.

4-7/Acquisition of Vocabulary: A.

Science: K-2/Earth & Space: D.

3-5/Earth & Space: C.

Mathematics: 5-7/Data Analysis & Probability: A., E.

### Objectives:

Children will distinguish between good and bad litter habits, create a bar graph to demonstrate results and read statements aloud pertaining to good and bad litter habits.

### Materials:

Appendix 1 (background information), Appendix 2 (Litter Habits fish), scissors, paper clips, small ruler, string, magnet, two clear plastic bags labeled good and bad habits. (*Appendix 1 & 2 are located at the end of this section.*)

### Preparation:

Copy, cut out and laminate Appendix 2 (Litter habits fish). Make a “fishing pole” by attaching a 3-ft. long string to a ruler. Attach a magnet to the other end of the string. Place paper clips on each cut out litter habit fish.

### Procedure:

Explain to students they are going fishing, but instead of real fish they are going fishing for litter habits. Tell students that each cut out fish represents a habit, and before the “fishing” starts, ask them to give an example of a bad litter habit, followed by an example of a good litter habit. Tape the plastic bags to the chalkboard (one labeled “good habits”, the other “bad habits”). Students take turns “fishing.” When a fish is caught, the student will read the habit and decide whether it belongs in the good or bad bag. The students should explain why the habit is good or bad. (Answers: 1. bad, 2. good, 3. good, 4. bad, 5. bad, 6. bad, 7. good, 8. bad, 9. bad, 10. good, 11. bad, 12. good, 13. bad, 14. good, 15. bad, 16. good, 17. bad, 18. good, 19. good, 20. good).

### Assessment:

1. Have students make posters urging others not to litter.
2. Give each student two blank fish and have him/her create one good and one bad litter habit.

Lesson Plan courtesy of  
Division of Recycling & Litter Prevention,  
Ohio Department of Natural Resources  
and Keep Akron Beautiful

# Community-3





## “Don’t Step on Litter”

Students *cooperate* in groups as they play a board game. They will identify causes of litter and good/bad litter habits. Students *make computations* to move an appropriate number of spaces during the game.

### Reference to Ohio Academic Content Standards:

Science: 3-5/Earth & Space: C. 6-8/Earth & Space: E.

Mathematics: 3-4/Number, Number Sense: K. 5-7/Number, Number Sense: A.

Social Studies: 6-8 Skills & Methods: D.

### Objectives:

Students will identify three causes of litter, cooperate in groups to read and follow directions, add, subtract, multiply, and/or divide numbers, and use parenthesis properly in math computations.

### Materials:

Appendix 1 (background information), Appendix 3 (Don’t Step on the Litter Game board & cards), scissors, glue, construction paper, old buttons for game markers. (*Appendix 1 & 3 are located at the end of this section.*)

### Preparation:

Copy the game board and game cards (Appendix 3) for each group of students. Students will glue the game cards onto construction paper for added strength. Students will cut out the reinforced game cards and shuffle before the game begins.

### Procedure:

Using the background information (Appendix 1), and discuss how litter negatively affects the environment. Ask students to describe litter and explain why they think litter happens. Discuss the penalties of littering and illegal dumping. Ask students if they have ever littered and why? Using general examples of negative litter habits ask students how these negative litter habits may be changed to positive litter habits.

Explain to students that they will be playing a game that penalizes players for negative acts of litter and rewards them for positive litter habits. Divide the class into groups of four students and have them assemble their game. Have each group place their game cards face down.

The first student will turn over a card and compute the number of moves. The group will verify that the computation is correct. The students will then move their game marker the correct number of moves. Each player will take a turn, and place the used cards in a discard pile. The first player to reach the recycling center wins. Students may need to reuse the cards to finish the game. (Answers: 1.5, 2. 7, 3. 6, 4. 2, 5. 3, 6. 6, 7. 6, 8. 5, 9. 7, 10. 5, 11. 2, 12. 4, 13. 1, 14. 3, 15. 1, 16. 1, 17. 2, 18. 4, 19. 1, 20. 1).

### Assessment:

Have students complete the worksheet/handout in Appendix 3, *Don’t Step on Litter Assessment*.

Lesson Plan courtesy of  
Division of Recycling & Litter Prevention,  
Ohio Department of Natural Resources  
and Keep Akron Beautiful

# Community-4





## **“Character Counts in Sports!”**

### **Reference to Ohio Academic Content Standards:**

Social Studies: 6-8/Citizenship Right and Responsibilities: B. Social Studies Skills and Methods: A., B. 9-10/Citizenship Rights and Responsibilities: A.

Language Arts: 4-7/Writing Applications: D. Writing Conventions: A., B., C. Research: B., C., E. 8-10/Writing Conventions: A., B., C. Research: B., C., E.

### **Objectives:**

Students will relate historical sports figures and their significance to the study of social studies and the Six Pillars of Character; trustworthiness, respect, responsibility, fairness, caring and citizenship.

### **Materials:**

Paper, pen, reference guides and/or the internet.

### **Preparation:**

Ask students who are their favorite athletes? Why are they popular? Discuss how athletes support the Six Pillars of Character. Discuss how sports figures have played a role in changing popular public perception through their citizenship choices. Have students select one of the following to research: Jackie Robinson, Jesse Owens, Jim Thorpe, or Roberto Clemente.

Students should create a timeline of events and write an informational essay about the impact of their athlete on history.

### **At the Game:**

Review the six pillars of character. Assigning one pillar to six different groups of students. Students should take notes on how the character of individual players is shown on the field. List examples of both positive and negative displays, and give suggestions as to how more character could have been shown, or how better character choices may have lead to a different outcome of a situation.

### **Follow-Up:**

Discuss with students society's view of athletes. Are athletes role models? Should they be? What happens when athletes make bad character choices? Relate the discussion to your school community - how do your sports teams' character choices impact the entire school community and how do those outside of your school community view you.



**“Heroes, Celebrities and a Hall of Fame”**

**Reference to Ohio Academic Content Standards:**

Social Studies: 6-8/Citizenship Right and Responsibilities: A.

Language Arts: 4-7/Acquisition of Vocabulary: F.

5-7/Writing Processes: A. Writing Applications: D., E. Writing Conventions: A., B., C.

Communication: Oral and Visual: C., E.

**Objectives:**

Students will examine the differences between being "a celebrity" and "a Hero." By using the newspaper, and any other appropriate reference materials, they will each determine a nominee for a Community Hall of Fame to be displayed in the classroom. They will present their nominee to the class, and the class will vote on which nominees should be included.

**Materials:**

Paper, pen, dictionary, newspaper, reference guides and/or the internet.

**Preparation:**

Have students look up the definitions of celebrity and hero in the dictionary. Discuss the similarities and differences of the two. Sometimes the words are used interchangeably, but there is a vast difference between the two. In just about every arena of life there are people that we look up to and call heroes, but are they really heroes? What types of celebrities are there? Discuss where and why sports figures fit into these definitions.

