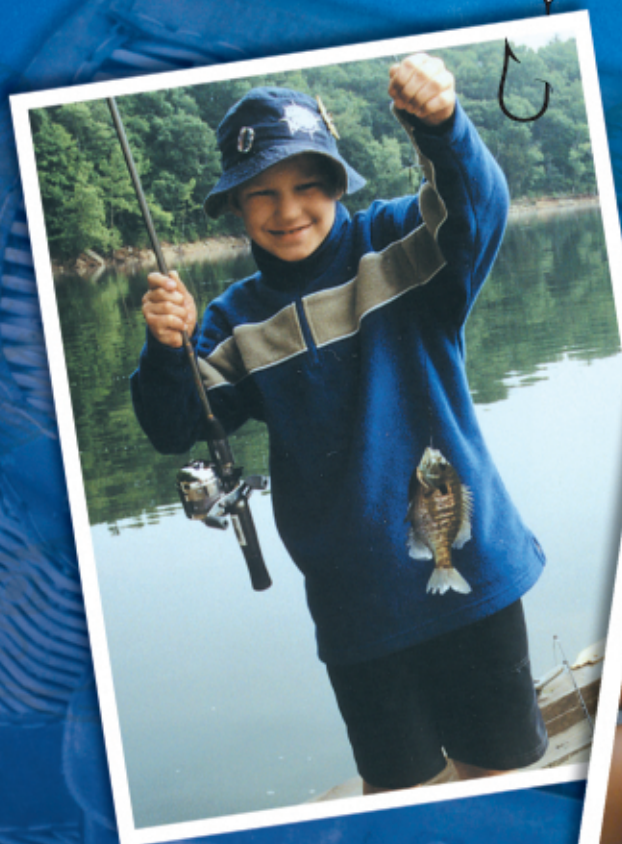




National 4-H Curriculum
BU-07598

Take the Bait



Sportfishing Project Activity Guide

Name _____

County _____



REVIEWED & RECOMMENDED
National 4-H Curriculum

Note to the Fishing Project Helper

Thank you for volunteering your time and talents to assist one or more young people in this project. This activity guide will introduce them to the exciting world of fishing. Your involvement will make a real difference in the quality of their experiences. You will play a valuable role in helping them learn the subject matter and practice important life skills along the way. Your interest, enthusiasm and, most importantly, your time will be key ingredients to positive and successful experiences. With your guidance and support, youth will set goals and challenge themselves to work through the activities in this guide. It will be a fishing journey everyone will enjoy.

Your Role

- Become familiar with the material in this activity guide and the Sportfishing Project Helper's Guide.
- Support youth in their efforts to set goals and complete the activities.
- Date and initial the activities when the youth completes them.
- Help them know themselves, including their strengths and weaknesses.
- Incorporate the use of the experiential learning cycle in all learning experiences.

The Fishing for Adventure Sportfishing Series



This guide, *Take the Bait*, is the first in the series of three for youth that also includes *Sportfishing 2 Reel in the Fun* and *Sportfishing 3 Cast Into the Future*. The three youth guides have been designed for grades 3–5, 6–8 and 9–12 respectively, but may be used by youth in any grade based on their fishing project skills, experience and interest.

Each activity is designed so the young person has an opportunity to learn by doing before being told or shown how. Your role as Helper is to "take a back seat" while the youth explores the activities and learns from the experiences, even when something doesn't work the first time the way you might think it should. You can help with the learning most effectively by listening as the young person considers the questions and draws conclusions. At times the activity may call for you to be a resource person for content or other ideas.

