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## WATER CONSERVATION

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atchwork Designs,

#### **Detailed outline of** Facts, Requirements, and Bibliography Crafts 6-10 Recipes 11-15-**Community Service** 17 18-Games 26 Templates for 27crafts and activity 32 Order form and 33-

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#### About this 'Water Conservation' kit

This **kit** was created to assist you or your group in completing the 'Water Conservation' patch program.

**Kits** are books written to specifically meet the requirements for the patch program and help individuals earn the associated patch.

All of the information has been researched for you already and collected into one place.

Included are crafts, recipes, coloring sheets, and

other educational information. These materials can be reproduced and distributed to the individuals completing the program.

Any other use of these programs and the materials contained in them is in direct violation of copyright laws.

If you have any questions, please feel free to contact Patchwork Designs, Inc. using any of the methods listed below.



#### Ordering and contact information

After completing the 'Planet Protection Patch Program', you may order the patch through Patchwork Designs, Incorporated. You may place your order in one of the following ways:

#### Mail

Checks and Money Order:
Please send checks and
money orders, payable to
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#### Credit Card

Telephone your Master-Card, Discover, or Visa order to (703)743-9948. Leave your order and credit card number on our secure line.

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#### **Email**

orders@patchworkdesigns.net Email is not secure to send your credit card information. Though you can email orders if you have any questions about ordering.

#### **Online Store**

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All information is secure.

Written by: Ariel and Cheryle Oandasan

shipping chart

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## Water Conservation

Patchwork Designs, Inc

## Detailed Outline of Kit

- Page 3 <u>List of Fast Facts</u> Interesting facts about water, animals, water conservation, and the world that you always wanted to know the answer to.
- Page 4-5 Patch Program Requirements and Bibliography All age levels need to complete only 3 three requirements to earn the patch.
- Page 6-10 <u>Craft Ideas</u> to complete which will enhance your familiarity with the topic. Includes boats, tornado, bath salts, and a "snooper."
- Page 7- Recipe Ideas to complete to enhance the participants knowledge of water and using it everyday in a fun and exciting way. Some recipes include: Custom popsicles, mix-match pasta, and creamy ice.
- Page 15-16 <u>Community Service Ideas</u> Information on various community service ideas to enhance your knowledge about conserving water. Examples are: rain water collection, visit a park, presentations, etc.
- Page 17 "Conserve Our Water" Poster Decorate your own water conservation flyer to hang in public areas or your home to spread awareness about conserving water.
- Page 18-20 <u>Game Ideas</u> Enjoy fun games that involve water or in a swimming pool. Some games include: Water Tag, Fishing, and Treasure Hunt.
- Page 21--24 Water Conservation Game This game assists the participants in learning about water conservation and helping animals. Follow the instructions on page 21.
- Page 25 Word Search Have the participants find words in this puzzle that represent water conservation.
- Page 26 <u>Fishing For Fun Game</u> This game teaches the children about cleaning our water bodies and helping the fish that live there.
- Page 27 Water Conservation Chart This page has ways you can conserve water in your home.
- Page 28 Water Cycle This page has the water cycle to color and to have the knowledge of how it works.
- Page 29 Watershed Diagram This page has a watershed diagram to color and to have the knowledge of how it works.
- Page 30-<u>Templates for Crafts</u> These pages assists you in completing the some of the crafts provided in this kit.
- Page 31 Food Chain Create a food chain with this craft page.
- Page 32 <u>Volunteer Hours Worksheet</u> Keep track of your volunteer hours assisting your community with this worksheet. This includes anything that you do for free for others such as: babysitting, raking leaves, bus patrol, church assistance, food drive etc.

#### Page 33-34 Order Form and Shipping Chart

## Fast Facts!



**How much water do we need to drink?** That's because we need to drink 8 oz. a day minimum or 4-6 liters (including our food intake)!

Why do we need water? Our body is 60% water and we can only go a few days without it because of that.

Why is the world mostly blue? About 75% of the globe is covered in water!

**Does that mean all the water in the world is saltwater?** No, but about 97% of it is, all the rest (3%) is freshwater, like rivers, streams, lakes, and ponds.

Where is the largest fresh water place? Antarctica. (90% of our sources!)

**How much water do we use?** About 80 gallons in the winter and 120 in the summer.

**How much water does it take to make one water bottle?** 3 liters for a 1 liter bottle.

Which country uses the most water? The United States. About 151 gallons a day per person.

**How do plants help water?** The plants soak up the water in the soil and then release it in the air and the water in the air goes into the clouds and then is released in rain to repeat the process. Without water, plants wouldn't survive and we'd have less water!

What is water made of? One atom or molecule is made out of 2 Hydrogen molecules and 1 Oxygen molecule, combined with "natural chemistry"—called a "polar covalent" bond.

Why is water hot sometimes? It has an excellent ability to hold heat once it's heated up!

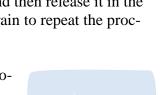
**How do fish breathe?** Through their gills. It's like a current, they take in the water (mostly saltwater, the fresh water fish are more rare) and filter out the salt and then release it. Since it has oxygen, that's also how they breathe. Saltwater fish drink the water through their mouths, while freshwater fish just use their gills and get some through their food.

How much water is used to water our plants for food? About 8%.

What does a dam do? It blocks water from flowing where it shouldn't or makes the water flow in a slower speed for the people that need it so it won't overflow their city.

Why is pool water so blue and tastes bad? Because they put a chemical called chlorine in it to kill the chemicals of us swimming around in it! You don't want to drink in someone's germs and get sick, do you?





## **Requirements for Water Conservation**

#### All age levels need to complete only 3 three requirements to earn the patch.

The following requirements should be chosen according to the age level of the participant. The requirements can be worked on as a group or individually. Each requirement can be completed at home, in school, or with specific groups.

- 1. **Think:** Water is everywhere and we interact with it daily. Think about three things that you use water for or may have water in it. Could you do without water? Could you change some of the ways you use water?
- 2. **Conserve:** Conservation is when you use just what you need and don't over use. Think about ways you can you or your family can conserve water. Choose one task that you can try to conserve water in your house. Try this task for one week. For extra, ask your family to help. Examples include: turn the water off while you are brushing your teeth, take shorter showers, run the dishwasher only when it is full, use only one cup a day for your drinks, or make sure facets are turned off completely after you use them.
- 3. **Animals:** Many animals live in the water. Research three animals that live in the water. What would happen if their water was polluted?
- 4. **Exploring**: Visit a local pond or stream of water locally with adult supervision and observe the animals and insects that live there. Create an art project or draw a picture of the what you observed OR create scope to look in the water with a coffee can, OR help clean up litter around the area OR take a tour at a park that has a water area. <a href="http://www.epa.gov/owow/NPS/kids/critterscope.html">http://www.epa.gov/owow/NPS/kids/critterscope.html</a>
- 5. **Experiment:** What happens when oil mixes with water or baking soda? Try some experiments with water to help you better understand how water areas are cleaned up OR the effect of water and other simple editions can create an artistic volcano look like its erupting. <a href="http://www.epa.gov/owow/NPS/kids/darbyduck.html">http://www.epa.gov/owow/NPS/kids/darbyduck.html</a>
- 6. **Water Drop:** When it rains the water falls on the ground and many other water sites. Where does your water come from? Do you have a well in the ground or a public water system? Learn about the water cycle or where your water comes from.
- 7. **World:** Water covers over 60% of the earth. Each country has a different way that they receive or use their water. Choose a country to learn more about their water supply and where it comes from.
- 8. **Watershed:** A watershed is an area of land that drains into a specific body of water. It catches the water and channels it into other bodies of water. Learn where there is a watershed located and learn more about it OR complete a project about a watershed. Examples: Creating a watershed model or diorama to share with others, adopt a watershed, create a rain garden, cleaning up a stream, or adopting storm drains. http://www.watershedactivities.com/projects/projects.html