**Procedure:**

Students will look through the newspaper to identify three people that they would define as heroes and three others that they would define as celebrities. They will make a list of the names of these people and the newspaper section in which they were located. Each student should then research the individuals they have chosen and make a brief list to support the status of hero or celebrity that they have assigned to these people. Each student will then choose one person from their list and present their nominee to the class. After all of the nominees have been presented, the class will vote on whom should be included in the class Community Hall of Fame. Include those from all walks of life such as business, education, government, sports, etc.

**Follow-Up:**

The class should obtain pictures and create biographies on those that have been voted into the Hall of Fame. Dedicate a space in the classroom to post each of the inductees and their information.





## “Understanding Our Community Ties”

### Reference to Ohio Academic Content Standards:

Social Studies: 6-8/Citizenship Right and Responsibilities: A.

6-8/Social Studies Skills and Methods: D.

**Objectives:** To understand and appreciate our link to the community and how our involvement is important in keeping it strong. To realize that we must all work together in the community to care for, and protect both people and animals.

**Materials:** Poster paper, markers, any materials needed for community service projects.

**Preparation:** Discuss with students what makes up a community and why we need to work together in our community. What organizations in our community help people and animals? Discuss various non-profit organizations like the Humane Society of Greater Akron, Keep Akron Beautiful, and Character Counts-Akron. Why were these organizations started and whom do they benefit? Why do people volunteer for these organizations? Have you or your family ever volunteered for a community organization? Which one(s)? How did you feel when you helped out?

**Procedure:** Write these headings on two separate pieces of poster paper: "Who Makes Up Our Community?" and "Needs of Our Community." Brainstorm ideas for both. Write a mission statement for your classroom that encompasses both of these categories and describes how the class feels about their link to the community. The statement should also reflect the class commitment to helping their community. They should then begin brainstorming ideas for how they can help various organizations.

Choose one animal related organization and one people related organization.

Write down all of the ideas and then vote on the two organizations the class would like to help. Once the organizations have been chosen, call the volunteer coordinator and discuss possible group projects for your class. It could be an on-site project like cleaning up at the facility, or an off-site project like a food or clothing drive. Find out what the organization's greatest needs are and what the students are most interested in doing. Have the students help organize the projects. Make a banner for the classroom that includes the mission statement and discuss it often.

**Assessment:** Post-Discussion: What did the students enjoy most about these community service projects?

What was learned about the organizations? Why is it important to help people and animals, alike?

Why is it important to help out your community, in general?

If the projects go well and the class is enthusiastic about volunteering, look at the possibility of having them volunteer with the organization on an on-going basis. It could be a few hours per month, or even every other month.

This will help bring a sense of unity to the class, as well as giving them a strong link to the community.

Lesson Plan courtesy of  
the Denver Dumb Friends League  
& the Humane Society of Greater Akron

# Community-7



**“The Two Sides of Leadership”**

**Reference to Ohio Academic Content Standards:**

Social Studies: 9-10/Citizenship Right and Responsibilities: B.

Language Arts: 8-10/Writing Processes: A. Writing Applications: A. Writing Conventions: A., B., C.

11-12/Writing Applications: A. Writing Conventions: A., B., C.

**Objectives:**

Students will examine leadership responsibilities and why it is important to have strong leaders.

**Materials:**

Paper, pen, newspaper, reference guides and/or the internet if desired.

**Preparation:**

Discuss as a class individual dreams of being a star in professional sports or entertainment or being a leader in school or in business. Examine with students the amount of commitment it takes to attain goals and the amount of responsibility that has to be taken on when you are a leader. Discuss the characteristics of a leader - hardwork, perseverance, and the willingness to accept responsibility. How do leaders balance doing what is best for individuals versus what is best for an organization or a community?

**Procedure:**

Students will read through the newspaper and find three examples of three types of leaders (a leader in business, government, sports, entertainment, etc.). Write a brief summary about these leaders as to what kind of leadership this person shows, personal characteristics that they require and what responsibilities they must accept on a sheet of paper.

**Follow-Up:**

Have students write an essay about a way in which they have served as a leader. What were some of the responsibilities that were accepted? How did actions as a leader effect others? What feelings were experienced as a leader?





## LESSONS IN COMMUNITY AWARENESS

Secondary

### “Litter & Life”

Students will read and discuss handouts about litter and wildlife, they will answer questions about the material in the handouts. Students research the habitat and feeding habits of animals to understand how litter can affect wildlife.

#### Reference to Ohio Academic Content Standards:

Science: 11-12/Earth & Space: C.

Language Arts: 8-10/Writing Processes: A. Writing Applications: A. Reading Applications: A.

11-12/Writing Processes: C. Writing Applications: C. Reading Applications: A.

#### Objectives:

Students will *read* for comprehension passages about litter and wildlife; increase their environmental vocabulary; *identify* hazardous materials in nature that result from littering and other actions and *identify* wildlife affected by litter.

#### Materials:

Handouts (Appendix 4), Additional Background information (Appendix 1) if needed, and one plastic six-pack can holder for each class, scissors. (*Appendix 1 & 4 are located at the end of this section.*)

#### Procedure:

1. Hold up a plastic six-pack holder. Ask students if they are aware that this plastic is often lethal to wildlife and why. Ask them how it can be made non-lethal. (this requires several cuts in the ring holder).
2. Give students the handout, **Wildlife Obituaries**. Have them read the sheet silently. Point out to the class that shearwaters, petrels, fulmarks, auklets, puffins, phalaropes, terns, and albatrosses are all birds. Whales, dolphins, and manatees are all mammals.
3. Have students conduct research about the habitat, global location, feeding habits, and movement of the animals listed on the handout and make inferences about how litter in various forms could affect each animal. Use a globe to point out the global impact of plastic pollution. Have students locate on the globe exactly where to find the animals vulnerable to litter. (Example: Greens, are found in the South China Sea and off of the coast of Japan, Australia, and Central America. Olive Ridleys are located in the Pacific coastal waters off of Mexico).
4. Have students complete the handout, **Awareness Check: Wildlife Obituaries**. Grade and discuss.

#### Evaluation:

Check the students' answers on the worksheets. Based on the information acquired in the activity, have each student write an essay (explanatory, persuasive, etc.) about the potentially harmful, effects of litter on wildlife and what should be done to correct the problem.

Lesson Plan courtesy of  
Division of Recycling & Litter Prevention,  
Ohio Department of Natural Resources  
and Keep Akron Beautiful

## Community-9



## **BACKGROUND INFORMATION**

**Waste material** can be found anywhere people live, work, and play. Waste that is not properly contained is called **litter**. It is important to learn about litter because people create the problem. Litter, such as paper, cans, food scraps, tires, and other waste materials improperly disposed of, can be unsightly and may often present a health hazard. Litter can result from a direct action (failing to secure trash can lids tightly). Deliberate littering is an improper form of waste disposal similar to **illegal dumping**. In both cases, harm may be done to the environment in one or more ways, including injury to wildlife and threats to human health.