Acknowledgments

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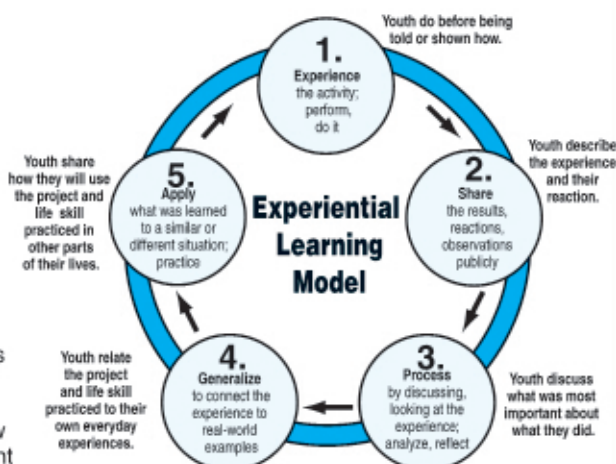
Editors: Tom Zurcher, MI and Jennifer Geraci, CO.

Photographs: Kelly Nelson, CO and Tom Zurcher, MI.

Experiential Learning Model

This five-step model is used in each activity in this series.

The youth first attempts the activity on their own. After the youth do as much as they can and answer the questions, you meet with the youth and discuss the questions with them. What did they do? What was important about what they did? How does their accomplishment relate to their lives? And finally, how might they use the life and project skills practiced in the future? The more you can ask additional thought-provoking questions and help them clarify and expand on their ideas, the richer the youths' educational experiences will be.



Pfeiffer, J.W., & Jones, J.E., "Reference Guide to Handbooks and Annuals" © 1983 John Wiley & Sons, Inc. Reprinted with permission of John Wiley & Sons, Inc.

All activities support the experiential learning model endorsed by the 4-H Program. Each activity lists the project skill, the life skill to be practiced and a success indicator. The success indicator indicates what the youth will do to successfully complete the activity. In addition, in the *Helper's Guide* you will find an evaluation piece to use to determine what the youth has learned from each activity.

Baiting the Hook gives direction how to complete the activity.

Sharing Fish Tales asks youth to share their experience by recording brief answers to questions and sharing these with the project helper. The questions help youth process the experience through the five important steps of the experiential cycle shown on this page and more fully outlined in the *Helper's Guide*:

- **Castig Out** – Youth share what they did in the activity.
- **Working the Lure** – Youth answer questions about important aspects of the experience and the life skill practiced while doing the activity.
- **Setting the Hook** – Youth relate the experience to everyday or similar experience in their own lives.
- **Landing the Fish** – Youth tell how they could use the experience or build from this experience to another experience.

Fishing Deeper

This section includes additional activities the youth may choose to do to expand the experience. Doing these activities may be used to complete the Achievement Program for this level.

Find more Sportfishing facts, information and resources online.



Explore more at
www.4-hcurriculum.org
National 4-H Curriculum

Sportfishing Helper's Guide

The fourth publication in this series, the *Sportfishing Helper's Guide*, provides additional learn-by-doing activities that can be adapted to 4-H fishing project groups, clubs or other groups. You'll also find helpful hints about characteristics of youth, life skill development, teaching experientially, project meeting ideas and resources for organizing a community sportfishing program.

Good luck in your role as Project Helper!

Supporters and Donors

American Sportfishing Association

Future Fisherman Foundation

Fly Logic, Inc.





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For more on
sportfishing
look for
these other
guides in
this set.



Reel in the Fun

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Reel in the Fun Completion Certificate

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Fishing On Line
A Different Splice
Turning the Crank
Flying Far
"Knot" Too Hard

Chapter 2: People and Fish

A Fine Kettle of Fish
Clean Up the Litterbug
Know Your Fish - Perch
Fishing by the Rules
*Know Your Fish - Largemouth and
Smallmouth Bass*

Chapter 3: Tackle Crafting

Fishy and Fun
Making a Fly Wad
The Woolly Bugger

Chapter 4: Aquatic Ecology

Trapped in a Bottle
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Fishy Smells Something
A Fish by Design

Fish Talk 2
Fishing Resources



Cast Into the Future

Cast Into the Future Completion Certificate
Cast Into the Future Achievement Program

Chapter 1: Angling Skills

Sharing the Adventure
A Real Mass!
Know Your Fish - Catfish and Bullheads
Designing a Skidathon Station

Chapter 2: Tackle Crafting

Beads, Dog Hair and Feathers
Making a Pont
Customizing Plugs
Trash to Treasure

Chapter 3: Aquatic Ecology

Water, Water Everywhere
Collecting Aquatic Insect
What's Bugging You?