Find a watershed near you: <a href="http://cfpub.epa.gov/surf/locate/index.cfm">http://cfpub.epa.gov/surf/locate/index.cfm</a>

- 9. **Pollution:** Oil and trash are a couple of common pollutants in our water. Find out how you assist in picking up trash near a water area, OR create a picture to depict how we can stop pollution, OR find out what happens when birds and animals are affected by an oil spill, how do they clean them?
- 10. **Endangered:** The sea turtle and dolphin are endangered due to pollution and entanglement in fishing gear. Learn more about an animal that is endangered OR adopt an animal that is endangered OR go on to an aquarium or other facility that has endangered water animals. Examples of animals: Emperor penguin, manatee, harbor seal, humpback whale, seahorse, beluga whale, sea lion, or clown fish. <a href="http://www.worldwildlife.org/ogc/species\_category.cfm">http://www.worldwildlife.org/ogc/species\_category.cfm</a>
- 11. **Environment**: Complete an activity that assists in making our environment better. You can complete an activity that you would like to participate in or create a project or poster. This could be teaching others about the water cycle, protecting animals, oil spills, learning about an estuary and the animals, seashore clean-up, wetlands, and much more.
- 12. **Teach me:** Attend an event, facility, or learn about protecting your plants, water areas, or animals at school. You may be able to accomplish all three requirements if you conduct several activities at these events or conduct an extensive study on protecting our planet.
- 13. **Create:** Create a craft or recipe activity representing or using water. Examples include: rain catcher or gauge, watercolor a picture, ocean in a bottle, seashell crafts, recycled water bottle craft, and much more.

- 14. **Natural:** Rain is a natural way of replenishing the earth with water. Sometimes it rains or snows too much and that can cause a natural disaster to happen. Choose a natural disaster to learn more about and how you can prepare your home or self for it. Examples are: floods, blizzards, tsunami, hurricane, or under toe at the beach.
- 15. **Careers**: Learn about careers involving water. Are there any careers you would like to do? Some examples include: water conservation specialist, marine biologist, oceanographer, water meter technician, fisherman, water tester, plumber, aquarium assistant, or water plant operator.

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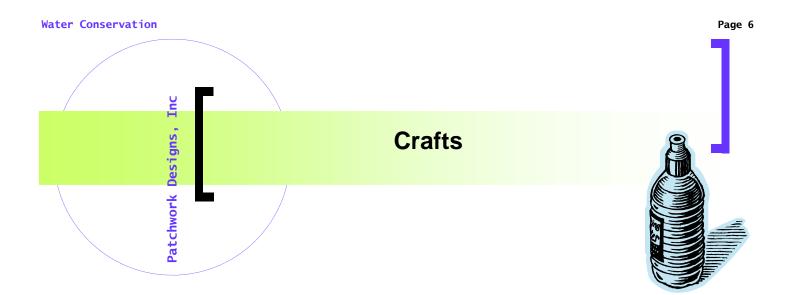
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Fancy Fish
Ocean in a Bottle
Explosion of Color
Musical Water
Sprouted Up
Rainbow Splatter
Blizzard
Bottle Boat
Powdered Socks
Bubbly Scents
Spring Flowers
Icy Soap
Snooper
Magic Tornado



#### Fancy Fish

Paper plate Stapler

Scissors

Tissue paper (a variety of colors)

Glue

Construction paper

Markers

Optional: googly eyes



Cut your tissue paper into squares. Glue your squares of tissue paper all over your paper plate to create your fish's scales. Cut out a gill, fin, flipper out of tissue paper or construction paper and glue it to the middle of his body. You can add three horizontal lines right underneath each other for the slots for his breathing gills with marker if you want. Cut out a back fin out of tissue paper or construction and glue it to the back of the paper plate for its tail. Add a googly eye, draw it with marker, or cut it out of construction paper. Add a mouth with marker or construction paper.

#### Ocean in a Bottle

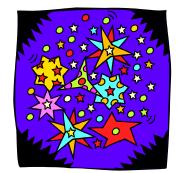
Bottle (glass or plastic) with a lid White vinegar Blue food coloring Vegetable oil

Optional: Nautical items (little boats, anchors, fish, crabs, stars) or confetti

Fill the bottle halfway with the white vinegar. Add about three or more drops of blue food coloring—it depends on how deep of a blue you want your ocean. Fill the rest of the bottle with the vegetable oil and replace the lid. Place the bottle on its side on a table for best results.

## **Explosion of Color**

Clear jar or bottle (glass or plastic) with a lid Water
1 tablespoon of vegetable oil
Cup or bowl
Red, blue, and yellow food coloring
Spoon



Fill your bottle up with water. Mix your vegetable oil and add about three or more drops of your three food colorings in your bowl. Pour this mixture slowly into your open bottle and watch the explosion!

## **Musical Water**

Glass jars (about 5 +)—baby food or a little bit bigger ones work well Water Food coloring



Pour water in different levels in the jars and add food coloring and mix. Run a spoon or a drum stick against them for a musical effect.

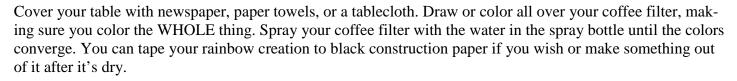
#### **Sprouted Up**

Paper towels Water with a spray bottle Glass jar with a lid Beans (not cooked, straight from the bag)

Spray a section of paper towel with the spray bottle so it is very damp. Fold it so it fits in the bottom of the jar and place about 12 beans on top of it. Put the lid on the jar and place under a light or in a window for sunlight (but not too harsh!) and make sure you turn the jar daily. You will have plants in about a week!