The environmental impact of litter depends on the nature of the littered items and the characteristics of the land or water where it is deposited. Food scraps when left in a natural environment in small amounts, may not be harmful to the environment because they become part of nature's recycling system. Food waste on city streets, however, is a health **hazard**.

Human made materials, such as plastic, glass, steel, and aluminum, are both unsightly to the landscape and a potential hazard to wildlife and people. These objects may become a home to disease spreading insects, such as flies and mosquitos. They can also cause external injury to animals and humans. For example, it is common for birds to ingest waste materials or become trapped, causing injury or death.

Litter comes from many sources. The following is a list of **seven sources of litter**, as identified by the Keep America Beautiful organization. It is estimated that 80 percent of all litter originates from the first five sources.

- 1) **Household Refuse:** Improperly covered household trash cans or trash contained in plastic bags are a potential source of litter. Animals or people can knock over cans and open bags. Wind can also blow trash from open cans.
- 2) **Commercial Refuse:** Stores and business generate large amounts of waste. If garbage cans and dumpsters do not have tightly-fitted lids or locks, the waste can easily be scattered.
- 3) **Commercial/demolition sites:** Scrap building materials can be blown or carried away from these areas to become litter if fences are not put around the site and containers with secure lids are not used.
- 4) **Uncovered vehicles:** Material can fall or blow from trucks and trailers creating serious hazards for other motorists. Loads should be tied down or covered with a tarp.
- 5) **Loading Docks:** The constant loading and unloading of vehicles can produce all kinds of debris. Storage bins and dumpsters should always be kept closed.
- 6) **Motorists:** Drivers and/or passengers create litter when they throw waste from their vehicles. Car litter bags and trash cans conveniently located at parks, rest areas, gas stations, and fast food stores help reduce this type of litter.
- 7) **Pedestrians:** Waste is often dropped or thrown on the ground by people on foot. Containers along sidewalks and in recreation areas provide an opportunity to avoid littering.

Lesson Plan courtesy of  
Division of Recycling & Litter Prevention,  
Ohio Department of Natural Resources  
and Keep Akron Beautiful



## **BACKGROUND INFORMATION Continued:**

Littering isn't just unsightly, unhealthy and wasteful; it's illegal. Under Ohio law, litter is any trash thrown, discarded, or dropped by a person onto public property not owned by the individual, or into Ohio's waterways. Littering is a serious offense, punishable by fines up to \$500 and 60 days in jail.

Law enforcement officers can issue tickets for casual littering from motor vehicles as they do for traffic violations such as, speeding. In addition, the driver of a motor vehicle or watercraft can be held responsible for litter discarded onto the roadway or waterway by passengers. It is also illegal in Ohio to drive or move a vehicle on any highway with a load that is not secured. All loads that can spill or drop litter on the roadway require a covering. Exceptions to this law include farm vehicles used to transport agricultural products and garbage collection vehicle in process of acquiring their loads.

Illegal dumping is a serious aspect of littering. Not only is dumping waste on private or public land and water ways prohibited, but it is illegal to use someone else's dumpster. Citizens should use licensed disposal facilities and insist that trash haulers use legal disposal methods.

Learning about litter can have a positive impact. Children can do their part, by not littering and by picking up litter when it is safe to handle. Most importantly; they can discourage others from littering.

## **BIBLIOGRAPHY AND ADDITIONAL RESOURCES:**

### **Student Resources:**

*50 Simple Things Kids Can Do to Save the Earth*, by The Earthworks Group, Kansas City, MO: University Press, 1990

*The Environment*, by Gerald Leinwald, New York: Library of Congress, 1990

*What We Can Do About Litter*, by Donna Bailey, New York: Franklin Watts, 1991.

### **Educator Resources:**

*Facts Not Fear*, by Michael San Era and Jane S. Shaw, Washington DC: Regnery Pub. Inc., 1996

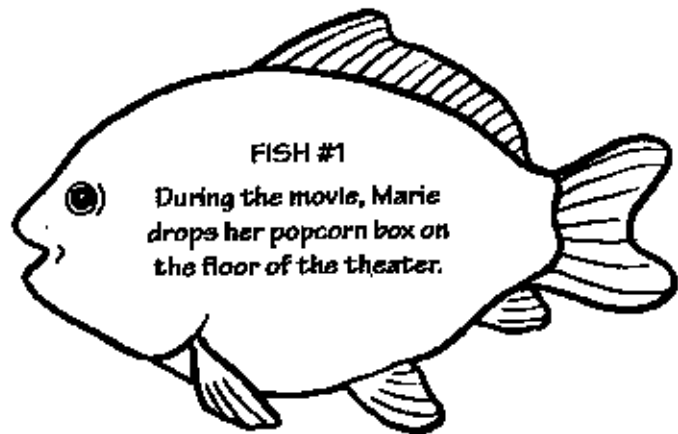
*The Environmental Crisis*, by David Bander and Bruno Leone, St. Paul: Greenhaven Press, 1986

*The Environment*, by Gerald Leinwald, New York: Facts on File Pub., 1990

Lesson Plan courtesy of  
Division of Recycling & Litter Prevention,  
Ohio Department of Natural Resources  
and Keep Akron Beautiful

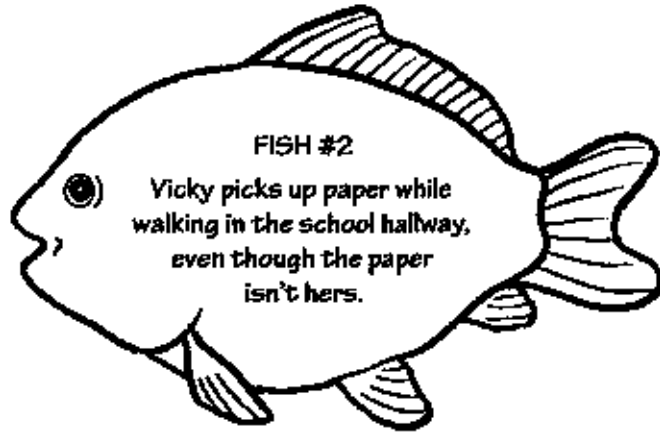


# LITTER HABITS FISH 1



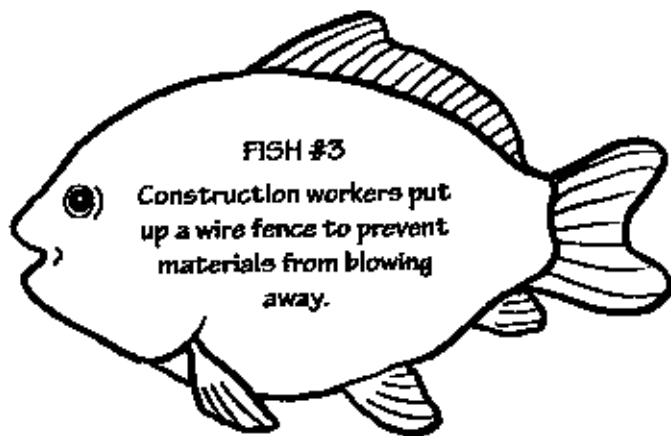
FISH #1

During the movie, Marie drops her popcorn box on the floor of the theater.



