



JULY- SEE WHAT YOU CAN SEA

OPENING

Set up- Pictures, silhouettes, models of sailing ships, and Cubs craft project decorate the meeting hall. The Pack and American flags are already posted.

CUB 1: The ocean-going ships of the 18th Century were a very important part of our early fight with England in the Revolutionary War.

CUB 2: Without the sailing ships of France bringing supplies, and later, our own fighting ships, we might still be part of England.

CUB 3: Old Ironside, the U.S.S. Constitution, achieved fame and glory in the war of 1812.

CUB 4: The Merrimack and The Monitor waged fierce battle in an important test of floating Iron in the Civil War.

CUB 5: American Clipper ships were the fastest afloat in the 19th Century.

CUB 6: Convoys of American ships supplied our allies throughout both World Wars.

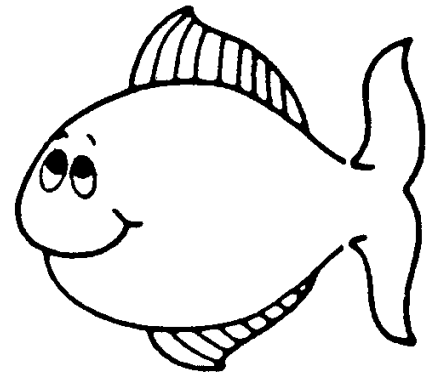
CUB 7: Tonight we celebrate the sea and the adventures you can find there. Please join us in paying tribute to those early sailors and the Flag that flew high above their Ships.

CUBS LEAD AUDIENCE IN THE PLEDGE OF ALLEGIANCE

CLOSING

NET

Form a net by clasping hands in any criss cross design making sure everyone is caught in the net. Boys shake each other hands, that they are holding and say: Do Your Best!



ADVANCEMENT

KING NEPTUNE'S TREASURE

Cubmaster appears from back stage dressed as King Neptune, carrying a treasure chest wrapped in chains, and seaweed dangling from the sides.

CUBMASTER: The sea is full of treasure, and while I was taking a ride on my favorite whale, I saw this chest at the bottom of the sea. Let's take a look and see what treasures it contains!

(The Cubmaster then ceremoniously opens the chest to reveal the recognition treasures it contains. As an added treat: The chest might be loaded with Spanish Doubloons chocolate coins wrapped in foil. Parent's assist in presenting awards to boys.

CUBMASTER'S MINUTE

TREASURES

There are many treasures we can find in the sea. We must protect our Ocean if we want to be able to always get those treasures. In a way Scouting is like the sea. It, too is full of treasures and adventures. And the most valuable treasure in scouting are the friendships we develop.

JULY- SEE WHAT YOU CAN SEA

FIELD TRIP IDEAS

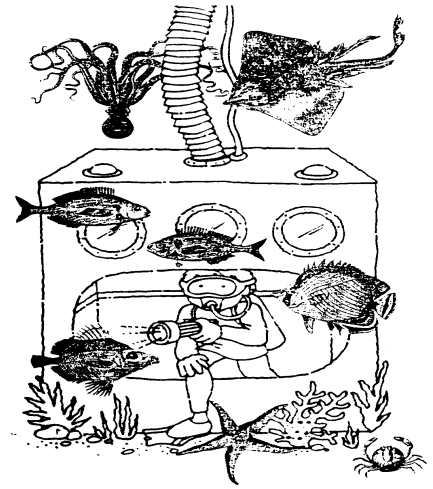
- * Visit a city aquarium
- * Visit tropical fish store
- * Visit Natural History Museum
- * Visit someone who owns a boat, find out about taking care of one
- * Visit a Boat show or store

PACK MEETING IDEAS

Find a special spot in your meeting room to develop a Sea Adventures, PLEASE TOUCH center, and fill it with oceans of stuff. Use a net as a backdrop and decorate with paper shells and brightly colored fish.

Borrow books about the ocean, shells, and marine life from the library and ask for donations of shells and other ocean treasures for the boys to explore and discover. A little sand on the table might be fun, too.

Underwater adventures await your pack in a specially equipped mini-sub made from a discarded appliance box. The boys could help with this during den meetings. Paint the inside of the box a dark blue. Install a control panel with lots of dials and gauges on one wall. Add a porthole and several windows for observing sea creatures. Behind each window place pictures or marine life cut from magazines or reproduced from clipart. Make the outside of the mini sub look as authentic as possible by adding tubes, lights, and gauges. Paint, add a name and look out below! It will be the most popular spot in the room!



You could have a pack seashell collection. Let everyone know in advance that you will have a display and have them bring seashells or any other sea creature for your "pack collection".

You could make sea murals by putting up two rows of butcher paper on the wall. One down low for the little kids and one above it for the boys and older brothers and sisters. Provide lots of reference materials, drawing tool, etc. Ask each person to create a portion of the mural. Parents could do it too.

GAMES

WAVES

Equipment: 14-16 ft length of 1/2" rope
solid rubber ball about the size of a tennis ball
Cloth Sack

Put the ball into the sack and tie the sack by it's mouth to one end of the rope.

The leader holds the rope by the end and moves it up and down to create ripples and waves along it. The weight of the ball at the other end will keep that end of

the rope grounded. Players try to jump over the waves without being touched by the rope.

If a player touches the rope, he is out. By stooping down, the leader can make the waves go as high as 18" above the ground. The last player left gets to be the next leader!

EAT THE FISH TAIL

Have the boys line up holding on to each other's waist. The first boy is the head, the last boy is the tail. The "Head" must try and catch the "Tail". All the boys must continue to hold on to each other.

MY SHIP GOES A SAILING

Equipment: ball or bean bag

Everybody sits in a circle. One person who knows the game starts off by throwing the ball to anyone in the circle and saying "My ship goes a sailing. "The person catching the ball responds with, "With it's cargo?"

The person who originally threw the ball responds with a cargo that begins with the first letter of his own name.

The person who caught the ball then throws it to some else. If the player responds to the cargo question incorrectly, he is told, "You're on the wrong ship." Play continues until all have figured out the trick.

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GAMES Continued

FISHING GAME

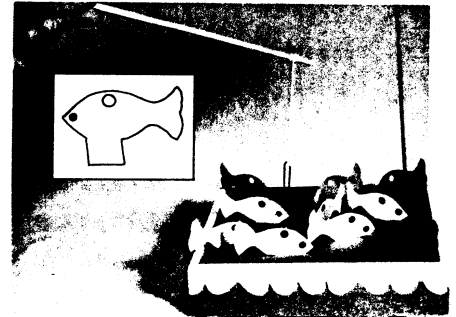
(cardboard box lid, construction paper, lightweight cardboard, wooden stick, string, paper clip)

Cut out blue waves from construction paper and glue them to the sides of a box lid. Cover the top of the lid with blue paper. Cut slits in the top.

Glue paper on both sides of a piece of lightweight cardboard. Draw and cut out fish shapes as shown. Punch a hole in the top of each fish.

Make a fishing pole from a stick and a piece of string. The hook is a bent paper clip.

How many fish can you catch together on the hook in three minutes?