## **Rainbow Splatter**

Markers (washable work the best)
Coffee filter
Newspaper, paper towels, or a tablecloth
Water with a spray bottle
Black paper and tape (optional)



### <u>Blizzard</u>

Glass jar (baby food is a good size) with a lid Glycerin or petroleum jelly Glitter (preferably white, silver, or gold) Water Popsicle stick or back of spoon Hot glue gun and plastic snow related items (optional)



Fill the jar halfway with glycerin or petroleum jelly and place the glitter on top. You could mix some glitter in it as well if you want. Add water to complete the other half of the jar and mix again. Place the lid on *tightly* (you may want to hot glue it shut) and place it on its lid, upside down to make snow. If you want to, you can hot glue some snow related items to the lid before you start to make it a bigger scene or you can draw or paint things on it.

## **Bottle Boat**

1 liter soda pop bottle (empty and washed out) Scissors Electrical, masking, or duct tape Permanent markers

Cut your soda bottle in half or with a hole with a way to close it (securely taping it) it for items (not too heavy) or a note. Decorate with permanent markers and stabilize with tape. Use it to float in the tub or carry notes to your friends across a lake.

#### **Powdered Socks**

Rubber bands
White cotton socks
Water
Large glass bowls
4 packages of colored drink mix in two different colors
1/2 cup of vinegar
Pot



Bind your socks with rubber bands; you can try many designs. Put room temperature water into a bowl and place *only* the top part of the socks in it until it soaks. Then, boil about 4 cups of water and place it in a glass bowl afterwards. Add the vinegar and 2 packets of the same color of colored drink mix and mix until dissolved. Place your socks into the bowl, but *only* the part you already wet before and microwave it for 2 1/2 minutes. If you want a light color, continue to leave the socks in the bowl for about 10 minutes, but leave them in overnight if you want a rich color. Once completed, do the same thing with the other half of the socks and ring out the excess dye in the socks.

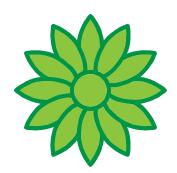
## **Bubbly Scents**

Epsom salts (thick salt can work if you don't have any)
Baby food jar with the lid
Lavender, almond, chocolate, lemon, peppermint, cherry, etc. scented oils
2 coffee filters and string

Measure 1 cup of salt into the jar and add 8 drops of oil. Place the lid on the container and shake for about 10 seconds. Pour out half of the salt mixture into one coffee filter and the rest on the other. Tie with string and once you have ran your bath, drop in the hot water.

## **Spring Flowers**

Construction paper or cardstock (in four different colors—including green)
Glass jar (small)
Green tissue paper
Coffee mug, water bottle cap, and a full roll of clear gift wrap tape
Pencil and scissors
A plastic straw
White glue and clay



Using the three different colors of paper (not green), trace the coffee cup, water bottle cap, and the roll of tape with your pencil, each on different sheets of paper. Cut them all out and layer them from biggest to smallest circle, the smallest one being on top and glue them. Draw a flower and cut it out from any paper color. Before you glue the circles on top of the flower, fringe the outside of the largest circle to give it some flare by making small cuts all around it. Glue them all together and tape your straw to the back of the flower. Cut out leaves out of the green paper and tape them on the straw for leaves. Place a small ball of clay at the bottom of the jar and stick your straw into it and fill with green tissue paper. Decorate with permanent markers or by cutting and taping your own designs out of paper.

#### **Icy Soap**

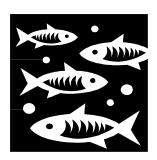
Glycerin bars (unscented) or glycerin already melted
Glass bowl
Lavender, almond, chocolate, lemon, peppermint, cherry, etc. scented oils
Chopstick or back of spoon
Dried flowers or rose petals (optional)
New ice cube trays (regular or shaped)
Food coloring



Melt the glycerin until it becomes liquid and pour into the ice cube trays. Add 5 or more drops of oil and then food coloring to match. Stir quickly with a chopstick or the back of a spoon. Place your dried flowers on top or before you place your glycerin in and cool until hard (about 30 minutes) and take them out to use!

#### **Snooper**

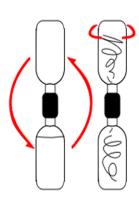
Can opener
Coffee can, oatmeal container, carton, bottle, etc.
Duct, electrical, or masking tape
Rubber band
Scissors
Clear plastic wrap



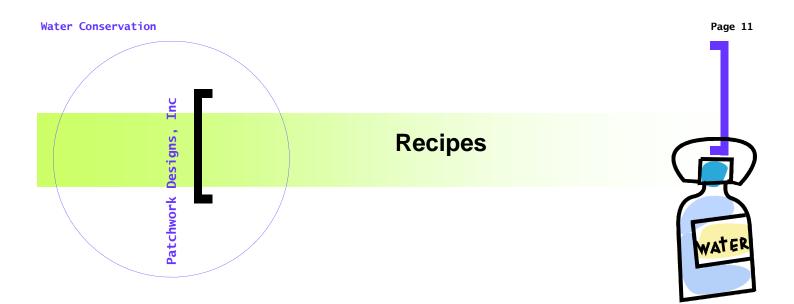
Cut the ends of the container with a can opener or strong scissors and cover with tape. Make sure there are no sharp edges! Cut your plastic wrap to fit around one end and place it over the edge snugly and place a rubber band there to keep it secure. Cut away excess plastic wrap and test seeing animals in your lake! (Look through the non-plastic wrap side.)

### **Magic Tornado**

Two empty 2 liter soda pop bottles
Plastic connector for "tornado tubes" (found at craft stores)
OR a metal washer with a 3/8 inch hole and duct or electrical tape
Dishwashing soap
Food coloring (any color)
Water
Glitter or confetti (optional)



Fill one of the bottles 2/3 with water. Add three drops of dishwashing soap and about 3 or more drops of food coloring. You can add glitter or confetti if you like. Place the bottle openings into the holes of the plastic connector or place a washer in between the two openings of the bottles and firmly tape it shut. (The bottles should be on their sides on a table while doing this.) Slowly place the "magic tornado" upright—vertically with the two bottles connected with the one with the liquids on TOP. As it makes bubbles, swirl the bottles in clockwise circles in circles a couple of times. Now you can see your magic tornado over and over again!



Mini Cupcakes
Under the Sea
Creamy Ice
Mix-Matched Pasta
Custom Popsicles
Acquacotta (Cooked Water Soup)
Orange Slushy



#### **Mini Cupcakes**

Boxed cake mix (any flavor)
OR you can make them homemade

1/2 cup powdered sugar1 tablespoon of warm waterFood coloring (optional)Writing icing (for decorating) and/or candies and/or sprinkles

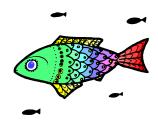
Small or mini paper or foil cupcake wrappers Cookie sheet or cupcake/mini cupcake pan Cooling rack Metal spoon Sifter



Make the cake mix according to the directions. Place your cupcake wrappers about a 1/2 inch apart on your cookie sheet (or use a cupcake/mini cupcake pan). Using a spoon, place the cake mixture into the cupcake wrappers to make it just under halfway full. Bake about 10 minutes, but watch for them to turn golden brown before they burn. This can happen a lot easier since they are mini. Wait a couple of minutes and place them on the cooling rack. **To make the icing:** Sift the powdered sugar and add the water until it's smooth, but not runny. Add drops of food coloring for color and wait until the cupcakes are absolutely cool to ice them. Decorate with writing icing, sprinkles, and/or candies.