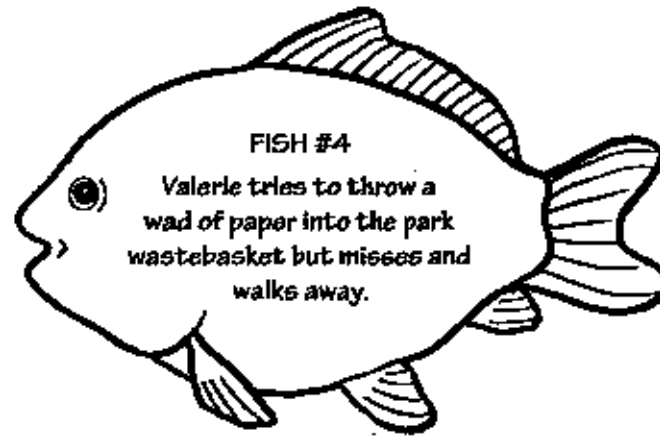
FISH #2

Vicky picks up paper while walking in the school hallway, even though the paper isn't hers.



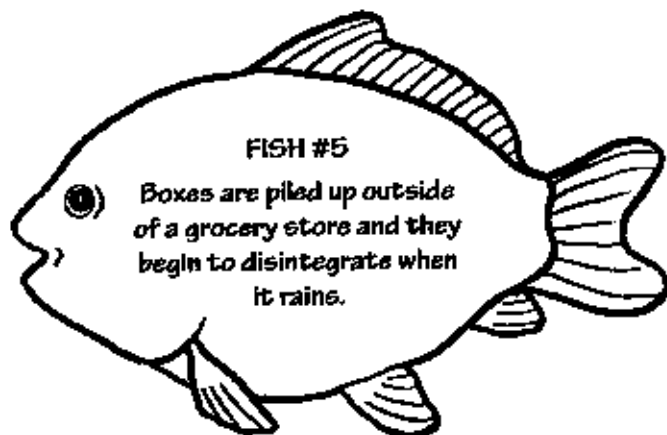
FISH #3

Construction workers put up a wire fence to prevent materials from blowing away.



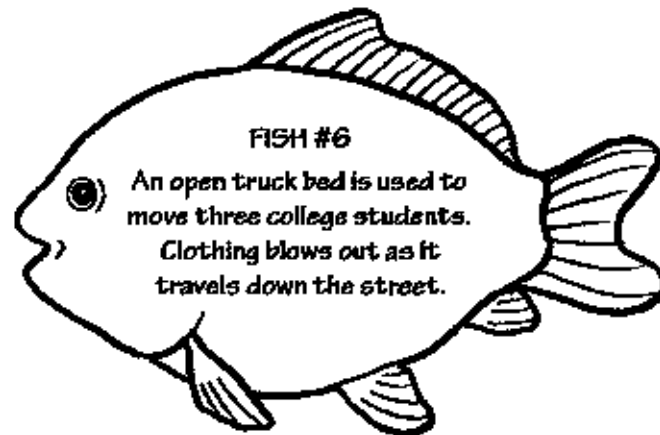
FISH #4

Valerie tries to throw a wad of paper into the park wastebasket but misses and walks away.



FISH #5

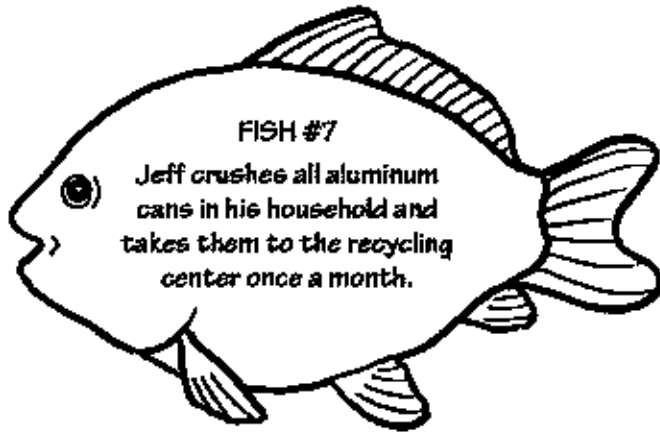
Boxes are piled up outside of a grocery store and they begin to disintegrate when it rains.



FISH #6

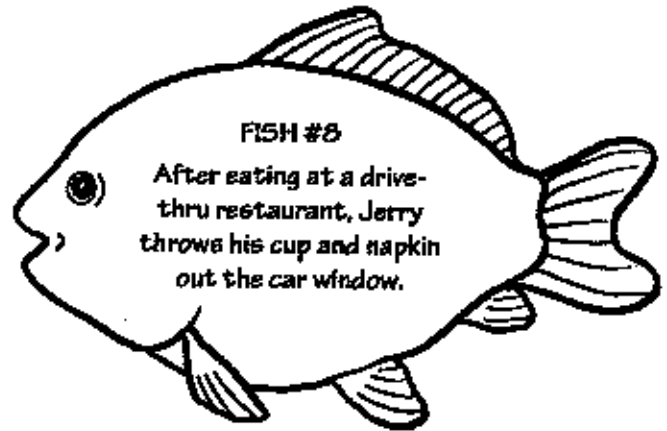
An open truck bed is used to move three college students. Clothing blows out as it travels down the street.

# LITTER HABITS FISH 2



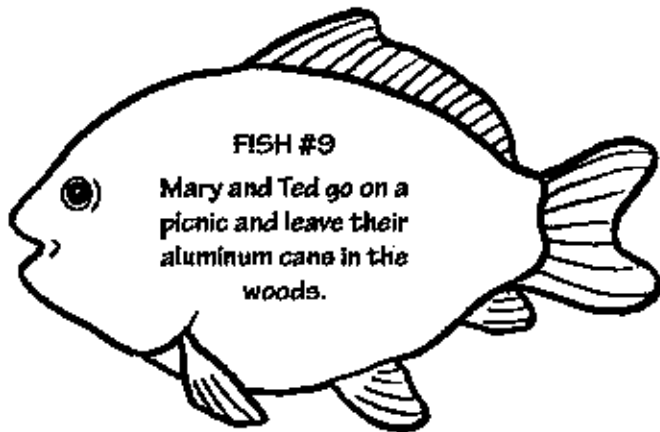
FISH #7

Jeff crushes all aluminum cans in his household and takes them to the recycling center once a month.