AT THE BEACH

This is a good game for boys who have not ever been to the beach

Equipment Sea shells for each boy
Sand box or sandy play area
Plastic shovels

Hide the shells deep in the sand before bringing the boys out. Let all the boys dig for sea shells "washed up by the ocean during a storm the night before". When a boy has dug up his quota of shells have him sit on the side. It is a good idea to have a shell identification book with good pictures for the boys to look through

GOLD FISH

Hang 2 candy fish or worms from strings tied on a broom stick. Cubs are blindfolded and attempt to bite the fish or worm without using his hands

DEEP SEA FISHING CONTEST

Equipment: Bucket or large pan of water
Wooden Clothespins
Two home made fishing poles 3' long
Two pieces of string
Two nails or bolts
Wax Crayons

With a wax crayon, write a number on one side of each clothespins. Tie the strings to the poles and tie a nail or hook onto the other end of the line.

Put the clothespins in the water with the numbered side down. Cub Scouts then go "fishing", trying to maneuver the nail or bolt so that the string goes between the prongs of the clothespins and catch the "fish" by pulling up. Scoring may be on the basis of the most "fish" caught or highest point total.



SUBMARINES AND DESTROYERS

Divide the den into two teams-submarines and destroyers. Give the submarines a balloon, which they bat in the air, trying to keep it away from the destroyers. The destroyers try to break the balloon with their hands or feet (No sharp articles may be used). When the balloon is broken, change sides and start with another balloon.

OCTOPUS RACE

Divide the den into two teams of three to four boys each. The team forms with backs together, elbows linked. On signal, they race to a turning point and back to the start. First team through wins.



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GAMES Continued

FEED THE SHARK

Equipment: *large cardboard box*
 Tempura paint or magic markers
 large kitchen funnel
 bean bags



Paint a shark on the box and let dry
 Position the funnel securely in sharks mouth
 Toss the bean bags into the shark's mouth (funnel)
 The cub scout who feeds the shark the most is the winner

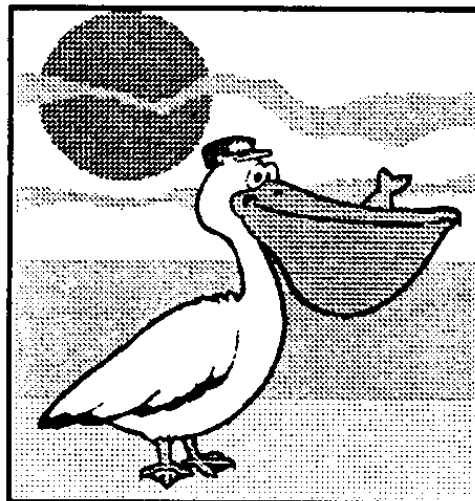
WALK THE PLANK

You need: a pair of dice
two or more players
a small piece of colored paper for each player

HOW TO DO IT:

1. Use the board on the next two pages. Give each player a piece of colored paper
2. Taking turns, have the players roll the dice and move their pieces of paper around the board. (The number of dots on the dice tells you how many squares to move. Example a five and 2 on dice move seven squares.)
3. Each player must do what it says on the squares.
4. The first player to reach land wins

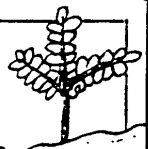
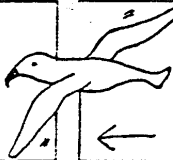


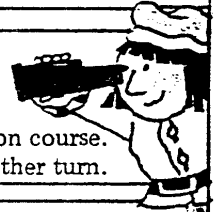
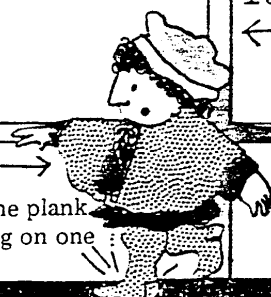

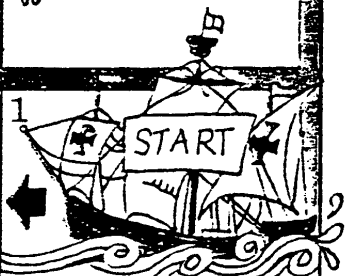
Make copy of the board on following pages and glue to a piece of foam board.



JULY- SEE WHAT YOU CAN SEA

GAMES Continued

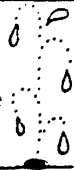






WALK THE PLANK Continued

	54 →	55 →	You win. LAND 
	45 ←	44 ←	43 ← You are close to land. Act like a sea gull. 
	40 → Pirates attack. Miss one turn. 	41 →	42 ↑
	31 ←	30 ← ☆  Full moon tonight. Tell us what you see.	29 ←
	26 →	27 →	28 ↑  You are on course. Take another turn.
	17 ←	16 ←	15 ←
	12 →	13 →  Walk the plank hopping on one foot.	14 → ↑
	3 You have been bitten by a shark. Go back to square 1. ←	2 ←	1 

JULY- SEE WHAT YOU CAN SEA

GAMES Continued

WALK THE PLANK Continued

50 →	51 →	52 Go slow. Rocks ahead. Use one dice for your next turn. →	53 →
49 ↑ Your boat leaks. Go back to square 22 for repairs. 	48 ←	47 ←	46 ←
36 →	37 → Good weather. Move ahead 2 more squares. 	38 →	39 →
35 ↑ Your compass broke. You are lost. Go back to square 26. 	34 ←	33 ←	32 ←
22 →	23 → Pretend you are riding on a whale. 	24 →	25 →
21 ↑ Hold on to your tongue. Now sing "Row, Row, Row Your Boat." 	20 ←	19 ←	18 ←
8 →	9 →	10 → A good wind is blowing. Go ahead 3 squares. 	11 →
7 ↑ Big storm at sea. Go back 3 squares. 	6 ←	5 ←	4 ←

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SKITS

FISH HEADS

Locate the song Fish Heads from Doctor Demento. It's a great lip-synch. It's comical and the boys love it!

SERPENT'S ADVENTURE

One boy is dressed as a sea serpent. He enters and sits alone. Three or more boys swim by dressed as fish. They giggle as they pull faces at the sea serpent. A boat full of sailors pass by taunting the sea serpent mercilessly. The sea serpent bemoans his fate. "Nobody ever wants to play with me." Just then the fish swim furiously by with the sailors carrying nets in hot pursuit. The sea serpent runs in between them, bringing the chase to a halt. The fish escape and the sailors turn and run the other way. The fish gather around the serpent and cheer. They pledge to be his friend forever. The moral of the story is, "A serpent in the ocean is worth more than a boat full of sailors with a net."

RERUN ADVENTURE

A boat full of sailors row by singing, "Row, Row, Row, Your Boat." Suddenly a large sea monster appears before them. They quickly begin rowing backwards singing the song backward: Dream a but is life merrily, merrily, merrily, merrily stream the down gently boat your row, row, row

THE BOY WHO CRIED WHALE

Narrator: There was once a small village by the sea where great ships went out every day in search of whales to help support the people of the village. There was a time when there were no whales to be found.