Chapter 4: People and Fish

Fishing Dilemmas
Cast Into the Future
Keeping a Field Journal
Investigating Sportfishing Issues
Playing Know Your Fish
Know Your Fish - Trout, Walleye, Pike, Carp

Fish Talk 3
Fishing Resources



Sportfishing Helper's Guide

Chapter 1: Planning for Success

Steps to a Successful 4-H Sportfishing Program
Evaluating Your 4-H Sportfishing Program
Ages and Stages of Youth Development
Teaching and Learning Experientially
Developing Skills for a Lifetime

Chapter 2: Developing Sportfishing Skills

Fish-Ketch Master
Let's Make Plans
Making Fish Prints
Powder Painting Jigs
Making Worms
From Actor to Albright Special

Chapter 3: Fishing for Fun

Go Fish!
Building a Watershed
Planning a Fishing Trip
Boating Safety

Chapter 4: Playing Sportfishing Games

Fishing A to Z
Playing PERCH Bingo
Conducting a Sportfishing Quiz Bowl
Sportfishing Skillathon Excitement
Fun with Sportfishing Pyramid

Fishing for Adventure Scope and Sequence
Sportfishing Meeting Ideas
Fishing for Adventure Answer Key
Evaluating the Impact
Sportfishing Resources

Let the Adventure Begin

Are you ready to begin the Sportfishing project? You'll soon discover that this project is more than just fishing. You will also learn how to make your own fishing tackle, experience the world of aquatic ecology and explore the relationship between fish, people and the environment.

Through the activities in this guide, you will have many interesting and exciting challenges. You'll learn some different casting methods, how to decide on the proper tackle, the basics of aquatic ecology and how important you and your actions are to a clean environment. It really will be a new adventure for you, even if you have fished before.

Don't be afraid to jump right into an activity and give it a try. Don't give up if the activity doesn't work the first time. Learning takes place even when things don't turn out as planned. The most important thing is to try. Once you try, talk with your helper about what you did or tried to do.

You'll also be learning about yourself. In addition to what you learn in this project, many of the things you'll do are skills you'll use in other areas of your life, such as decision making, communicating with others and being an effective leader.



Take the Bait Project Guidelines

Set your goals and record your Sportfishing project highlights.

- Do a minimum of six activities in the *Take the Bait* Achievement Program each year and complete the Program within three years.
- Participate in a minimum of three of the learning experiences listed on the Planning Guide each year.
- Practice and develop the life skills of relating to others, making decisions, learning to learn and communicating with others.
- Increase your fishing knowledge and skills.

Take the Bait Achievement Program

While you are having fun doing the activities, you'll also be completing the *Take the Bait* Achievement Program. The overall program consists of three levels. This program will help you set goals, record your successes and be recognized for your good work.

Your Project Helper

Your project helper will support you in this project and make learning more fun. This person may be a parent, project leader or advisor, a neighbor or an older friend who knows about fishing and is willing to support you. The choice of a helper is yours.

As you do the activities, you'll discuss with your helper what you did and the questions in the "Sharing Fish Tales" part of each activity. Sometimes your helper will work with you to identify resources, including people, Internet sites, organizations, events, magazines and books necessary to complete an activity.

Once you have successfully completed an activity, your helper will date and initial your achievement program record. Write the name, phone number and E-mail address of your project helper here.

My Project Helper _____

Phone # _____

E-mail address _____

Take the Bait

Sportfishing Project Goals

Name _____

What I want to do and learn.

1. _____
2. _____
3. _____

Learning Experiences

Complete at least three of these activities each year.

Activity	Year	Year	Year
Give a demonstration			
Exhibit at a fair			
Go fishing			
Do a community service project			
Visit a tackle shop			
Attend a fishing project meeting			
Tour a boat or fishing store			
Conduct a water quality experiment			
Interview a fisherman			
Collect local fishing folklore			
(Your own idea)			
(Your own idea)			

Sportfishing Project Highlights

Date and list the most fun and interesting things you did in this project.