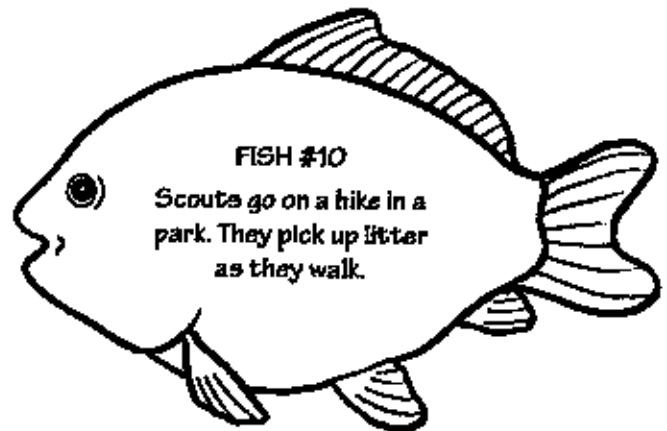
FISH #8

After eating at a drive-thru restaurant, Jerry throws his cup and napkin out the car window.



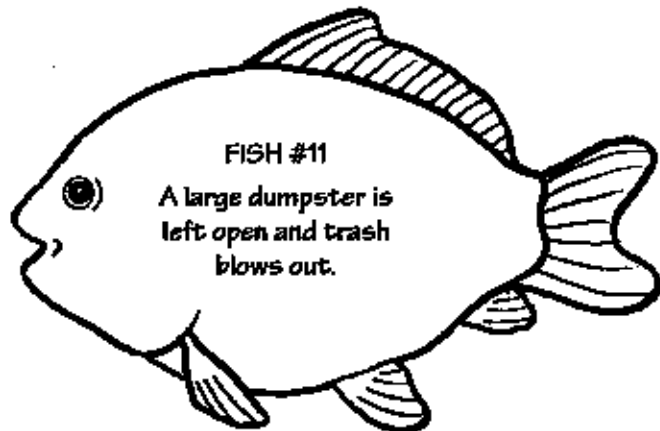
FISH #9

Mary and Ted go on a picnic and leave their aluminum cans in the woods.



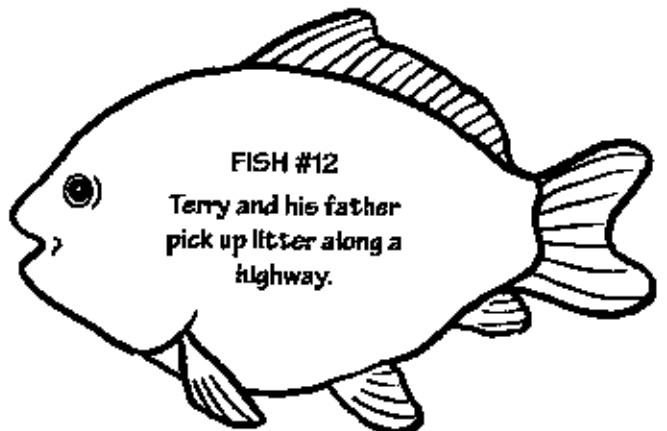
FISH #10

Scouts go on a hike in a park. They pick up litter as they walk.



FISH #11

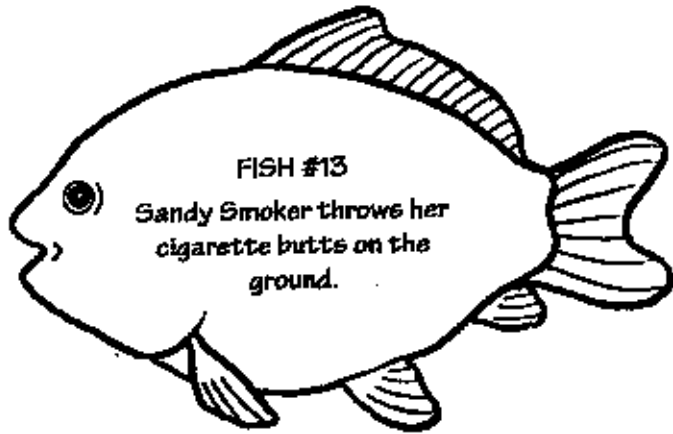
A large dumpster is left open and trash blows out.



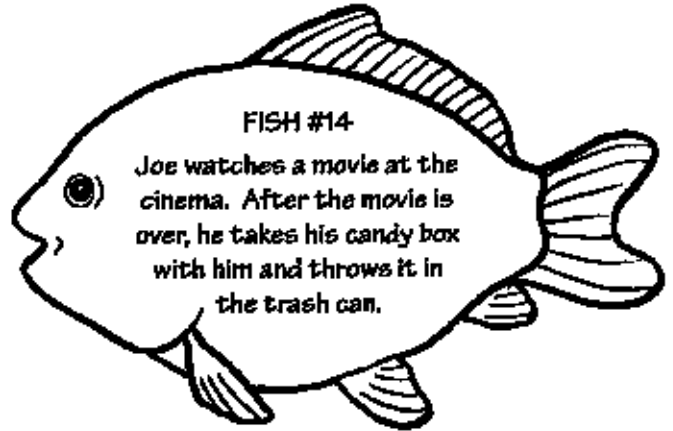
FISH #12

Terry and his father pick up litter along a highway.

# LITTER HABITS FISH 3



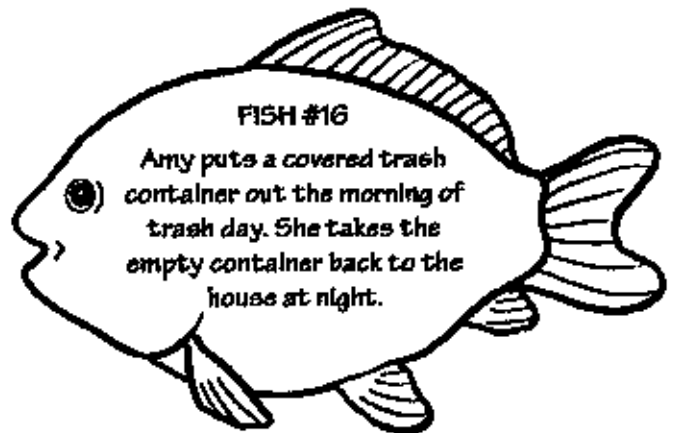
**FISH #13**  
Sandy Smoker throws her  
cigarette butts on the  
ground.



