

AQUARIUM ARTISTRY

Dear Presenter,

This activity is 10 to 25 minute HANDS-ON presentation for approximately 250 people. You must do this activity at home BEFORE you attempt to lead the activity during the water festival.

Thank you for volunteering to present “Aquarium Artistry.” Have fun, enjoy yourself and we hope you will consider volunteering again next year.

Big Sioux Water Festival

AQUARIUM ARTISTRY

MATERIALS LIST (FOR APPROXIMATELY 250 PEOPLE)

CONSUMABLES

- 500 Chinet brand 8 3/4 inch paper plates
- 500 green pipe cleaners
- 1,000 paper fish
- 2 rolls of fishing line (250 yards each)
- 10 boxes of blue plastic wrap
- 10 rolls of scotch tape
- 4 boxes of staples
- 4 large garbage bags
- 1 roll of masking tape

NON-CONSUMABLES

- 10 staplers
- 10 tape dispensers
- 20 pairs of scissors
- 1 small plastic container to place extra cut pipe cleaners in
- 1 plastic stack box with 2 drawers
- 1 small plastic storage container for unused scotch tape
- 1 large Rubbermaid container to store kit
- Presenter kit instruction notebook

Each aquarium will include:

- 2 rims of paper plates
- 4 fish hung on various lengths of fishing line
- 3 pieces of pipe cleaner
- 1 large pipe cleaner piece shaped like a hook
- 1 large piece of blue plastic wrap

AQUARIUM ARTISTRY

To construct an aquarium:

1. Carefully cut out 4 fish - make sure there are 4 different fish.
2. Tape 1 fish to the bottom of 1 piece of fishing line. Tape the top of the fishing line to the rim of one of the paper plates. This rim will be your “assembled” rim - the other rim will be the “cover” rim.
3. Tape another fish to another piece of fishing line. This piece of fishing line needs to be a different length than the first piece (What you’re going for here is that the fish will look suspended in water, once the aquarium is finished and you don’t want all the fish “swimming” in a straight line, or laying on the bottom of your aquarium!). Attach the top of the line to the “assembled” rim near the first line.
4. Repeat this process with the other 2 fish.
5. Cut a pipe cleaner into 3 different lengths. Tape the pieces together at the bottom to form a “W” shape. This will make your aquarium plants. Tape these to the bottom of the rim of the “assembled” plate.
6. Cut another pipe cleaner in half. Take one half and form it like a hook. Tape or staple the hook to the top of the “assembled” rim
7. At this point, you should have 4 fish and line, 1 set of plants and one hook attached to the “assembled” plate rim. Take the “cover” rim and place it onto the “assembled”rim so the two rims face each other. Carefully tape the rims together.
8. Finally, tear a piece of blue plastic wrap large enough to enclose the entire aquarium. Wrap plastic wrap around to the back (underside) of the “assembled” rim and staple around the rim to hold wrap in place.
9. Display in a window.

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This activity is a hands-on activity. To best explain and supervise this activity you must do it at home BEFORE the actual presentation.

Background information is provided as a basic overview with both general and specific information. Share this information with the visitors throughout the activity.

BACKGROUND

Your first aquarium can be a 10 gallon or 300 gallon tank, as long as you have a balanced self-contained world. In the wild, fish live in a much larger body of water and nature filters out waste materials. In your aquarium, however, the single greatest killer of fish is the build up of waste materials, such as excess food and fish wastes. These wastes must be filtered out or changed into harmless compounds to prevent poisoning of your fish.

The basic item for the home aquarium is the container to house your fish. There are many tanks on the market today, tanks made of glass or plastic, tanks in all shapes and some that even double as coffee tables or lamps. But, whatever tank you choose, you will need the same basic equipment: a tank with a hood containing a light source to control the length of day and season, a heater to control the temperature, and a filtration system to aerate and clean the water.

One of the best filters for conversion of waste is the undergravel filter, a plate with water lift tubes that is placed under the aquarium gravel. Water is drawn down through the gravel and up through the lift tubes causing the waste to be trapped in or filtered through the gravel, where bacteria can convert the wastes into harmless compounds. Another type of filter is the outside power filter, which operates outside of the aquarium and pulls water from the tank and filters this water through a medium of sponge foam and charcoal before returning it to the tank. Outside power filters remove large, floating waste particles from the water and are recommended when messy fish, like goldfish, are kept.

Many people prefer a combination of an undergravel filter (for bacterial action) and an outside power filter (to remove large waste particles); this combination makes tank upkeep much less work.

Your choice of fish is a matter of personal preference, but there are a few basic rules to follow:

1. **Do not put too many fish in your tank!** Overpopulation stresses fish and is the #1 cause of disease and other problems.

2. **Buy inexpensive fish for your first try.** If the fish die, you are not out a lot of money.

3. **Choose fish that require the same water conditions, temperature and food.** Fresh and salt water fish do not belong together. Also check to make sure you put only aggressive fish together and non-aggressive fish together. Both in the same tank could be trouble!