[illegible]

Photo of you fishing.

Take the Bait Achievement Program

Guidelines

1. Try to do at least six activities each year.
2. Complete at least 20 of the *Take the Bait* and Fishing Deeper activities within three years to complete this achievement program and receive the completion certificate.
3. Ask your project helper to initial the activities as you complete them.

Take The Bait

Complete at least 12 of the activities.

	Date Completed	Helper's Initials
Chapter 1 Angling Skills		
Let's Go Fishing		
It's a Clinch		
Pop Can Casting		
Casting Out		
Hook, Line and Sinker		
Chapter 2 Tackle Skills		
Tackling Tackle		
Having the Right Stuff		
Clean Mean Fishing Machine		
Chapter 3 Aquatic Ecology		
Home, Home on the Pond		
Fishy Baits		
Kitchen Table Water Cycle		
Chapter 4 People and Fish		
Which Fish Is It?		
From Hook to Table		
Sharp Teeth, Sharp Spines		

Fishing Deeper

Select any of the Fishing Deeper activities. Record the page number of each activity you complete and discuss with your helper.

[illegible]

Write your own activity here.

Date_____ Helper's Initials_____

Write your own activity here.

Date_____ Helper's Initials_____

Write your own activity here.

Date_____ Helper's Initials_____





Take the Bait

Completion Certificate

I certify that

has completed all requirements of the
Take the Bait Achievement Program
in the Sportfishing Adventure Series.

Helper's Signature _____

Date _____

Place a picture of you,
the angler, here.



Chapter 1 Angling Skills



Let's Go Fishing!

Fishing Project Skill: Identifying skills
Life Skill: Tracking personal growth through record keeping
Success Indicator: Completes the angling self-assessment.

What do you know about fishing? When you go fishing do you usually catch fish? Are you ready to learn to be even a better angler? See how much you already know.



Tackle Box
Materials Needed

- Pencil

Baiting the Hook

In each of the areas below mark the answers that best show what your fishing skills, knowledge and experiences are right now. There are no right or wrong answers.



Angling Self Assessment

Fish I've Caught

- ___ Bluegill
- ___ Perch
- ___ Catfish
- ___ Trout
- ___ Salmon
- ___ Northern Pike
- ___ Smallmouth Bass
- ___ Largemouth Bass
- ___ Bullheads
- ___ Walleye
- ___ Muskie
- ___ Carp
- ___ Sunfish
- ___
- ___

Fishing Equipment I've Used

- ___ Spinning rod and reel
- ___ Baitcasting rod and reel
- ___ Cane pole
- ___ Lures
- ___ Hooks
- ___ Sinkers
- ___ Snaps/swivels

Knots I Know How To Tie

- ___ Kreh knot
- ___ Polomar knot
- ___ Surgeon's knot
- ___ Improved Clinch knot
- ___ Snell knot
- ___ Turtle knot

Fish Parts I Can Identify

- ___ Nare
- ___ Lateral line
- ___ Gills
- ___ Pelvic fin
- ___ Dorsal fin
- ___ Pectoral fin
- ___ Anal fin
- ___ Caudal fin
- ___ Eye

Lures I Have Used

- ___ Artificial flies
- ___ Spoons
- ___ Plugs
- ___ Poppers
- ___ Plastic worms
- ___ Jigs
- ___ Spinners

Aquatic Plants I Know

- ___ Cabbage
- ___ Coon tail
- ___ Water milfoil
- ___ Water lily
- ___ Water hyacinth
- ___ Reeds
- ___ Bulrushes
- ___ Cane
- ___ Sand grass
- ___ Elodea

Baits I Have Used

- ___ Crayfish
- ___ Cutbait
- ___ Grasshopper
- ___ Grub
- ___ Leech
- ___ Night crawler
- ___ Shiner
- ___ Shrimp
- ___ Waxworm
- ___ Worm

