DISCOVERING THE RAINFOREST

Table of Contents

atchwork

Detailed out- line of kit	2
Requirements	3
Crafts	4-7
Recipes	8-11
Create a Rain- forest book with a file folder	12-22
Games	23-38
Templates for crafts and file	39-46
Order form and shipping	47-48
Cites	

Written by: Cheryle Oandasan

49

Copyright © 2007

referenced

- All text, graphics, audio, design, software of and other works are the copyrighted works of Patchwork Designs, Inc.
- · All rights reserved.

About this 'Discovering' manual

This **manual** was created to assist you or your group in completing the 'Discovering the Rainforest"

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, reci-

pes, 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 'Discovering the Rainforest 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
Patchwork Designs, Inc. to:
Patchwork Designs, Inc.
14420 Round Lick Lane
Centreville, VA 20120

Credit Card

Telephone your Master-Card, Discover, or Visa order to (703)222-0985. Leave your order and credit card number on our secure line.

Fax

Using these same card types, you may also fax your order to (703) 543-8627.

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

Effective November 2006, customers may also order online through Patchwork Designs' website at: www.patchworkdesigns.net

All information is secure.

Discovering The Rainforest!

Patchwork Designs, Inc

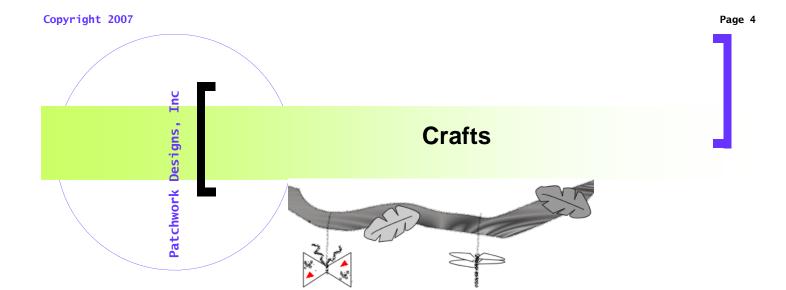
Detailed Outline of Kit

- Page 3 <u>List of the Patch Program requirements and activity ideas to complete</u>. All age levels need to complete only 3 three requirements to earn the patch.
- Page 4-7 <u>Craft ideas</u> to complete which will enhance your familiarity with the topic. Includes puppets, rain gauge, flower, and a variety items to decorate a mural or display.
- Page 8-11 Recipe ideas to complete to enhance the participants knowledge of the products that are grown in the Rainforest. Some recipes include: Chocolate Brownies, Tropical Pizza, Slushy, and Fruit Punch Drink.
- Page 12- How to construct the book of Rainforest information using a file folder and our interactive books. You can choose the booklets the participants would like to create or complete all of them.
- Page 13 Booklet # 1 People of the Rainforest This booklet focuses on some of the indigenous, native, people that have lived in or near the rainforest for many years.. Requirement # 6
- Page 14 Booklet # 2- Helping the Rainforest! This booklet includes information about programs that assist the rainforest and things that you can do at home to help protect it. Requirement # 5 and #8.
- Page 15–17 <u>Booklet # 3– What lives in the Rainforest?</u> This booklet includes information about animals, flowers, birds, insects, bugs, fish, reptiles, and amphibians. It also highlights some of the flowers that are used for medications. Requirement # 7, 10, 11, and 13.
- Page 18-19 Booklet # 4- Rainforests of the World. This booklet includes information about Rainforests of the world emphasizing on animals, trees, and rainfall. Requirement # 1.
- Page 20 <u>Booklet # 5– Levels of Rainforest</u> This booklet includes information about the levels of the rainforest. Requirement # 4
- Page 21-22 Booklet # 6— Endangered Species of the Rainforest This booklet includes information about endangered species in the rainforest. Requirement # 14
- Page 23-38 <u>Games</u> This section offers a variety of games to complete that enhance their knowledge about the rainforest, animals, food products, and math. Requirement # 9
- Page 39-46 Templates for Crafts Use these templates to help create crafts, murals, or displays. Req. # 8 & 9
- Page 47-48 Order Form and Shipping Chart
- Page 49 Bibliography

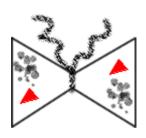
Requirements for Discovering the Rainforest

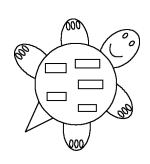
All age levels need to complete only 3 three requirements to earn the patch.