(Enter a small boy who is the look out on the ship)

BOY: Thar she blows, it's a whale

(Enter the crew carrying harpoons and ropes running to their positions)

Narrator: The little boy watched and watched and watched and watched, but never saw anything again. He thought that it would be fun to call again and so he did.

BOY: Thar she blows, It's a whale!

(Enter crew again as before)

Narrator: Once again the whole crew came running to their posts to get the whale but there was no whale and the boy laughed and laughed to see everyone scramble so fat. They were real angry with him and told him that he wouldn't get dinner that night for being so bad.

(Exit crew)

Narrator: As the day went on the boy watched and watched and watched. All of a sudden, when he thought there was no hope of seeing a whale, way out on the horizon he thought that he could see the hump back of a whale. The biggest whale that he had ever seen, He called to the crew, but no one came, He called again and still had no response. He called and called but no one came because they didn't believe him

(Enter crew)

Narrator: When the crew finally came, the whale was gone and the boy tried to tell them that they had missed the biggest whale in all the world. They laughed and told him that was the biggest fish story they had ever heard.

JULY- SEE WHAT YOU CAN SEA

SONGS

THE LITTLE FISH

Words by Bob Greer

Music by Donna Wagstaff

Sheet Music on following page

A hungry fish was swimming up and down a little stream.
When he spied the most delicious worm that he had ever seen.
"So fat," he thought, "so juicy-I just can't believe it's real.
How nice of it to come along (pause) and be my evening meal"

With a flashing and a splashing, in an instant he had turned,
And in another instant had his mouth around that worm.
But just before he swallowed it, he paused and turned aside,
He'd remembered it's the fattest worm (pause) that has the hook inside.

So he dropped back and cocked his head to take another look,
Then poking from the worm he saw a sharply pointed hook.
He spun around and swam away from that unhealthy thing.
When he was safe beneath the bank (pause) the fish began to sing:

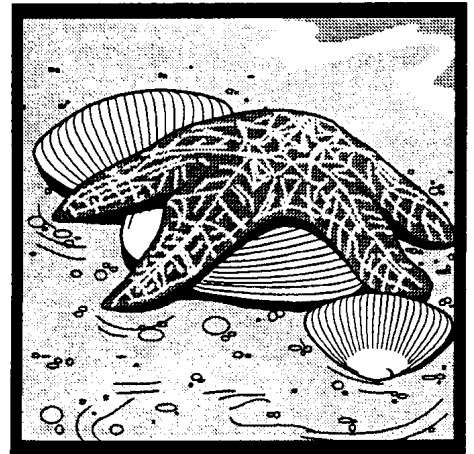
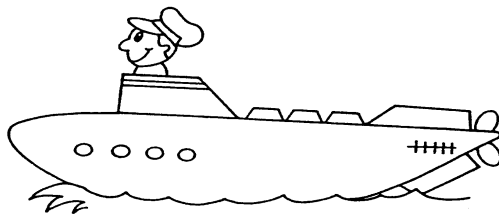
"Choosing's never easy, but at least the choice is mine.
Who can say for certain where I'll go or what I'll find?
The life I'll live tomorrow is the one I choose today.
If I'm careful in my choosing, then I'll know that I can say
I won! I didn't take the bait!
I won! The future's looking great! I WON!"

I had a friend who told me of a special pill he'd tried.
He said it made him feel so warm and fuzzy deep inside.
He said he had another I could sample if I wished,
But when he held it out to me (pause) I thought of that old fish.

My friends said, "Here, just try it. It will make you feel just great!"
I was tempted - just a little- but I thought I'd better wait
Until I had a chance to stop and take a closer look.
Then I said, " I think your pill (pause) contains a little hook."

"I choose to take care of myself--I will not take the bait.
I want a good tomorrow and tomorrow starts today!"
I turned and proudly walked away from that unhealthy thing.
And a big smile spread across my heart (pause) as I begin to sing:

"Choosing's never easy, but at least the choice is mine.
Who can say for certain where I'll go or what I'll find?
The life I'll live tomorrow is the one I choose today
If I'm careful in my choosing, then I'll know that I can say.
I won! I didn't take the bait!
I won! The futures looking great! I WON!"



JAWS *Tune: Do Re Mi*

Jaws--- A mouth, a great big mouth
Teeth--- The things that kinda crunch
Bits--- The friendly sharks "Hello
Us--- His favorite juicy lunch
Blood--- That turns the ocean red
Chomp- That makes the swimmers pause
Gulp--- That means the shark's been fed
That will bring us back to
Jaws! jaws! Jaws! Jaws!

JULY- SEE WHAT YOU CAN SEA

SONGS Continued

The Little Fish

Verse

Musical notation for the Verse of "The Little Fish". It consists of five staves of music in 3/4 time. The first staff begins with a treble clef and a key signature of one flat (F major/D minor). The melody is written in eighth and quarter notes. Chords are indicated above the staff: C, G7, C, F, C, D, G7, F, G7. A first ending bracket spans the last two measures of the fourth staff, with a repeat sign and a double bar line at the end. The piece concludes with a double bar line and repeat sign on the fifth staff.

Chorus

Musical notation for the Chorus of "The Little Fish". It consists of six staves of music in 3/4 time. The melody is written in eighth and quarter notes. Chords are indicated above the staff: C, G7, C, F, C, F, C, C, G7, C, C, G7, C, C, G7, C. The piece concludes with a double bar line and repeat sign on the sixth staff, with the word "fine" written below.

JULY- SEE WHAT YOU CAN SEA

APPLAUSE

SEAL

Put your arms straight in front of you like fins. Clap them together and say "Arf!, Arf!, Arf!"

FISH

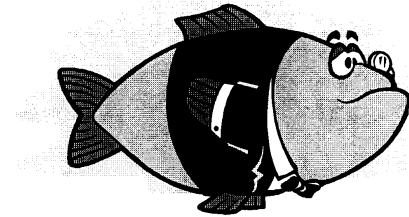
Suck in your cheeks, bug out your eyes, wiggle your top and bottom lips up and down

NECKERCHIEF SLIDES

FISH

*Need: Poster board
Glue
Glitter
1/2" PVC*

Make copies of picture let boy embellish with glue, glitter, sequins, any leftover scraps. Glue picture to piece of poster board cut to size and to give it some strength. Glue PVC pipe to back.



SEASHELLS

Sea shells grow in many different sizes, shapes, and colors. You can make some interesting slides from shells. The general rules are:

1. Clean the shells in boiling water.
2. Study the shells-use your imagination to see them as part of animals or birds.
3. Glue together using a drop of glue, a small piece of cotton, more glue, and then finally the other shell. The cotton helps hold them together.
4. Epoxy glue or a glue gun can be used. Pipe cleaners cut in small pieces can be used to hold two shells together too.
5. Use glue on eyes or paint eyes, nose, and mouth.
6. A coat of spray sealer will protect your creation.
7. Small piece of PVC pipe glued to back will work as neckerchief ring.

JOKES

WHAT'S THE BEST WAY TO CATCH A FISH?

Have someone throw it to you

WHAT BUS CROSSED THE OCEAN?

Columbus

WHAT FISH HAVE THEIR EYES CLOSEST TOGETHER

The smallest

HOW DID JONAH FEEL WHEN THE WHALE SWALLOWED HIM?