Rods and Reels I Have Used

- ___ Fly
- ___ Baitcasting
- ___ Spincasting

Fishing Words I Know

- ___ Leader
- ___ Adipose fin
- ___ Bobber
- ___ Cast
- ___ Creel
- ___ Dry fly
- ___ Fishing rig
- ___ Habitat
- ___ Lure
- ___ Nymph
- ___ Rigging
- ___ Split shot
- ___ Tackle
- ___ Terminal tackle

Sharing Fish Tales

(With your helper)



Casting Out (Share what you did)

What do you know about sportfishing and how to catch fish?



Working the Lure (Process what's important)

What do you want to learn in the sportfishing project?



Setting the Hook (Generalize to your life)

Why is record keeping important in sportfishing?



Landing the Fish (Apply what you learned)

What is your long-range fishing goal?

Angling Tips

Playing a Fish

To hook a fish and then actually land it on the bank or in a boat takes a lot of patience and skill. Here is a way to practice before you actually hook a big one. Ask your helper or a friend to pretend to be a fish. Practice playing (tiring) a hooked fish and landing it on the bank.

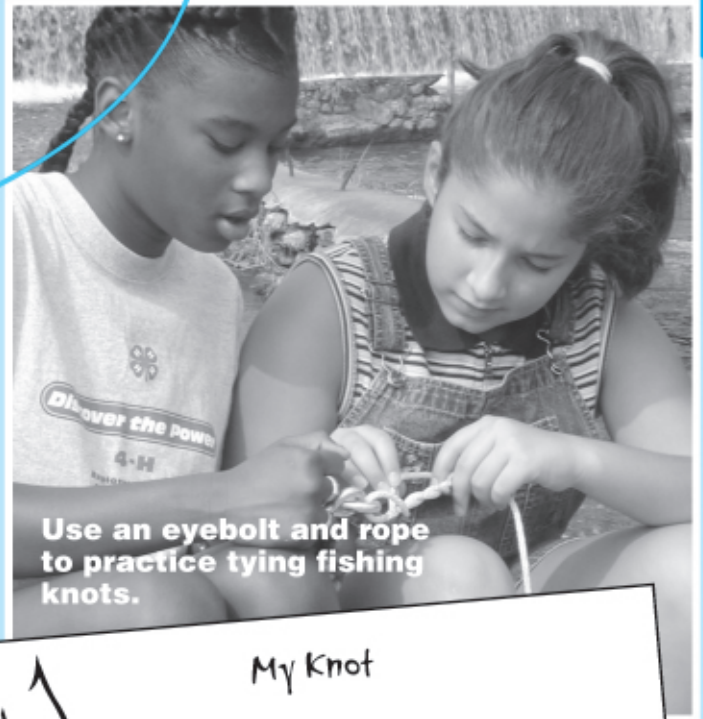
1. Cast out your line in front of you. Remember to take the "slack" out of the line.
2. Ask the person pretending to be the fish to gently pull the casting plug. This will let you get the feel of a fish nibbling and getting ready to take your bait.
3. Have your "fish" take the bait by making a harder series of tugs on the line. Not hard tugs since fish are not as strong as people!
4. Set the "hook" by firmly bringing up the rod tip. Don't do this so hard that you jerk the practice plug from your friend's hand.
5. Now that the fish is "hooked", try to reel it in. Tell your fish to move forward or backward quickly. If the fish moves toward you, reel in the slack in the fishing line. If it moves away let the drag on the reel let line out. The key is to keep slack out of the line between the rod and the fish.
6. Ask the "fish" to move to the left or to the right. If it moves to the left, lean your rod to the right. If the fish moves to the right, lean the rod to the left. This will keep pressure on the fish and will allow you to control it better.
7. Once your "fish" shows it is tired, (this is called "playing" the fish out) reel it in for a landing on the bank. Do not reel the fish all the way up to the tip of the rod because it might break off.