### **Under the Sea**-(serves 4)

3/4 cup of boiling water 1 small box of BLUE Jell-O® (berry blue) Ice cubes 1/2 cup of cold water 4 fish shaped gummy fruit snacks Clear plastic cups



Place the Jell-O® in a medium bowl until it is completely dissolved. Add ice cubes to cold water until it reaches the 1 1/4 cup line. Place the ice cubes and cold water in the to Jell-O® mixture. Stir until the mixture thickens, removing any non-melted ice. Refrigerate until slightly thickened. Pour the gelatin over the fruit. Place the fish in the gelatin and place in the refrigerator until it is firm. Serve.

## Creamy Ice

Ice

Food processor or blender
Apple pie filling (in a can), fruit syrup, chocolate syrup, caramel, etc.
OR shaved ice syrup (available at grocery stores)
Nuts, sprinkles, fruit, etc. (for toppings)
Large cup or cereal bowl



Place your ice in the food processor or blender and blend until crushed OR you can crush it with the feature on your refrigerator. Place the ice in your cup or bowl. Top with apple pie filling, fruit syrup, chocolate syrup, caramel, or whatever you want. Top with nuts, sprinkles, fruit, chocolate shavings.

#### Mix-Matched Pasta – Have everyone bring a different box of pasta for an extra fun night!

Pot (one for boiling water)
Medium saucepan
Your pastas
Water

Wooden spoon and tongs (preferably plastic)

Strainer or colander

3 tablespoons of olive oil

1 large onion, chopped

3 garlic cloves, minced

1/2 teaspoon dried oregano

1 (29-ounce) can diced tomatoes in juice (not drained)

1 (29-once) can tomato puree

2 tablespoons sugar

1 small bay leaf

Salt and pepper to taste



Fill up your pot with water about halfway until boiling. **To make the sauce:** Place the oil in the saucepan and cook over medium heat then add the onion. Stir with the wooden spoon until the edges of the onion are brown (about 7 minutes). Add the garlic and oregano and cook for about 1 minute. Add both kinds of tomato, sugar, and the bay leaf and put the salt and pepper in. Stir until it becomes a boil and then place on simmer. Simmer for about 20 minutes. While your sauce is simmering, place your pastas in the boiling water and mix until tender. Drain with the colander and serve with the sauce.

### **Custom Popsicles**

1 (3 oz.) pack of gelatin fruit mix
1 pack of unsweetened soda or juice mix
1 cup of sugar
4 cups of water (2 cold, 2 hot)
Bowl
Ice cube trays (regular or shaped)
Wooden spoon
Toothpicks
Clear plastic wrap



Boil 2 cups of water and place into a bowl. Place the two mixes into the boiling water and mix until dissolved. Mix in the 2 cups of cold water and pour into the ice cube trays. Place the clear plastic wrap over the entire ice cube tray and put a toothpick into each compartment of the tray. Freeze until firm and take them out and enjoy!

#### Acquacotta (Cooked Water Soup)

1/2 cup of olive oil

6-inch celery stick, minced

A small carrot, minced

3 small onions, minced

1/2 of a small hot pepper

2 lbs. of spinach (stemmed, washed, chopped)

1 lb. of fresh tomatoes (peeled and chopped) OR canned tomatoes

1 lb. of peas, beans, peppers, OR artichokes

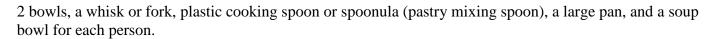
1 1/2 quarts of water

5 eggs

1/2 cup of Parmigianino cheese

1/2 teaspoon of salt

Toasted bread, sliced (optional)



Boil the water. Combine the carrot, onions, and celery in a bowl. Place the oil in the pan when the pan is heated up, then the carrots, onions, and celery. Add in the salt and pepper. When the onions are clear, add the spinach until they are "wilted." Add the tomatoes and your choice of 1 lb. of vegetables from above. Simmer for 20 minutes and then add the water when it is boiled. Simmer for another 20 minutes and beat the eggs. After beaten, add the cheese and more salt, if desired. Optional: Lay your sliced bread in the bowl and then pour the egg on top on the bread (it should cook it) and then pour your soup on top of the bread. You can also scramble and cook the egg into the soup and dip your bread in instead, if you desire.

## **Orange Slushy**

1/2 can of 12 oz. frozen orange (or small can) 1/2 cup of sugar

1 cup water

1 cup milk

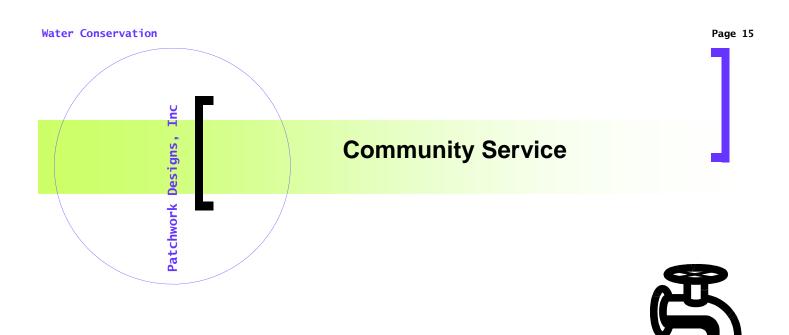
Dash of vanilla extract (a capful works)

Blender and ice

Place all ingredients in the blender in the order above. Fill the remainder of the blender with ice ALMOST to the top. You must have enough room to blend it. Blend until it has a slushy consistency. Serve in cups.







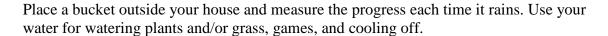
Rain Water Collection Spread the Word Trash Clean-Up Grow a Garden Dishwash for a Cause

**External Links** 



## **Rain Water Collection**

Bucket Ruler





#### **Spread the Word**

Make a presentation about conserving water (**template for a flyer or poster on the next page**) and share with your community. Hand them out to your neighbors, friends, teachers, parents, and friends. Make it colorful with markers and draw pictures that will help your cause. Use visuals and talk about different ways you can conserve water. OR color the flyers for your home to place by the sink, shower, faucet, hose, etc. OR teaching younger people about the water cycle, how to conserve water, and trash clean-up.

### Trash Clean-Up

Gloves Trash bags Comfortable walking shoes

Volunteer at your local park, lake, pond, stream, or ocean to collect trash for a couple of hours. The water will be cleaner for all of us and the animals will thank you!

### <u>Grow a Garden</u>

Potting soil Flower seeds Terra-cotta pot Permanent markers Watering can



Fill your pot with soil halfway and place your seed in it and water it daily. Decorate with permanent markers and give to someone that would brighten their day—like a school, an older or younger person, a relative, or a sick person in the hospital.