Down in the mouth

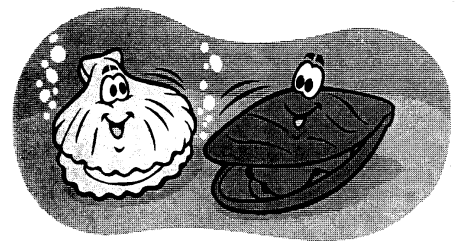
THREE MEN FELL IN THE WATER BUT ONLY TWO GOT THEIR HAIR WET. WHY?

One was bald

WHAT DID NOAH SAY WHEN HIS SONS WERE FISHING OFF THE ARK?

Go easy on the bait boys. There are only two worms

July- See What You Can Sea



JULY- SEE WHAT YOU CAN SEA

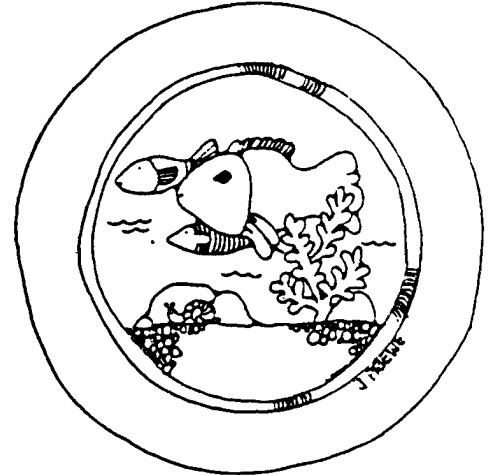
CRAFTS

NO CARE AQUARIUM

You will need: Two 9" paper plates
 Small amount of sand
 Two shades of green construction paper
 8" square of clear sandwich wrap
 Glue
 Scissors

Cut center out of one plate and glue clear sandwich wrap on inside. Cut a circle of green construction paper and glue it inside the other plate. Spread a light coat of glue over a 1" strip at the bottom of the green circle. Sprinkle sand over the glue, let dry, and shake off excess sand.

Draw several fish or cut out some pictures of fish from a magazine. Glue them above the sand on the green circle. Use a lighter shade of green for seaweed. A few wavy lines made with a dark green marking pen will make the water look as though it's moving. Staple the plates together or sew them together with colored yarn so you can see the aquarium picture through the clear sandwich wrap.



FISH

Material needed:

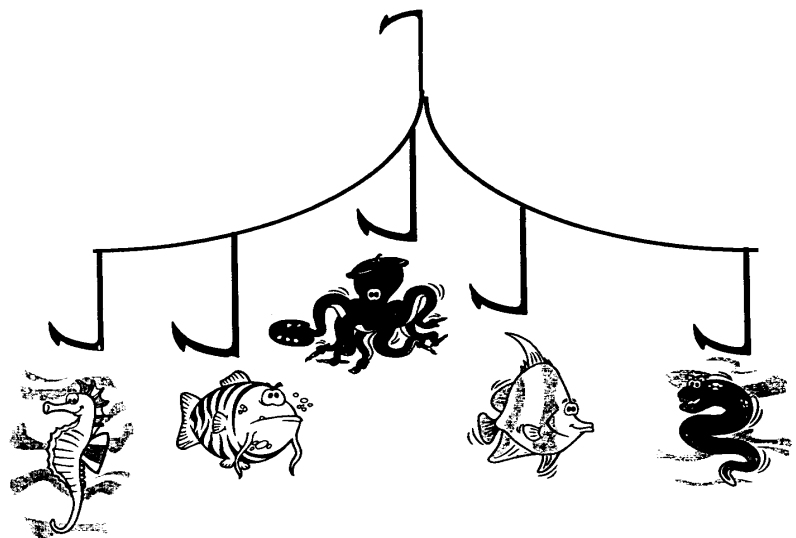
1 bathroom Toilet tissue tube
 Tacky white glue
 2 moveable eyes 7mm
 1 chenille stem
 Soft glow matte spray paint any color



Cut two 1" pieces of tube, one for the body and the other for the tail. Bend tail as shown. Cut fins from paper and glue to hold. Paint. Glue strip of paper behind nose so that you will have a surface on which to glue moveable eyes. Glue circle of chenille stem in front as mouth.

SEA ADVENTURE MOBILES

Equipment: Coat hanger
 Fishing line
 Fish Eel Octopus Boats
 Treasure Chest
 Anchor Squid Seals
 Mermaids etc.



JULY- SEE WHAT YOU CAN SEA

CRAFTS Continued

SAIL MOBILE

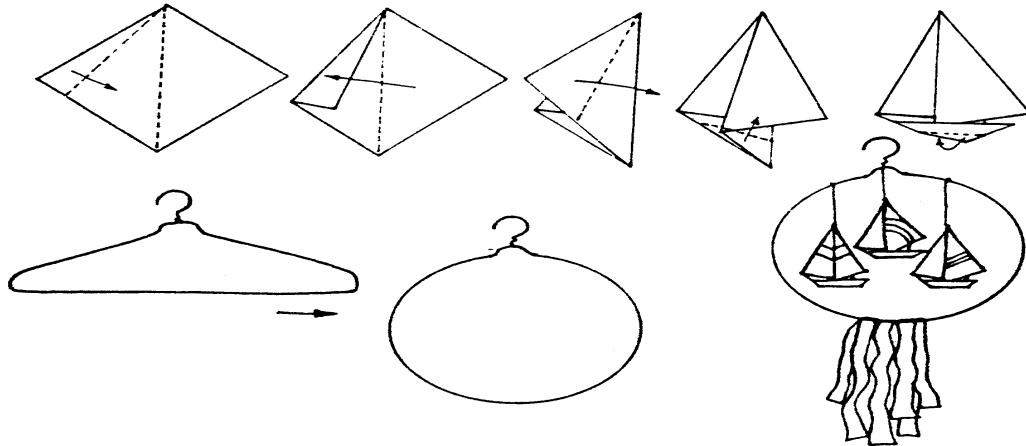
Cut three 5 inch squares of colored paper...or use origami paper. Fold each square as shown below.

Bend a wire coat hanger into a circular shape.

Use fish line or thread to hang the sailboat from the hanger.

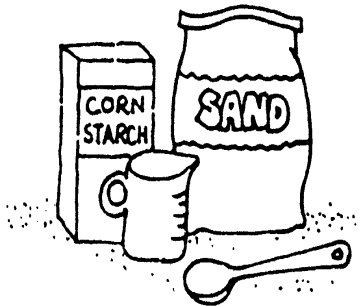
Attach crepe paper streamers as shown.

Hang in the wind to collect breezes!



SAND SCULPTURE

Sand castles that last! Sand sculptures don't have to disappear, crumble, or be washed away by the waves. Make them right in den meetings and save them for display at pack meeting.



Materials: 2 cups sand (from beach or garden center)
1 cup water
1 cup cornstarch
Pan
Spoon
Stove

Mix ingredients, stirring over low heat until mixture thickens. When cool, mold into desired shape with hands...castles, sea animals, monsters, anything! Allow to set until dry.