Fishing Deeper

1. At a tackle shop make a list of what a new angler would need in order to fish for pan fish and the total cost of everything.
2. Demonstrate to your helper how you would land a large fish.
3. At an antique show or antique business talk to a dealer who sells antique fishing tackle. Share with your helper what you discover.



Fishing Project Skill: Tying fishing knots
Life Skill: Communicating with others
Success Indicator: Demonstrates how to tie a fishing knot.



Use an eyebolt and rope to practice tying fishing knots.



Tackle Box
Materials Needed

- Eye bolt
- Cord
- Hook
- Fishing line

Baiting the Hook

Your challenge is to learn to tie one of the knots shown in Tackle Tips. These knots are often used to attach a hook to a line. You may want to practice the knots using a cord for the "line" and an eye bolt for the "eye" of the hook. When you have learned to tie at least one of the knots, demonstrate to your helper how to tie it. Finally tie the knot using a hook and line. Carefully tape it in the space shown.

My Knot



Name of Knot

Sharing Fish Tales

Castig Out

Share with your helper how you learned to tie the knot.

How did you learn to tie this knot?

Working the Lure

What was the most difficult part of tying a knot?

Setting the Hook

How will being able to tie knots help you be a better angler?

Landing the Fish

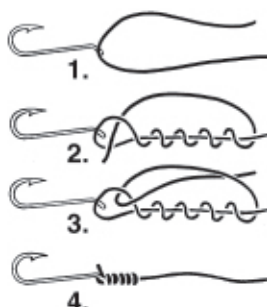
How and where will you use the knot?

Tackle Tips

Knots to Attach Snaps, Swivels, Lures, Flies, Sinkers and Hooks

Improved Clinch Knot

1. Pass the line through the hook or swivel eye once and pull it back towards the line.
2. Make five turns or "S" twists with the free end of the line around the main line.
3. Pass the end of the line between the eye and the first loop formed.
4. Bring the end through the large loop just formed and slowly pull tight while holding the free end by your thumb and forefinger.
5. After pulling tight, cut off any extra line coming out of the knot.



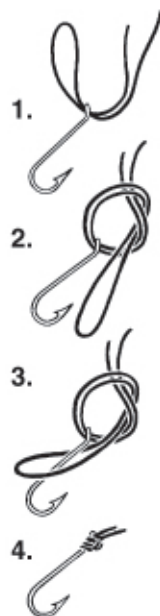
Snell Knot

1. Pass the line through the eye, forming a loop, and pass it through the eye again in the opposite direction.
2. Take the part of the loop closest to the eye and wrap it over the shank seven or eight times.
3. With the long end of the line in your right hand and the wraps held in your left hand, slowly and steadily pull the starting line until the line is almost tight. Then grasp the tag end with your fingers or a pair of pliers and pull it and the standing line at the same time until the knot is tight.



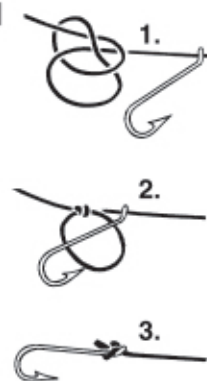
Polomar Knot

1. Make a loop and pass it through the eye.
2. Make a loose overhand knot with the double line.
3. Put the loop over the item (hook, lure, swivel).
4. Slowly pull tight both ends of the line.



Turtle Knot

1. Pass the line through the eye and tie a single running knot at the end of the line, forming a loop.
2. Pass the fly or hook through the loop.
3. Pull the knot tight behind the eye.
4. Snip away extra line.



Fish Facts

Fish have no eyelids so they can't close their eyes. This is one reason why fish often like to hide in the shade or other dark places.