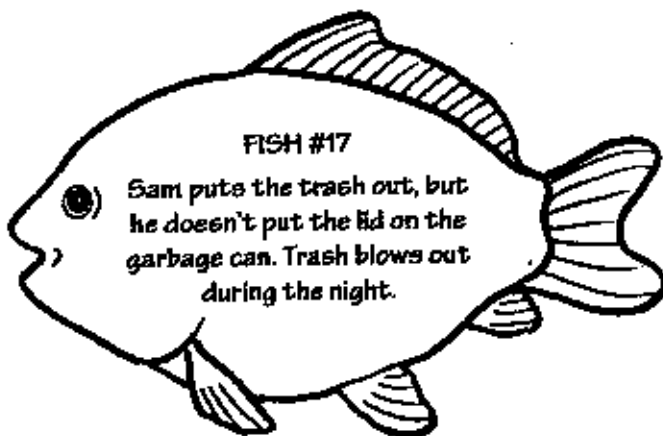
**FISH #14**  
Joe watches a movie at the  
cinema. After the movie is  
over, he takes his candy box  
with him and throws it in  
the trash can.



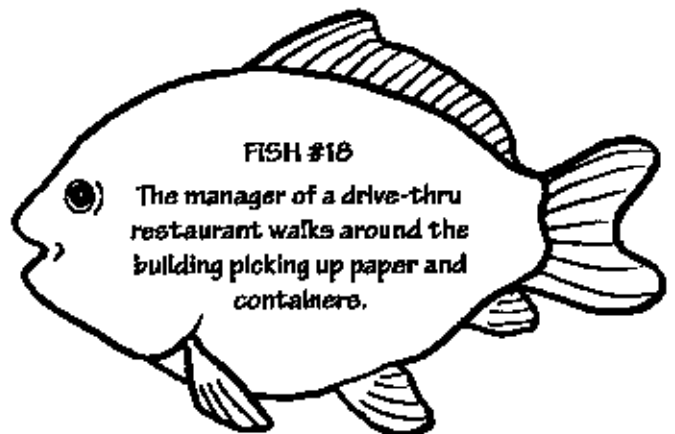
**FISH #15**  
Wood scraps and nails  
are left outside of a new  
house. Children play  
nearby.



**FISH #16**  
Amy puts a covered trash  
container out the morning of  
trash day. She takes the  
empty container back to the  
house at night.

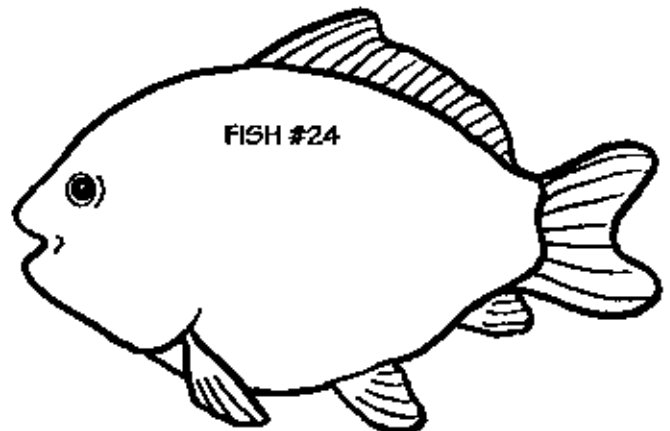
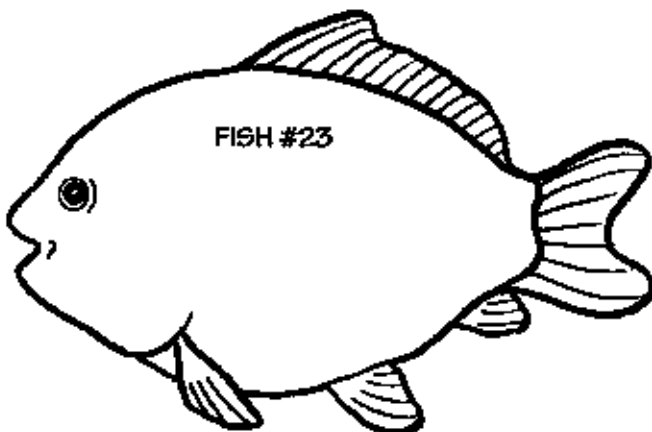
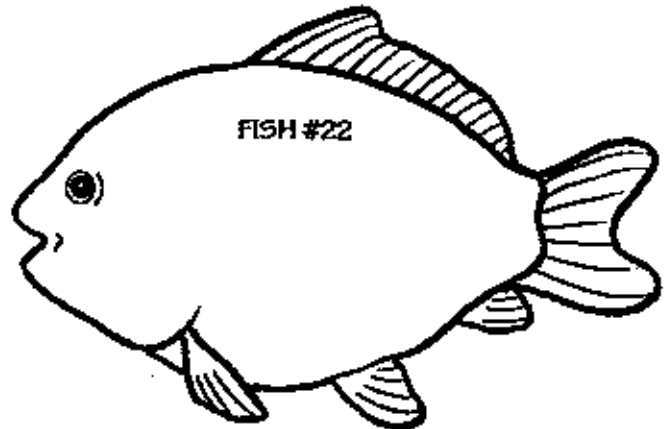
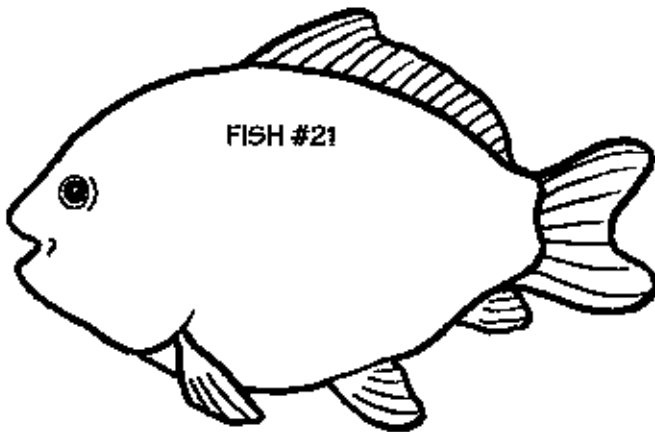
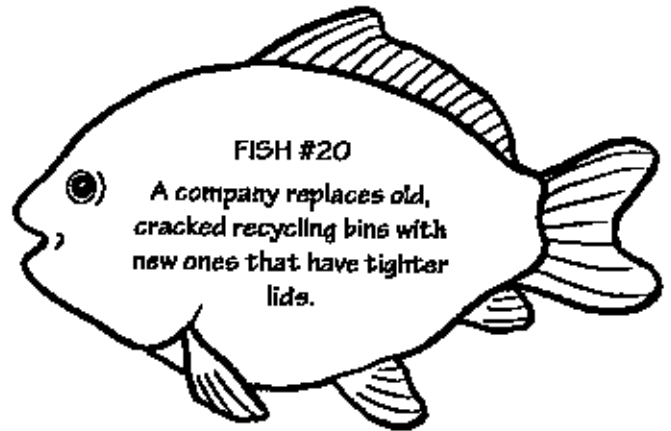
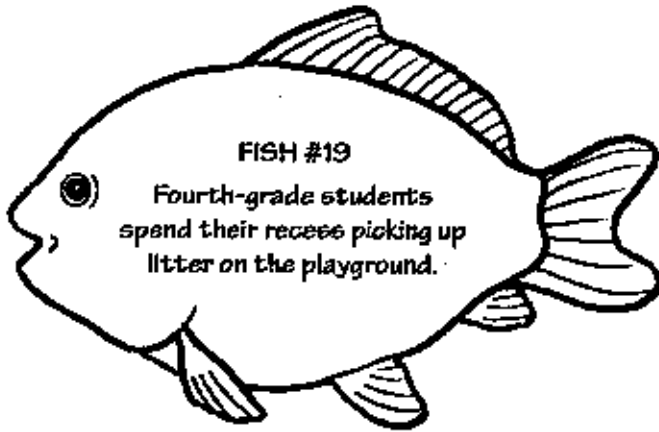


**FISH #17**  
Sam puts the trash out, but  
he doesn't put the lid on the  
garbage can. Trash blows out  
during the night.