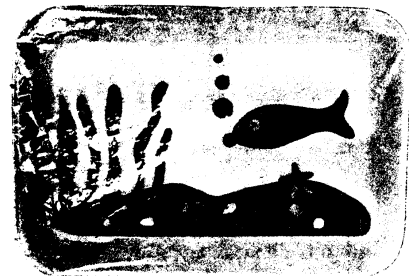
AQUARIUM

Need: Plastic foam meat tray
Plastic wrap
Pebbles
Construction paper

Cut Fish, ocean bottom and greenery out of construction paper

Glue these and some small pebbles to a plastic foam tray

Cover the entire tray with plastic wrap and tape the edges to the back



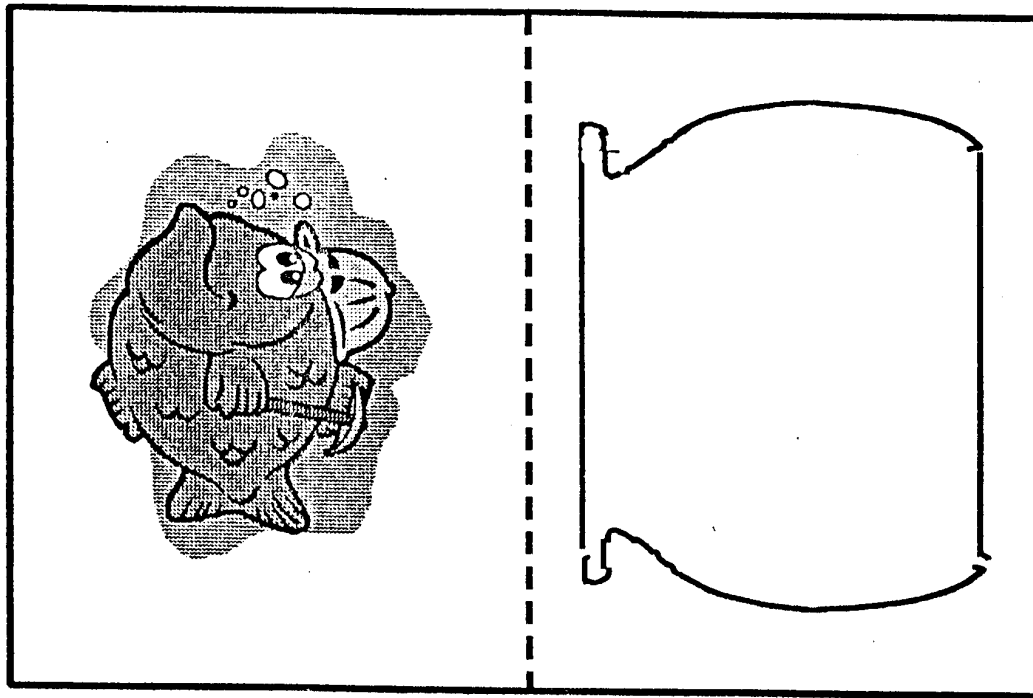
JULY- SEE WHAT YOU CAN SEA

CRAFTS Continued

MAGIC GOLDFISH

Materials needed: *Pattern*
 Pencil
 Tape
 Poster board

Draw the goldfish on the poster board
Fold the sheet in half
Tape a pencil inside the folded sheet
Tape poster board closed
Roll the pencil quickly in the palms of your hands, and watch the goldfish jump into the bowl



JULY- SEE WHAT YOU CAN SEA

CRAFTS Continued

PERISCOPE

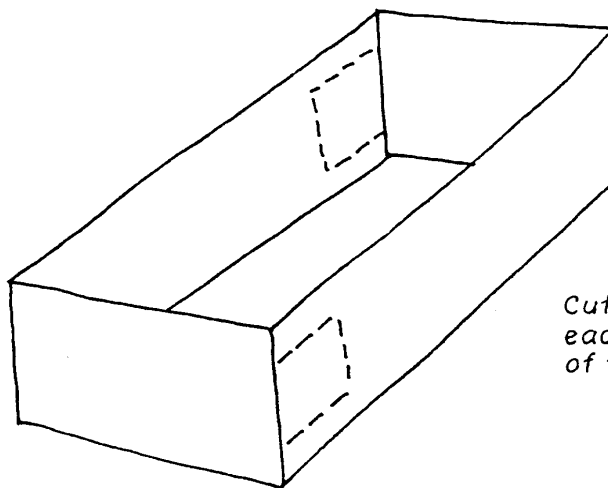
Materials needed: *Narrow box, like a shoe box, with a lid
2 small mirrors
Masking tape
Scissors
Hot Glue gun*

Using the mirrors as patterns, trace around them near the bottom of two sides of the box on opposite ends of the box, as shown in diagram. Cut the two sections out. Place the mirrors at an angle inside the box, opposite the cut out opening. Use tape to hold them in place.

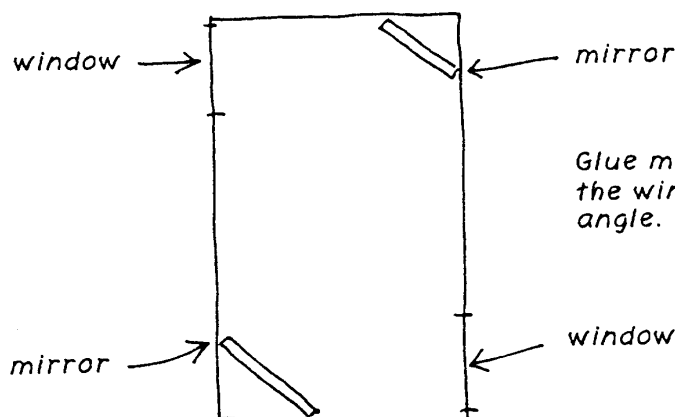
Adjust the mirrors until you can see out of the top hole by looking into the bottom hole. Use the hot glue gun to glue the mirrors in place along their edges.

Put the lid back on the box. Seal the lid to the box with masking tape.

Decorate the outside as you desire.



Cut out windows on each side of both ends of the box.



Glue mirrors opposite the windows at an angle.