## Dishwash for a Cause

Create posters, spread the word, or collect Dawn® dishwashing liquid and send it in to help clean animals after the oil spill—they will donate \$1 for each.

## **External Links to Help You:**

http://www.takepart.com/news/2010/04/30/the-gulf-coast-oil-leak-how-to-help

http://www.wateruseitwisely.com/index.php

http://www.petfinder.com/blog/2010/05/07/gulf-oil-spill-help-animals/

http://www.worldvision.org/

http://water.epa.gov/learn/kids/waterkids/kids\_you.cfm

http://www.tvakids.com/environment/cleanwater.htm

http://www.nwf.org/News-and-Magazines/National-Wildlife/Outdoors/Archives/2010/Winter-Wildlife-Prep.aspx



Water Tag
Polar Bear or Whale
Fishing
Changing Whale
Water Cup Relay
Sponge Relay
Treasure Hunt

All of the following games need to be played in a swimming pool.

#### **Water Tag**

Choose a player to be "It" and when the game starts, they can start tagging the other players. BUT, when the other players are underwater, they are safe from "It." Once everyone is tagged, the last person tagged is the new "It."



#### Polar Bear or Whale

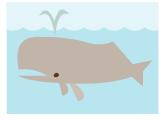
This game has to be played in a pool, with a designated "safety area." You also need an object that's painted black on one side and white on the other side (a Frisbee® works well). To start the game, split your group into two even teams. One team is assigned "polar bear" (white) and the other is assigned "whale" (black). Next, have a designated person stand in the middle, holding the black and white object. On the "go" signal, that person will throw the object in the air and wait for it to land. Once it lands and tells you the color the side is (black or white), the player will tell the team and they start chasing the other team and trying to tag them. For example: The object lands on black. The whale members start chasing the polar bear members and tagging them until they reach the safety zone. The team members tagged join the team that tagged them (the polar bears cross over to the whales). The game goes on until it is one whole team, then you can start it again by tossing the object in the air again.

#### **Fishing**

Choose someone to be the fisher (or "It") and the rest of the players are fish. The fish line up on one side of the pool and the fisher places him/herself in the middle of the pool and says, "I want some fish!" and starts pretending to cast to catch the fish. Once that happens, the fish start swimming to try to get to the other side of the pool while the fisher tries to catch them. The fish that are captured becomes part of a net by joining hands together with the fisher. Now the fish have to swim under the "net" to get to the other side. The last surviving fish becomes the next fisher.

## **Changing Whale**

Choose a person to be the "whale" (or "It") and the rest being fish. The whale has two sides—black and white. When the whale is black, s/he has to be floating on their back and the fish have to be in the middle of the pool, next to the whale. BUT, whenever the whale decides, she/him can shout out "transformation!" and become the white whale



and start swimming again. Once the whale is in its white stage, s/he can tag players and the fish are only safe when touching the borders of the pool (the shore of the ocean) and once they are tagged, they also become whales. The whale can turn back to the black whale whenever they want and start floating.

All of the following games require a field.

#### **Water Cup Relay**

Plastic cup Water Two buckets



Divide your group into lines and place the buckets at the end of the field. Fill one bucket with water and leave one empty. The first person in the line has to walk or run as fast as they can with the cup on their head to the bucket and fill the cup up with water and return it back to the person next in line. The next person does the same except this person has to dump what was left in the cup into the empty bucket. Then, they have to fill the cup up with water and balance it on their head to give the next person the cup. The goal is to have as much water in your cup to place in the bucket, so you have to plan your movements wisely. The team that wins is the one that has the most in their bucket.

#### Sponge Relay

Alternative to above. Use a sponge instead of a cup and squeeze out the water. Place the sponge in your hands though.

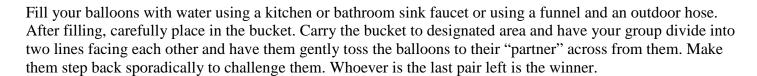
#### **Treasure Hunt**

2 buckets About 50 pennies (a roll of them will do) Water

You will need two buckets and about 50 pennies for each *group*. Divide your group into teams and place them into lines. Fill the first bucket up with water and dump the roll of pennies in it. Have the participants take their shoes off so that they are barefoot. At the "start" signal, the first player sticks their foot into the bucket with the pennies and tries to pick them up with their toes. They have three tries to transfer as many pennies as they can into the empty bucket. The team that has the most pennies by the time everyone goes is the winner.

## **Water Balloons**

A pack of balloons (be aware of allergies to latex!) Faucet or funnel and hose Bucket



OR

You can have a water balloon fight by throwing the water balloons just for fun.

## Rules of the Water Conservation Game

#### You will need dice and individual markers for the players.

The markers can be buttons, coins, or other game pieces. Everyone begins at the START square and move clockwise from there.

**Set-up:** The highest roll of the dice goes first and the turns are clockwise there after. Everyone places their markers on the "Start Here" space. Participants can move backward and forward along the board in order to get to certain marked spaces.

Place the cards on the designated labeled areas located on the game board face down.

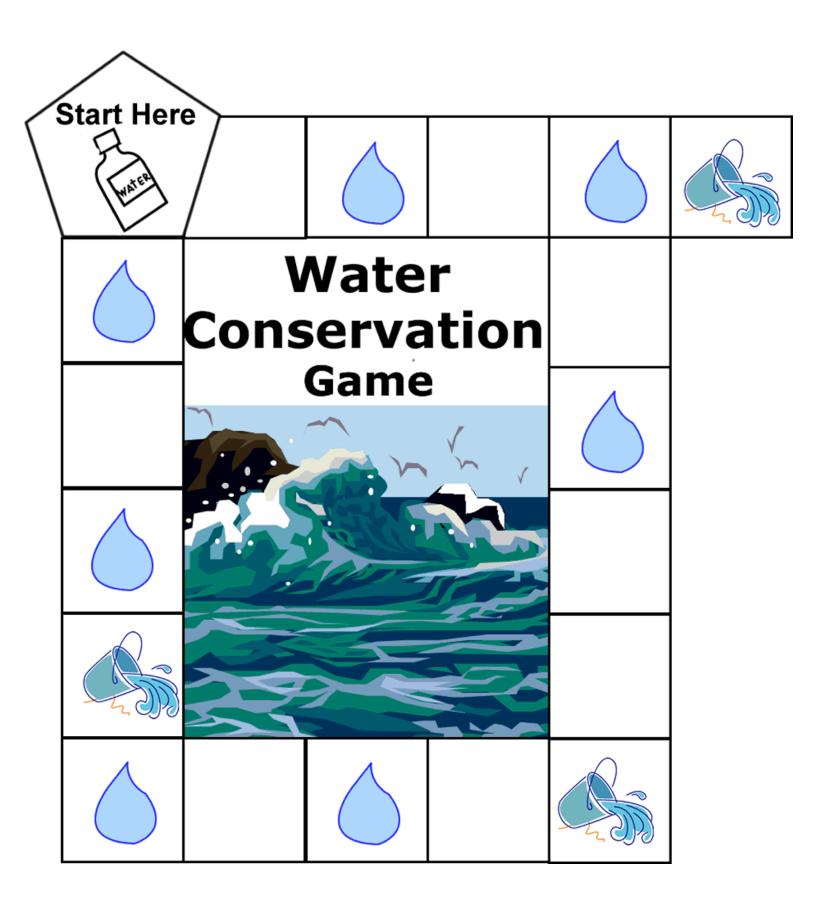
**Landing on a water drop symbol:** If they land on a water drop symbol, then they draw a water drop card from the pile. They will need three water drop cards to win the game.