Fishing Deeper

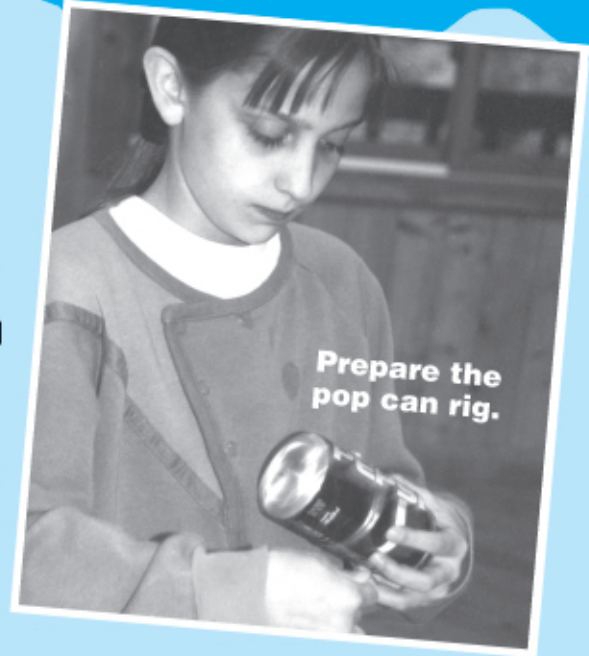
1. Demonstrate to your family how to attach a hook to a line with a snell knot.
2. Teach your family or a friend how to tie a fishing knot.



Pop Can Casting

Fishing Project Skill:
Life Skill:
Success Indicator:

Casting a lure
Problem solving
Builds a pop can rig and
casts accurately to a target.



What do you think when you hear the word rig? Someone might think of an eighteen-wheeler going down the freeway. A fisherman would think of something very different. Fishing "rigs" usually consist of a rod, reel, line and bait such as a worm, lure or fly. There are several types of fishing rigs: bait casting rigs, spin casting rigs, salt-water rigs and fly fishing rigs. In this activity you will have fun building a "pop can rig" and learning to cast it to any spot you select. You can't catch fish unless you can accurately place the worm, lure or fly where the fish can get to it easily. This activity will not only help you cast accurately but will also help you become a better problem solver.



Tackle Box
Materials Needed

- Pop can
- 50 feet of fishing line
- Casting weight
- Piece of tape

Baiting the Hook

First you'll want to make your own pop can rig. Find a pop can, about 50 feet of fishing line and a plastic casting plug. Attach the line to the can with a piece of tape. Then wind the line around the center of the can. Finally, tie a loop in the end of the line and attach the weight.

Now the fun begins. See what happens when you cast the weight to a target such as a bucket. First cast 10 feet to the target. Record below how many feet away from the target the weight lands. Do this 10 times. Check the casting tips in the Fishing Tips section on page 11 for helpful hints. Practice with a friend or your helper to make this activity even more fun. Now cast 10 times from 15 feet and then 20 feet. Finally, write in the space below how you improved your casting scores.



My Casting Record

Cast Number

How I Improved My Score:

	1	2	4	5	6	7	8	9	10
10' Cast									
15' Cast									
20' Cast									

Sharing Fish Tales

Casting Out

How did you make a pop can fishing rig?

How was your rig like a real fishing pole, line and lure?

What happened when you made your first casts?

How is this way of casting like casting a real rig?

Working the Lure

What is the most important part of building a pop can rig?

What did you do to make your casts go in the bucket (or close to the bucket)?

Setting the Hook

What's another problem that can be solved in a similar way?

Landing the Fish

How could this activity make you a better angler?

Fish Facts

There are casting tournaments where anglers compete for prizes.

Fishing Tips

Casting the Pop Can Rig

Place your hand around the can behind the line with your thumb on the line. Swing the can underhand like you would throw a ball. Instead of letting go of the can as you would a ball raise your thumb off the line and hold onto the can.



Increasing Accuracy

As you practice casting you will learn that there are many ways to increase accuracy.

- Releasing the line too soon will cause the weight to fall short.
- Releasing too late causes the weight to go too high and probably short.
- A faster arm speed will cause the weight to go farther.
- How high your hand is when you release the line may affect where the weight goes.

Fishing Deeper

1. Teach someone who has never fished how to cast a lure using the pop can rig.
2. Use a regular fishing rig and practice casting to a target.
3. Describe to your helper how the pole, reel, line and bait affect how accurately you can cast.