JULY- SEE WHAT YOU CAN SEA

CRAFTS Continued

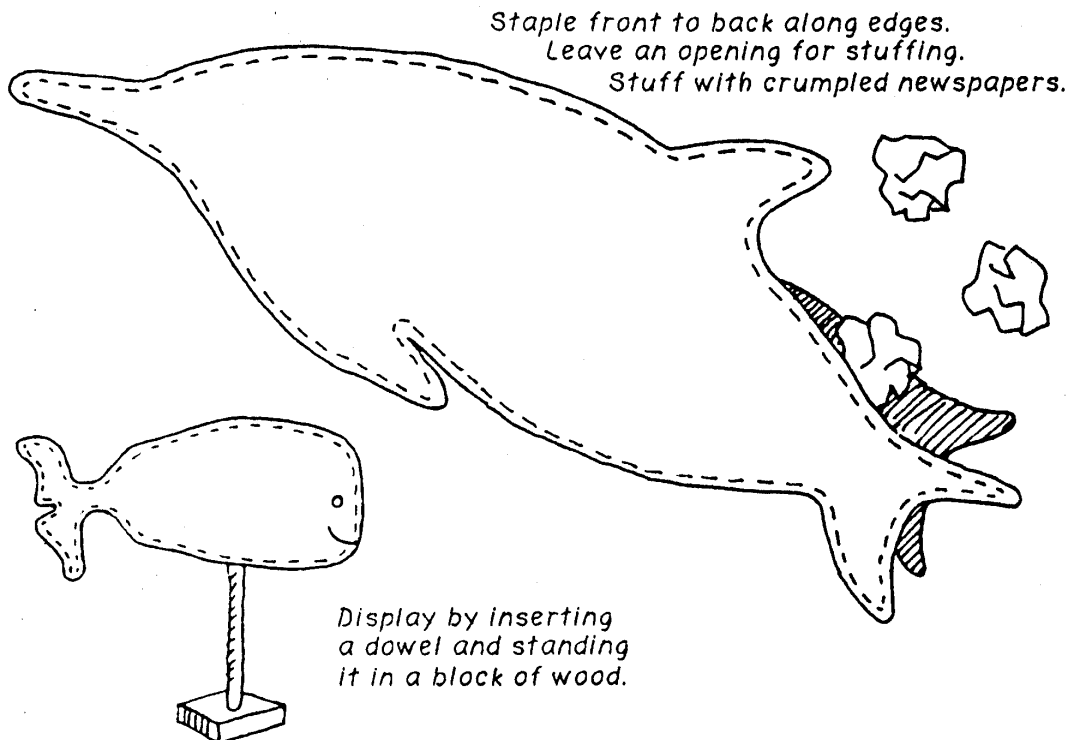
Paper sculptures are lots of fun because they are big, colorful and unique. Before you begin, decide what you would like to enlarge or exaggerate. Large paper fish are easy to create. But think of what would be unusual. How about a large stuffed insect? Camera? Ear of corn? With stuffed paper sculpture, there is no limit to what you can create.

STUFFED PAPER SCULPTURE

Materials needed: *Newspapers (for stuffing the sculpture)*
Butcher paper, newsprint or newspaper
Stapler
Staples
Paint: tempera or acrylics

Draw the desired shape on the paper and cut out two identical shapes, one for a front, one for the back. Staple the two pieces together until about half the object is stapled. Then begin wadding up newspapers and stuffing the sculpture. Staple the edges as the stuffing fills up, until the entire shape is full, and stapled shut.

Lay the sculpture on a table top covered with newspaper, and begin painting the surface. If you like, use yarn strips of paper, crepe paper streamers, or whatever you choose, to add to your sculpture. When dry, you can perch your creation on a shelf, or tie on fishing line at the top, and hang from your ceiling. These three dimensional paper sculptures can also be displayed by drilling a hole in a flat piece of wood and inserting a dowel or broomstick. Insert the other end of the dowel into the bottom of the sculpture.