**FISH #18**  
The manager of a drive-thru  
restaurant walks around the  
building picking up paper and  
containers.

# LITTER HABITS FISH 4

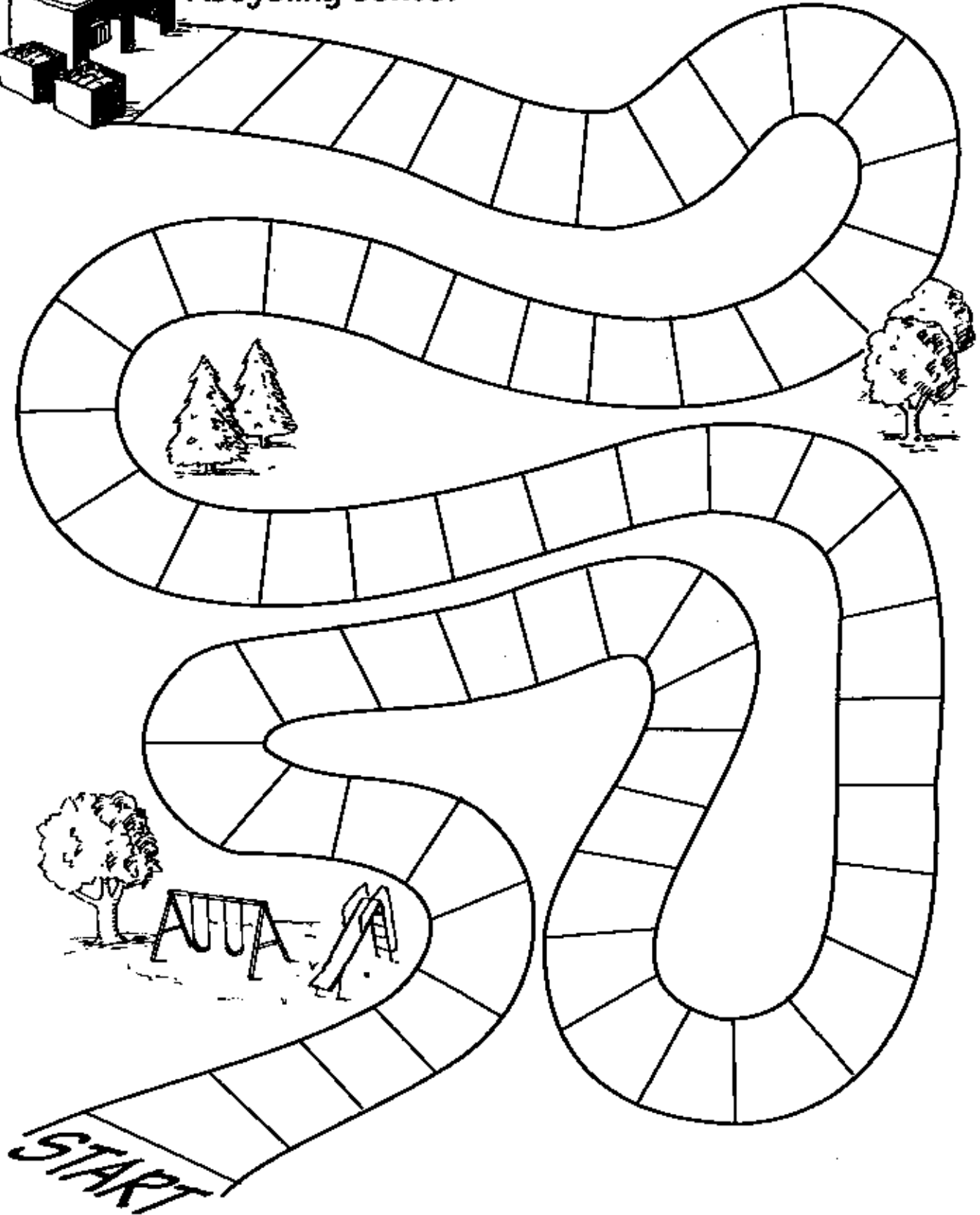




# DON'T STEP ON LITTER GAME BOARD



Recycling Center








# DON'T STEP ON LITTER GAME CARDS-1




**1**

You recycled your plastic milk jugs.  
Move ahead  $(3+4) - 2$  spaces.






**2**

You recycled your old aluminum cans.  
Move ahead  $(3-1) + 5$  spaces.






**3**

You recycled empty glass jars.  
Move ahead  $(3+5) - 2$  spaces.






**4**

You recycled a cardboard box. Move  
ahead  $(6+6) - 10$  spaces.






**5**

You stacked and recycled your  
family's old newspapers.  
Move ahead  $(10-5) - 2$  spaces.




**6**

You rinsed and recycled a dozen steel  
cans. Move ahead  $(6+8) - 8$  spaces.








# DON'T STEP ON LITTER GAME CARDS-2



**7** 


You reused the back of old notebook paper. Move ahead  $(9-4) + 1$  spaces.



**8** 


You packed your lunch in reusable containers. Move ahead  $(9-7) + 3$  spaces.



**9** 


You sold your old toys at a garage sale instead of throwing them away. Move ahead  $(2+2) + 3$  spaces.



**10** 


Your family bought paper towels made from recycled paper. Move ahead  $(6+3) - 4$  spaces.



**11** 

You picked up the litter along your street. Move ahead  $(14-7) - 5$  spaces.

**12** 

You dropped your candy box on the movie theater floor. Move back  $(7-5) + 2$  spaces.




 



# DON'T STEP ON LITTER GAME CARDS-3




**13**

You pitched your hamburger wrapper out the car window.  
Move back (9-6) - 2 spaces.






**14**

Sandy Smoker throws cigarette butts on the ground.  
Move back (8-6) + 1 spaces.






**15**

At the picnic in the park, you left your paper plates and cups on the ground.  
Move back (9-5) - 3 spaces.






**16**

When you moved, your family forgot to cover the back of the truck and your clothes fell on the road.  
Move back (6-4) - 1 spaces.