4. **Buy young fish and watch them grow.** Immature fish cost less and small fish are less likely to overcrowd your tank.

Do not feed your fish more food than they can eat in 5 minutes. Feed them once or twice a day. Remember, healthy and hungry fish are active fish.

The care and upkeep of your tank will depend on your filtration system and the number of fish you have. If your filter controls the poisons caused by fish wastes, you will only have to replace water lost through evaporation, do a basic clean up and one-third water change about once a month. If you overfeed your fish and have an inefficient filtration system (like a small, inside corner filter), you will have to change your water more often to keep your fish happy and healthy.

Your local fish store is your best source of information about fish, equipment and aquarium care. Even in today's hurried world, there are still full service, owner-operated fish stores that care about your aquarium fish. Shop around to find a local store that will analyze your aquarium water, diagnose and treat sick fish, repair faulty equipment, and give you complete and detailed information and advice on fish and fish care.

AQUARIUM ARTISTRY

ROOM REQUIREMENTS

- Room with tables - three 8' tables for the activity; one 8' table for storing presenter supplies. Chairs at each table for participants to sit at while constructing the aquariums.

PRE-PREPARATION

Pre-preparation can include any or all of the following

- Check supplies against supply list
- Cut out center portion of each paper plate, leaving the rim intact. **DO NOT CUT THROUGH THE RIM.** Discard center portion.
- Copy fish onto colored paper. One sheet of fish can be red, one green, one yellow and the other gray. Cut fish apart. It is not necessary to cut around the outline of the fish (have participant do that part). Place all fish squares into corresponding color stacks.
- Check all staplers to make sure they work
- Make a sample aquarium to display (see construction instructions) - at least one per table

PREPARATION - Approximately 30 minutes to set up

- On each table, place several pairs of scissors, several staplers and several rolls of scotch tape.
- With masking tape, attach a garbage bag to one end of the table
- In center of each table, place supplies to construct aquariums

AQUARIUM ARTISTRY

INTENDED PARTICIPANT OUTCOMES

By completing this activity the participants will experience an art project that will encourage brainstorming about proper care of wildlife in their natural habitat as well as in a habitat sustained by humans.

PROCEDURE

10. With your team of volunteers review the information about fish aquariums provided in the background section of this notebook. Assign a minimum of 1 volunteer per table to help construct the aquariums.
11. Greet each of your visitors enthusiastically. As each participant arrives, show him/her the model aquarium. Explain that they will be constructing an aquarium that can be hung on a window at their house.
12. Have each participant gather 4 fish squares. Instruct him/her to carefully cut out the fish around the outline of each picture. While participant is cutting out the fish, tell him/her the fish aquarium information. Keep in mind that participant will not be at this activity very long, so use the time he/she is constructing to talk with them about habitat.
13. Next have him/her cut 4 pieces of fishing line in varying lengths. Have him/her attach one fish to one line and repeat until all fish are on a line. Explain that the fishing line will be invisible in their completed aquarium and by attaching the fish to the line, it will appear the fish are swimming inside the aquarium. Have him/her tape each fish/line to the top of one of the rims.
14. Give him/her a pipe cleaner. Instruct him/her to cut the pipe cleaner into 3 parts. Now have him/her tape the bottoms of the pieces together forming a "W" shape. The pipe cleaner pieces will be different lengths, which is okay. Now have him/her tape the pipe cleaner plants to the bottom of the rim.
15. With another pipe cleaner, have him/her cut it in half. Take one half and form it into a hook shape. This is what he/she will use to hang it in the window. Instruct him/her to tape it to the top of the rim in the center of the rim if possible.
16. Give the participant another paper plate rim. Direct him/her to place it onto the rim they've been working on, making sure to place them face to face. Let him/her carefully tape the two rims together.
17. Lay a large piece of blue plastic wrap on the table. Next, place the aquarium on the plastic. Pull the plastic wrap around to the back side of the aquarium and staple around the rim to hold the wrap.
18. Trim off any excess plastic wrap.

CLEAN UP AND SET UP FOR NEXT PARTICIPANT

19. Discard any paper scraps left over from participant cutting out fish
20. Discard any excess blue plastic wrap left over from making previous aquarium
21. Place extra pipe cleaner (the second half from the hook cutting) into the small plastic container for use with other aquariums

AQUARIUM ARTISTRY

FINAL CLEAN UP Approximately 30 minutes

- Dispose of any excess paper scraps
- Place all paper supplies, cut out fish, pipe cleaners and plastic wrap in large Rubbermaid storage container
- Put all scissors and staplers in drawers of storage box. Place any scotch tape into smaller storage box and put into one of the drawers
- Place tape dispensers and unused fishing line in one of the drawers of the storage box
- Put storage box into large Rubbermaid container
- Place presenter notebook in Rubbermaid container