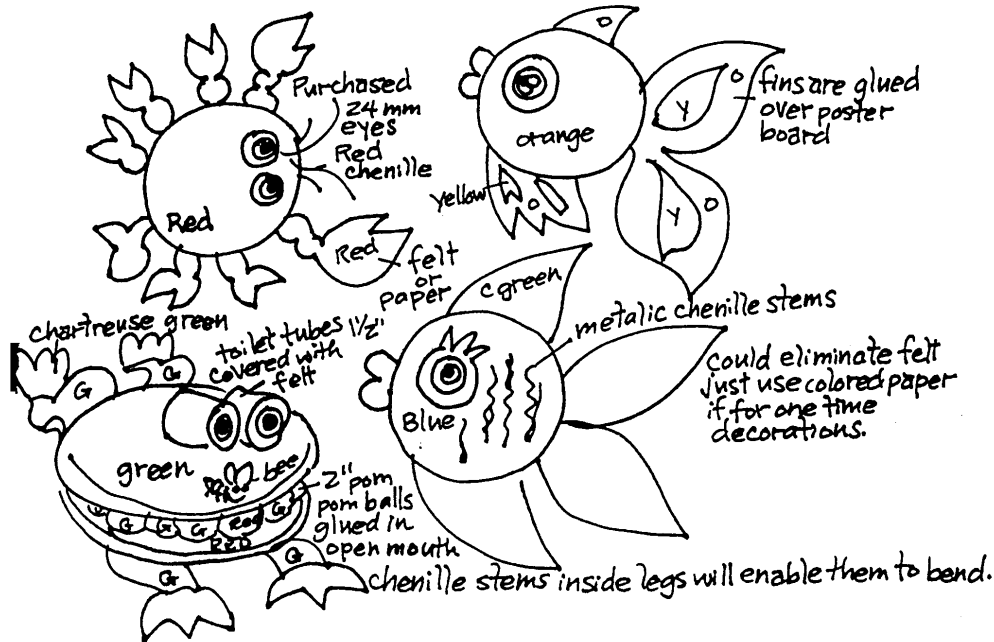


JULY- SEE WHAT YOU CAN SEA

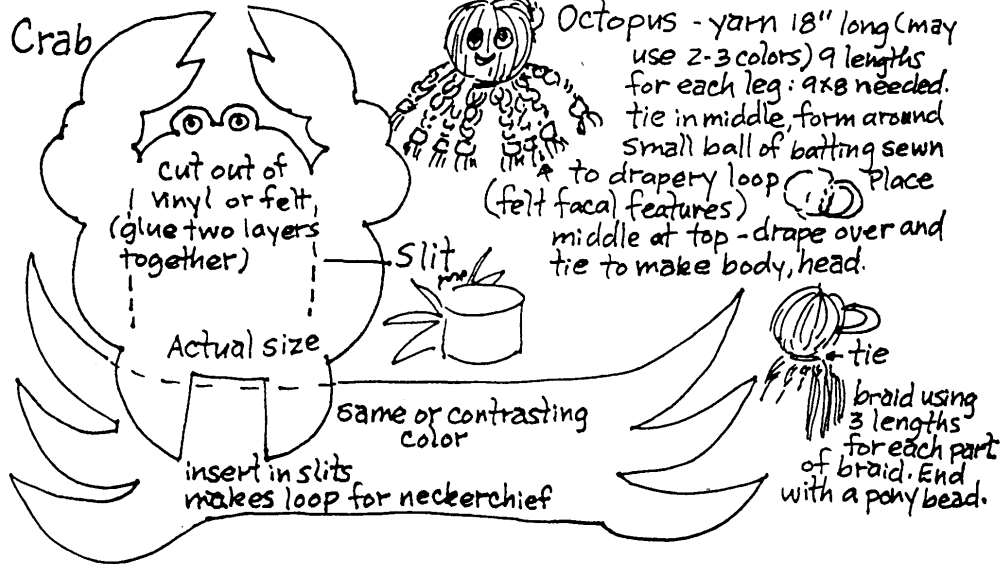
CRAFTS Continued

Paper Plate Sea Life

Paint plates with acrylic paint. 6 1/2" plates

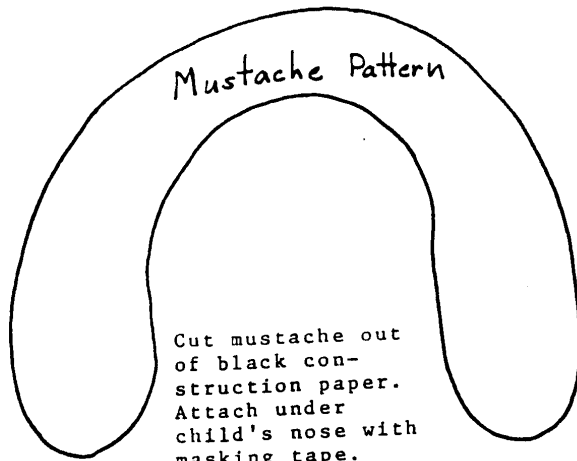


Neckerchief Slides

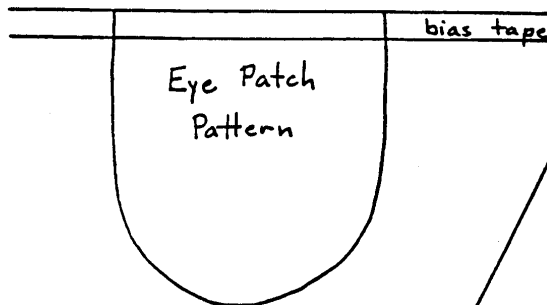
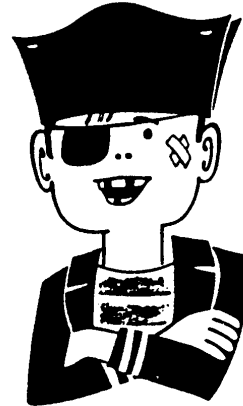


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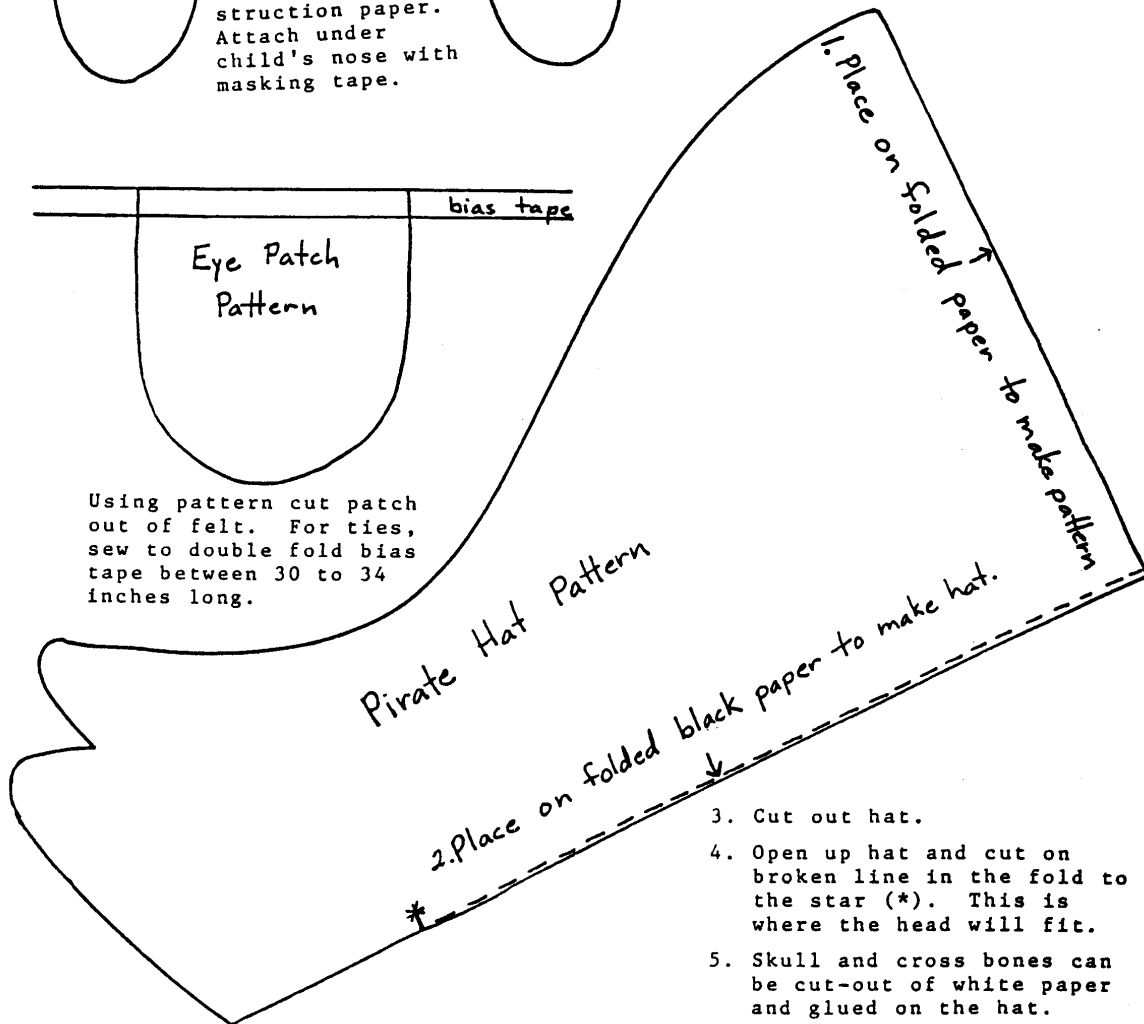
CRAFTS Continued



Cut mustache out of black construction paper. Attach under child's nose with masking tape.



Using pattern cut patch out of felt. For ties, sew to double fold bias tape between 30 to 34 inches long.



3. Cut out hat.
4. Open up hat and cut on broken line in the fold to the star (*). This is where the head will fit.
5. Skull and cross bones can be cut-out of white paper and glued on the hat.

JULY- SEE WHAT YOU CAN SEA

NAUTICAL KNOTS

Family Activities

Nautical Knotting

by Dennis Starin

A length of rope is about the best all-purpose tool you can have when things come undone in the middle of nowhere or when something has to be hitched, hoisted, hauled or secured. Even if your knotting skills haven't improved since you first learned to tie your shoelaces, a little practice with a few basic knots can prove extremely useful when camping, bundling newspapers to be recycled or making decorative accessories.