**17**

You set out open, plastic garbage bags for trash pickup.  
Move back (8-4) - 2 spaces.



**18**

You gave away old magazines and books to your local library.  
Move ahead (9-4) - 1 spaces.








# DON'T STEP ON LITTER GAME CARDS-4




**19**

After fishing, you leave the extra fishing line along the bank of the river.  
Move back (9-3) - 5 spaces.






**20**




After Randy Roofer put a new roof on your house, he left packaging and nails in your yard.  
Move back (6-3) - 2 spaces.






**21**






**22**



**23**



**24**





# DON'T STEP ON LITTER ASSESSMENT

Directions: Put the correct letter in the blank space beside each question.

- \_\_\_\_\_ 1. An example of a good litter habit is:
- throwing paper out of a car window
  - putting aluminum cans in a dirty yard
  - walking around old papers on the sidewalk
  - picking up papers along the highway
- \_\_\_\_\_ 2. An example of a bad litter habit is:
- taking cans to a recycling center
  - allowing papers to fall out of a car or truck
  - picking up litter in the park
  - going on a picnic
- \_\_\_\_\_ 3. The answer to this math operation:  $(6+4)-8=$  \_\_\_\_\_
- 2
  - 18
  - 10
  - 3
- \_\_\_\_\_ 4. The answer to this math operation:  $(15-8)+6=$  \_\_\_\_\_
- 29
  - 13
  - 2
  - 15
- \_\_\_\_\_ 5. The answer to this math operation:  $(9-5)+7=$  \_\_\_\_\_
- 21
  - 10
  - 11
  - 20
- \_\_\_\_\_ 6. The answer to this math operation:  $(15-6)+5=$  \_\_\_\_\_
- 16
  - 14
  - 26
  - 15

## **BACKGROUND INFORMATION**

Wild animals are curious about litter such as metal cans, glass bottles, shiny soft drink aluminum pop-tops, bottle caps, etc., and are often injured by the sharp edges of these items. Young animals including fish can be “ringed” by a plastic six-pack holder or a glass rim that has broken off of a jar. As they grow they become strangled by the litter. Young squirrels and birds have become entangled and died in monofilament fishing line when their parents used the material in preparing their nests. Other animals who have fallen victim to various forms of plastic litter are foxes, raccoons, opossums, and woodchucks.

Since the 1960’s the amount of plastic litter has increased in both the marine and the built environment. The increase has unfortunately affected wildlife. Animals can mistake plastic for food and eventually die from the balls of plastic in their stomach. Animals can also die from entanglement in discarded fishing lines, nets, buoy lines, or six-pack holders. It is estimated that 14 billion pounds of plastic trash are annually dumped into the world’s oceans.

Not all animals are affected the same way by litter. Oddly enough, of the thousands examined, plastic has not been found in any of the stomachs of ribbon, bearded, harbour, spotted, ringed, or northern fur seals from Alaska. However, it is estimated that 50,000 northern fur seals die in the North Pacific each year as a result of entanglement. So, although seals do not ingest plastic, they are still victims of plastic litter. The northern fur seal numbers are dropping so quickly that environmentalists are keeping a close watch on this species. This animal is also a major part of the polar bear’s diet. In addition to litter, lead is killing native wildlife through direct ingestion (waterfowl) and secondary ingestion (bald eagles).

## **WILDLIFE OBITUARIES**

### **1960’s**

- \*Adult leaches and petrels collected off Newfoundland died of plastic ingestion. Young laysan albatrosses died in the Hawaiian islands ingesting plastic fed to them by their parents.

### **1970’s**

- \*Short-tailed shearwaters, sooty shearwaters, and northern fulmars from the North Atlantic died of plastic ingestion.
- \*Parakeet auklets, horned puffins, phalaropes, gulls, and terns from the Northern Pacific died of plastic ingestion.
- \* A reindeer became entangled in Japanese gill net which had washed ashore near the Aleutian islands.
- \*Petrels and shearwaters from the South Atlantic, South Pacific, and subantarctic died of plastic ingestion.
- \*Five of seven marine turtle species were affected by plastic pollution: greens, hawksbills, olive ridleys, leatherbacks, and loggerheads.
- \*In addition to the species listed above, the following animals have also fatally ingested plastic: pygmy sperm whales, rough-toothed dolphins, Cuvier’s beaked whale, West Indian manatee, and minke whales.
- \*Pelicans died from diving into plastic six-pack rings which prevented further feeding. Pelican chicks died in their nests, strangled by hundreds of feet of fishing line.
- \*It is estimated that up to 50,000 Northern fur seals die each year due to entanglement in fishing gear.

### **1980’s**

- \* The deaths continue as ships continue to litter the world’s oceans with plastic pollution. Plastic is the most common type of sea litter today. The durability of plastic has created a frightening disposal problem. Ocean waves break up the plastic litter into “beach confetti,” the brittle and shardlike remains of bottles, combs, toothbrushes, etc. Animals ingest the plastic pieces, mistaking them for natural foods. Larger plastic waste can be collected but plastic confetti is difficult to collect. It is clear measures need to be taken to reduce the amount of litter in the environment.

# AWARENESS CHECK: WILDLIFE OBITUARIES

Directions: Fill in the missing words.

1. Sea birds are often subject to strangulation by plastic yokes used in packaging six-packs of beer and soda pop. \_\_\_\_\_ \* \_\_\_\_\_ which plunge into the water to feed, run the risk of diving into yokes. When the rings become firmly wedged around their bills, the birds often starve to death.
2. Land mammals are also becoming victims of the ocean's plastic pollution. For example, a \_\_\_\_\_ \* \_\_\_\_\_ became entangled in a Japanese gill net washed ashore near the Aleutian Islands.
3. The advantage to the consumer of plastic is that it is lightweight, inexpensive, and often lasts longer than the natural alternative. The disadvantage is that once it is no longer needed and is not properly disposed it becomes plastic \_\_\_\_\_ \* \_\_\_\_\_.
4. A brittle and shardlike substance created by broken pieces of plastic toys, plastic bottle caps, utensils, combs, cigarette lighters, toothbrushes, and plastic containers is called beach \_\_\_\_\_ \* \_\_\_\_\_.

To marine turtles around the world, especially hatchlings that spend their early lives at sea surviving off surface organisms, a plastic bag looks just like plankton, jellyfish, or the larva stage of a crab. Name five marine turtles that often fatally ingest plastic bags.

5. \_\_\_\_\_ E \_\_\_\_\_
6. \_\_\_\_\_ R \_\_\_\_\_
7. \_\_\_\_\_ I \_\_\_\_\_
8. \_\_\_\_\_ N \_\_\_\_\_
9. \_\_\_\_\_ G \_\_\_\_\_

Copy down, in order, each starred letter to complete this sentence:

In OHIO, \_\_\_\_\_ is a serious offense which is punishable by a fine of up to \$500 and 60 days in jail.