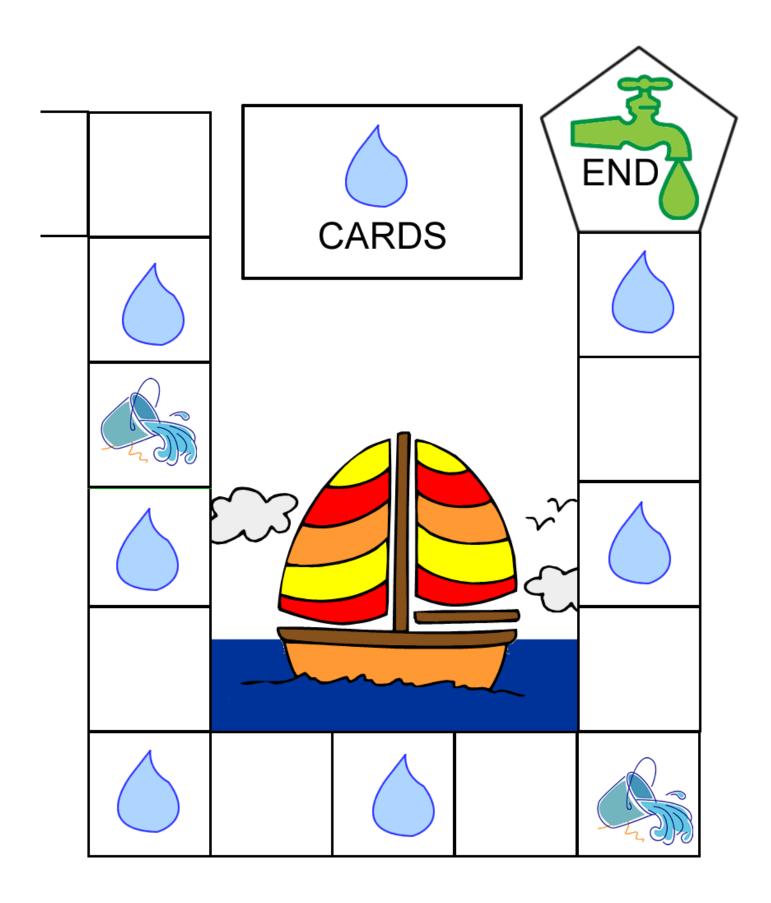
**Landing on a spilled bucket:** If they land on a spilled bucket spot, then they have to give back a water drop card. They will need three water drop to win the game.

**Winning the game:** The goal of the game is collect three water drop cards. You will need to make it back to start in order to present your game pieces to the other players. You do not need to land directly on start but need to roll a high enough number to get there. Beware of the spilled bucket cards landed on by other players along the way, you could loose water drop cards before you get back to start. Participants will use math skills as they play the game. In addition, they will learn about the water conservation in the world.

If only older participants are playing, the game then you can raise the goals.

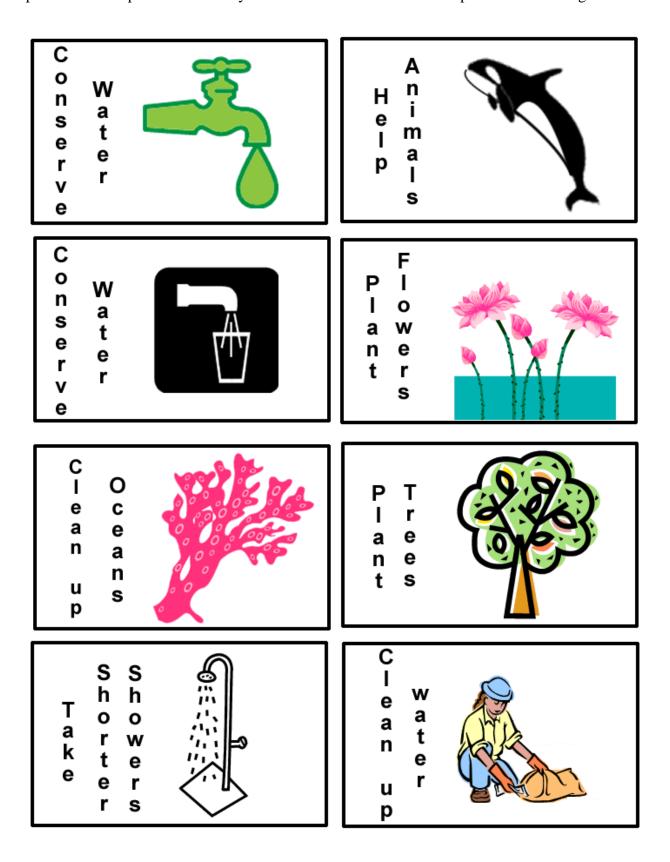




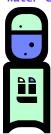


## Water Drop Game Cards

Make at least *three copies* of these game cards. When they land on a water drop symbol they can collect a water drop card from the pile. Remember you have to collect three water drop cards to win the game.



#### **Water Conservation**



## **Water Conservation Word Search**

S N G W Ι C X O C Ε U V K F В W Ε P R R W T Y N O A S O G L C X G Ε Ε N V G E F W W I X V C В P U K W K N L Q R Q Α N Z C S  $\mathbf{C}$ P R O F F I K S D I G O L M L M R R W P R M R Ε L Ε N I J M U M Ε O S Η E I K Е C A T D U O Α S Ε  $\mathbf{C}$ O R L R  $\mathbf{S}$ M F T L N W U O Q Ε A Q I Q D P D J Α В J Z S K G T Α O S I I N W D Ε Η R Ε T Α W N O C Е S S L I N I X K Α N L L Α A M Α F T S W I G В Ε R U D Y Y O F K O L J Α R Y Z Ε P R Ε C I P I T T I O N E A M A P T T N F W R Q W I Y Ι X Ι T Q K Q K Α S Α N I G C G I Η O R P L Y O N I Α R U S C V  $\mathbf{C}$ Z Z W G Y O S Е R Ε N Η Α N L A V  $\mathbf{C}$ P Η C T V L C J M Q R K I G Η U В Q X O P K R F P G C V Y W Z E L O K A D В P Ε V T R P Ε F L X X O N U D A Η U J K В U F U L U P X X C N X R O V Y R L V M C S F N U Ε U N M M Ε J Z D M В R Ε Ε K Z C C В R Ε S I L D O C R L S J T R A K