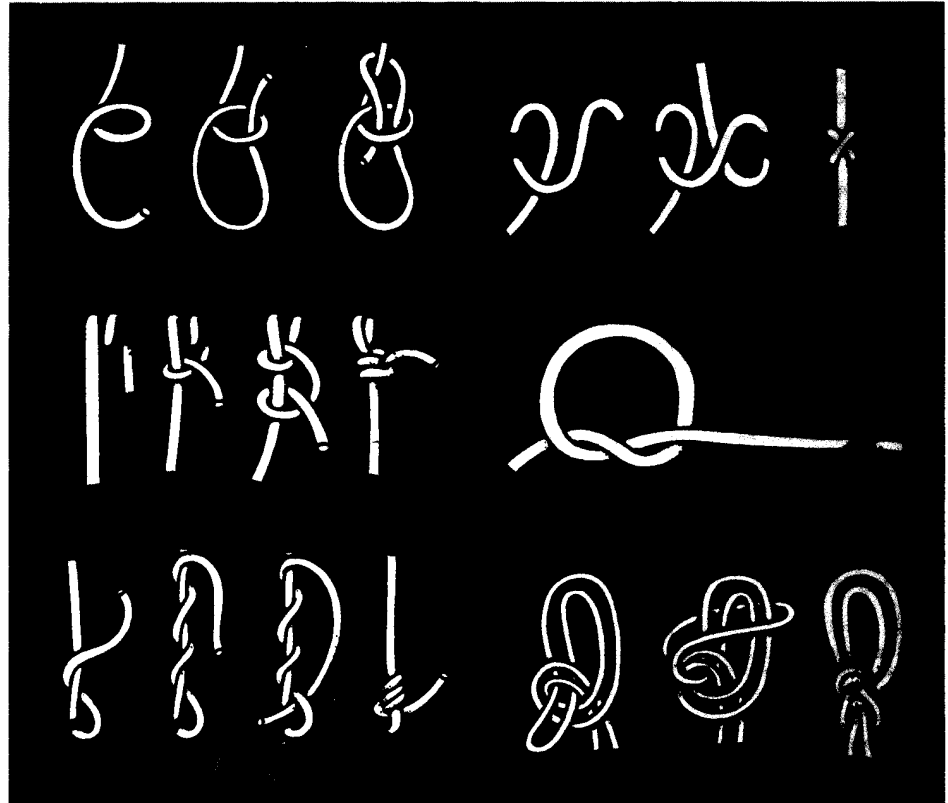
In the days of the great sailing ships (before steam powered them), the very lives of a sailor and his shipmates depended on the strength and reliability of his knots. During the idle hours of a long voyage, seamen would practice intricate knotting. This art is known as marlinspike seamanship. Sailors became highly skilled at tying ornamental knots. Competition existed among knotters and each had a few special knots he would not show anyone how to make.

The history of knotting is steeped in superstition and magic. According to legend, ancient mariners who bought magic knots from sorcerers believed that favorable winds were tied up in these knots and could be released when needed.

There are 3,800 knots listed in the *Encyclopedia of Knots and Fancy Rope Work*, by John Hansel, an authority on nautical knotting. But a handful is all you need to know for everyday jobs. If you make a mistake, nothing is wasted. Just untie the knot and retie it.

Following is a list of a few practical knots and some of their uses:

(1) The **bowline** (pronounced bow-lin) is used anywhere a slip-proof loop is needed, as for mooring a boat, putting up a tree swing or tying down a car trunk. Sailors practice making the bowline around their waists. If one falls overboard, he can grab a line, tie a bowline around his waist and be pulled safely aboard.



(2) The **round turn with two half hitches** is used to secure the end of a rope. The turn allows you to keep the line taut while finishing off the knot with two or more half hitches.

Young children can easily master the blood knot and clove hitch:

(3) The **blood knot** (also known as the bullion or manifold knot) is used to shorten a small rope or to increase its diameter to prevent it from slipping through the eye of a hole. It works well with monofilament line and is an easy way to attach a fish hook or sinker to a line.

(4) The **clove hitch** is most useful when you need to tie a rope to something. Cowboys use it to tie their horses to a hitching post. For a more permanent knot, add a half hitch around the standing end (the unused portion of a rope).

(5) The **fisherman's knot** is a good knot for joining two light ropes, package twine or fishing line.

(6) Like the regular bowline, the **bowline**

on a **bight** knot is often used in rescue work, especially when the victim is weak or unconscious. For extra strength, a double rope is formed at the bight (the midpoint of a rope) and knotted.

Rope Care

As with any tool, proper care and storage are important. Always untie knots before storing rope since they cause abrasion of the strands. Store rope on spools above the ground in a cool place. Twisted rope ends should be seized (wrapped and sewn with thread) or secured with tape to prevent unraveling.

For practicing, venetian blind cord, clothesline, twine, string or fishing line will do. Nylon marine rope is weather resistant and easier (on the fingers) to work with than manila. Polypropylene rope should not be used for anything other than decorative work since it lacks strength and is easily abraded. Check marine suppliers, hardware stores and craft and hobby stores for a variety of ropes. ■

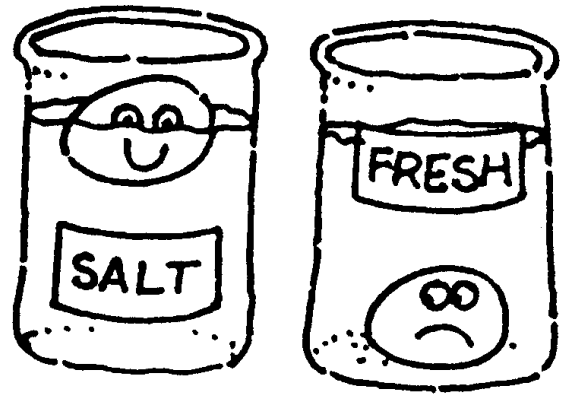
JULY- SEE WHAT YOU CAN SEA

SALTY SEA

Saltwater is different than fresh water, the kind we drink.

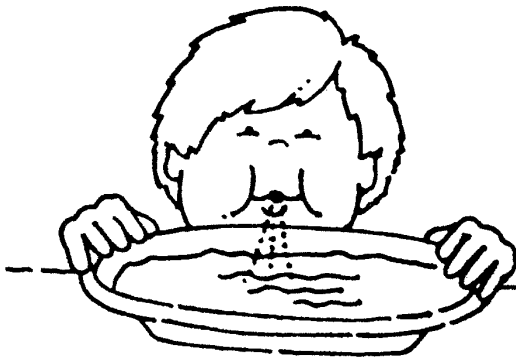
Experiment to discover differences. make saltwater by dissolving two tablespoons of salt in a cup of water. Stir to dissolve and allow the boys to taste. They surely wouldn't want to drink saltwater if they were thirsty!

Discuss the fact that travelers crossing the ocean need to bring along their own drinking water. Now some experimenting with saltwater. Place a hard boiled egg in a glass of fresh water. It sinks to the bottom. If the same egg is placed in a glass of saltwater, it floats. Saltwater has greater density, allowing things to float. It's easier for people to float or swim in the ocean than in fresh water lakes and streams.



WHAT MAKES WAVES

Waves are caused by the wind blowing over the smooth surface of the water. As the wind blows little ripples are created. If the wind keeps blowing in the same direction, the ripples get bigger and bigger becoming waves. The harder and longer the wind blows, the bigger the waves are. Now make some waves!



Demonstrate the ripple effect by blowing gently at water in a flat dinner plate. Blow steadily, at water level, and watch the ripples. Multiplied many times, this ripple action creates big wave action. Watch the wave travel.

Boys can make "human" waves, too, just like the fans at football and baseball games. Kneeling in a circle, one child begins the wave by slowly raising both arms above his head. As his arms are lowered the boy to the left does the same. This action continues around the circle, giving a wave appearance.