#### Try to find the following words in the above puzzle.

ANIMALS
BEAUTIFUL
COLLECT
CONDENSATION
CONSERVE
DROPS
EVAPORATION
FISH
FLOWER
IMPORTANT
OCEAN
OILSPILL
PRECIPITATION

RAIN SHOWER SNOW SPRINKLER SWIMMING WATER WATERCYCLE WATERSHED WORLD



## **Fishing for Fun**

cutouts (below)
paper clips
magnet
string
pencil or stick
shoe box

#### Directions on how to play:

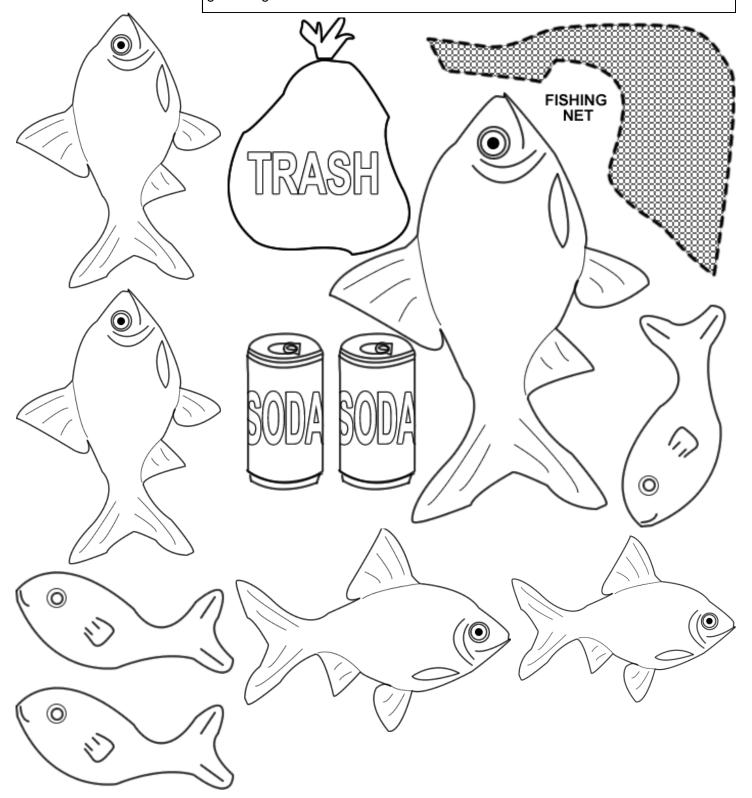
Make at least two copies of the cutouts. Decorate and cut them out.

Attach a paper clip to each cutout and place them in a shoebox.

Attach the magnet to a length of string (this would be easier to do with a magnet that has a hole through it).

Attach the other end to the end of the pencil or stick.

Try to pick up the cutouts with the magnet, like a fishing pole. You will need to pick up the trash to clean up the pond and then try to pick up at least one fish to go fishing!



## **CONSERVE WATER**



# Give yourself a point for every time you save water. How many points do you have at the end of the week?

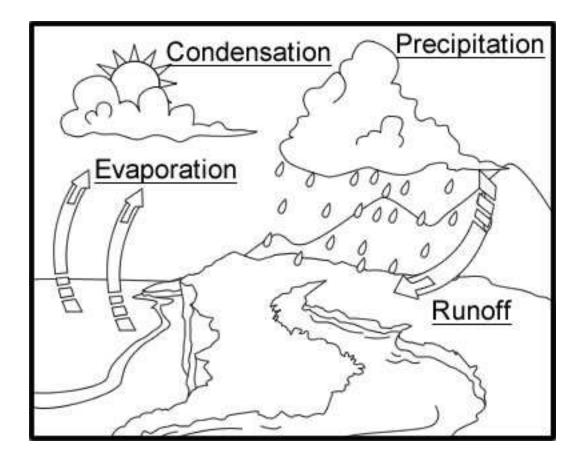
DAY	Don't run the water when you brush your teeth	Take a short shower, 15 min. max.	Only fill up the tub halfway	Don't let the water run while washing dishes	Other
Sunday					
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					

## List any other ways you saved water.

Examples include: checking faucets, toilets, and pipes for leaks, clean sidewalks with brooms not water, and run the dishwasher when it's only full.



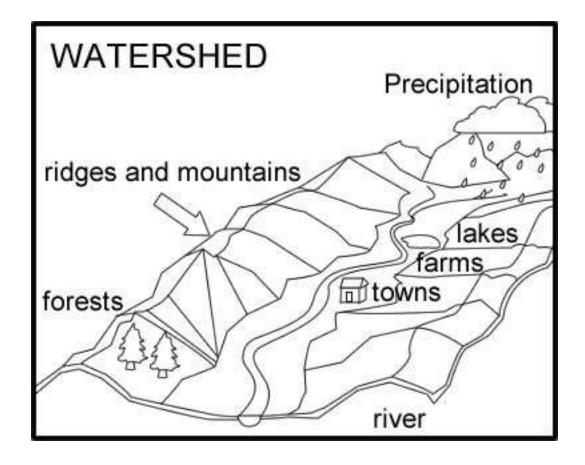
## WATER CYCLE



Feel free to color me!! The water is **blue**, ridges and mountains are **brown**, and the sun is **yel-low**. The rest is your choice.

The heat from the sun evaporates the water from earth. The water then condenses and forms into tiny droplets of water in the cloud called condensation. The cool wind blows the cloud towards the land. The droplets of water form together to create precipitation of rain, snow, sleet, etc. to the ground. The water falls and soaks into the ground or into the waterways. When the water lands on the mountains or valleys and flows into the water areas this is called a runoff. Sometimes when it flows down the mountains through rocks, it gathers minerals that are salty and it then flows into the ocean. The salt does not dissolve or evaporate in the ocean so that is why it tastes salty when you swim in it. The next day when the sun comes out the cycle starts all over again.

## WATERSHED DIAGRAM

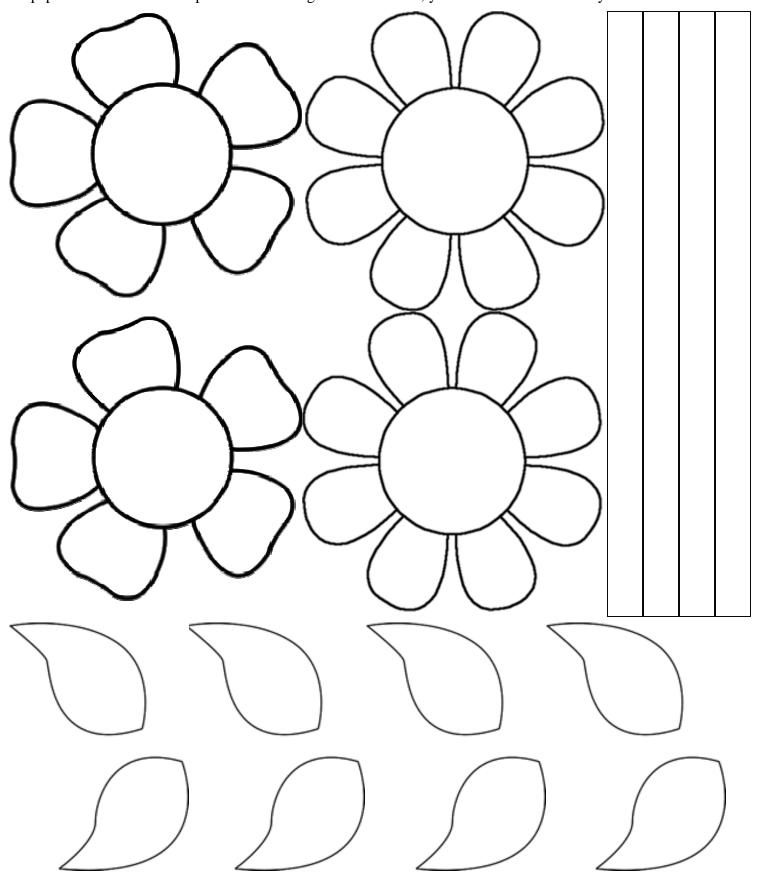


Feel free to color me!! The water is **blue**, ridges and mountains are **brown**, and the forests are **green**. The rest is your choice.

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. Watersheds come in all shapes and sizes. They cross county, state, and national boundaries. In the continental US, there are 2,110 watersheds; including Hawaii Alaska, and Puerto Rico, there are 2,267 watersheds. A watershed is a basin-like landform defined by highpoints and ridgelines that descend into lower elevations and stream valleys. A watershed carries water "shed" from the land after rain falls and snow melts. Drop by drop, water is channeled into soils, groundwaters, creeks, and streams, making its way to larger rivers and eventually the sea. Water is a universal solvent, affected by all that it comes in contact with: the land it traverses, and the soils through which it travels. The important thing about watersheds is: what we do on the land affects water quality for all communities living downstream.

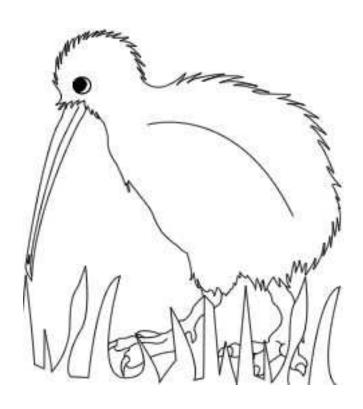
## Flower Pattern

Decorate the flower. Cut out the leaves, stem, and flower and glue them together. Glue them on construction paper to create an artistic picture or flower garden. For extra, you can create a name for your flower.



## Finish the Picture

Add other animals, trees, and items to complete the picture of the Kiwi near the water. Color your picture.



(Over, Down, Direction) ANIMALS(17,9,W) BEAUTIFUL(3,10,NE) COLLECT(10,1,SW) CONDENSATION(5,3,SE) CONSERVE(6,14,E) DROPS(15,4,S) EVAPORATION(18,1,S) FISH(5,12,SW) FLOWER(8,10,NW) IMPORTANT(10,20,NW) OCEAN(2,9,E)OILSPILL(7,7,SE) PRECIPITATION(6,11,E) RAIN(19,13,W) SHOWER(20,6,N) SNOW(8,4,NW) SPRINKLER(1,13,N)SWIMMING(2,1,S)WATER(1,14,NE)

WATERCYCLE(11,8,SW)
WATERSHED(20,8,W)
WORLD(9,12,SE)

Answers to Word

Search

## **Duck Craft**

#### **Duck**

Paper plate Scissors Glue Stick Stapler Yellow and orange construction paper Crayons or markers

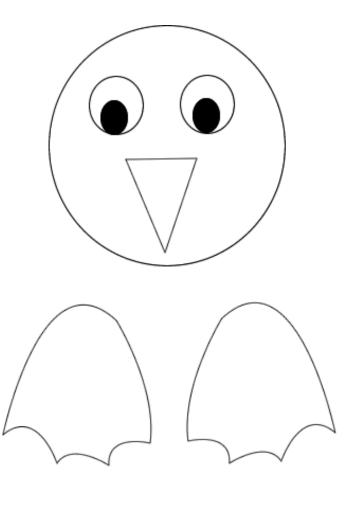
Color one side of the paper plate yellow. Take the paper plate and fold it in half.

Color the face yellow. Color the beak and the feet orange. Cut them out.

Glue the feet slightly inside the lower part of the paper plate. Glue the face on the paper plate. Staple it around the edges.

(optional) Add yellow feathers to the paper plate.





## **ORDER FORM**

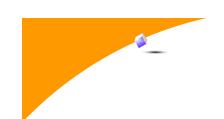
Please complete this form and mail it or fax it to:

#### Patchwork Designs, Inc.

8421 Churchside Drive Gainesville, VA 20155 (703) 743-9948 PHONE (703) 743-9942 FAX

Name		
Address		
City	State	Zip
Phone ( )	one ( ) Referred By:	
Email Address:	·	
Discover/Mastercard/Visa#	<u> </u>	or Check #
Expiration Date:	Have you ordered be	efore?

Item #	Description	Quantity	Unit Price	Total Price
WATERCON	Water Conservation Patch		\$1.50	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
	OTAL \$			
	page) \$0.00			
Special Shipping (next day, priority mail etc)				etc) \$0.00
			TO	OTAL \$



# Shipping Chart

If you would prefer Priority Mail, please add \$2.00 to the \$4.99 or above shipping category.

Next day service is an average cost of \$28.00 (USPS determines the pricing according to the zone and weight.)

Patches				
1-5	\$3.55			
6-20	\$4.99			
21-30	\$5.99			
31-50	\$6.50			
51-70	\$6.99			
71-100	\$9.55			
101-150	\$10.55			
151-200	\$13.00			
201-400	\$15.99			
401-500	\$17.50			
Over 500	Contact us for pricing			

Kits or Manuals (shipped Priority Mail)		
1	\$6.99	
2	\$9.25	
3-5	\$10.75	
6-8	\$12.75	
10-12	\$15.75	
13-20	\$22.25	
21-23	\$24.00	
Over 24	Contact us for pricing	

Kits and manuals range from 30 to 62 pages in length (except the Patch Program Book, that is over 100). Therefore if you are ordering more than 2 kits or manuals, please use the above shipping chart. Patches, bracelet kits, and stamps can be added to any order falling within that price range. Otherwise, use the highest shipping amount on the chart according to the items ordered.