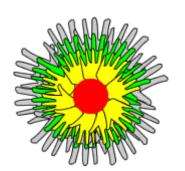
- 1. There are rainforests all around the world, each one having a variety of animals and plants. Choose a rainforest to learn more about. Locate it on a map. Name one species that lives there. Areas include: Hawaii, Brazil, Australia, and Madagascar.
- 2. Choose a country that has a rainforest. Learn more about it's culture. Choose a festival, game, song, recipe, art project, OR legend from that country.
- 3. Rainforests atmosphere have heat, rain, and very tall trees, the Tapang tree being the tallest rainforest tree in the world. What is the average rainfall and temperature in a rainforest.? Name two trees that can be found in the rainforest.
- 4. The rainforest is divided into distinctive levels. Within those levels each species has had to adapt to the environment they live in. Name the levels and one species that lives there. Examples are insects, mammals, birds, flowers and plants.
- 5. The rainforest converts large quantities of carbon dioxide into clean oxygen, becoming the largest source of air that we breathe. There is a variety of ways that you can help preserve the rainforests of our world. Choose one activity that helps preserve or rainforests by little things at home or in your community. Examples include: recycle, preserve water, use mulch in your garden, plant a tree, and don't litter.
- 6. There are indigenous, native, people that live in the rainforest for many years. They rely on the rainforest for food and shelter. Chose one tribe or community of people to learn more about. Find out where they live and the name of their tribe or community. For extra, learn about their housing, clothing, and food they eat. Examples are Mbuti, Pygmies, Yanomami, or Tukano.
- 7. There is a unique variety of animals that reside in the rainforest. Choose one to learn more about. Research the name, color, and any unique qualities. You can find them in books, internet or our kit. Examples include: three toed sloth, woolly opossums, and giant otters.
- 8. The rainforest is a unique and wonderful place on our earth. Though everyday it is being destroyed, soon it will disappear. There are lots of things that you can help to save the rainforests. Choose a program or action that helps save the rainforest from being destroyed. Examples include: protect an acre program, adopt a tree, write letters to companies that destroy rainforests, purchase items that support the rainforest, or create a display and educate people about conservation of the rainforest.
- 9. Explore the rainforest through games and crafts. Play a game, create a puzzle, create a craft or enjoy an event or celebration with a rainforest theme. Some suggestions are , "Who am I?," animal charades, puppets, and flowers and animal art.
- 10. Some species in the rainforest have special attributes that assist them in protect themselves from predators. Choose one to learn more about. Research the name and how they protect themselves. You can find them in books, internet or our kit. Examples include: poison dart frog, lo moths, tree hoppers, and the clear wing butterfly.
- 11. There are a variety of organisms in the rainforest that have assisted in the healing of diseases and illness of humans. Research one and find out how it has helped us. Examples are: rosy periwinkle, quinine, or wild yams.
- 12. Create a food that represents the rainforest theme or made with items from the rainforest. Have a chocolate tasting test, make Some examples are trail mix, banana bread, dried fruit, fruit salad, smoothies, and animal crackers.
- 13. There is a variety of insects and bugs in the rainforest. Choose three to learn more about. Research the name, color, size, and any unique qualities. You can find them in books, internet or our kit. Examples include: leafcutter ant, morpho butterfly, dragonfly, and Hercules beetle.
- 14. There is a variety of endangered species that reside in the rainforest. Choose one to learn more about or watch a documentary on the rainforest. Examples are: yellow tailed wooly monkey, goeldi monkeys, cameroon, and morpho butterflies.

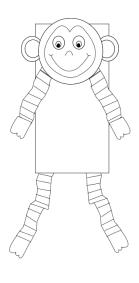


Parrot Puppet
Tiger Paper Bag Puppet
Butterflies
Dragonflies
Rainforest Vine
Rain Gauge
Turtle
Hummingbird
Monkey Paper Bag Puppet
Walking Stick
Grasshopper
Large Rainforest Flower









Parrot Puppet

Popsicle stick

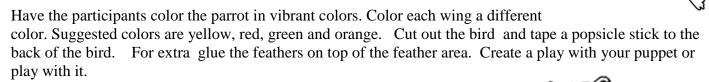
Pattern (located in the back of this book)

Cardstock

Scissors

Tape

(optional) colorful feathers and glue



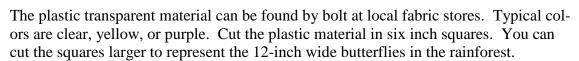


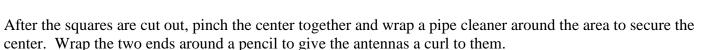
Tiger pattern (located in the back of this book)
Paper lunch bag
Orange crayon or marker
Scissors and glue stick

Copy the pattern on paper and color it orange. Cut it out. Glue it on a paper bag top and prepare an animal puppet show.

Butterflies—Clear butterflies are found in the rainforest. They are poisonous to animals if eaten.

Plastic material (used typically for plastic tablecloths) sold by the yard at fabric stores Black pipe cleaner Sharpie markers

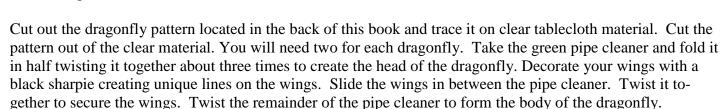




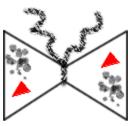
Hang a piece of *yarn* from the center of the butterfly if you wish to hand the butterfly from the ceiling for decoration. (optional)

Dragonflies

Clear tablecloth material Green pipe cleaner Black sharpie markers







Rainforest Vine The vine in the rainforest is called liana. It is a climbing vine that grows on trees to reach the sunlight. They are very strong and used to construct rattan furniture and bridges across rivers. You can hang this from the ceiling or attach it to the wall for decora-

tion.

Brown paper bags (large grocery store size) Tape or yarn Leaves or insects to hang from the vine



Cut the bottom of the bag off. The remainder of the bag should be a long rectangle. Tape another bag to the end of the other bag. Begin twisting them together, creating a vine. Continue this until you have created a vine long enough to hang up. Attach Butterflies, dragonflies, ladybugs, or leaves to the vine. (crafts available on page 4) Another option is just to hang some green yarn from it to make it look like moss.

Rain Gauge The average rainforest gets about 80 inches of rain a year. The rainforest has very warm air. Warm air holds more moisture, clouds are filled with the moisture and it begins to rain again. Measure the rain that accumulates in your area for a week.

Clear Jar Ruler

Listen to the weather and see if it is going to rain. Place the jar outside in an open area, such as your deck or outside patio. When it stops raining use your ruler to measure how many inches of water it rained.

Extra credit: Keep a record of the rainfall for a week.

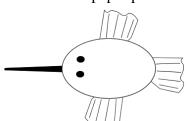
Turtle

Paper plate Turtle pattern Green marker and crayon

Draw rectangular squares on the paper plate with the green marker. Color the paper plate and body parts with the green crayon. Cut the body parts out and glue them underneath the paper plate.

Hummingbird

Cardboard
Paper muffin cup
Markers and crayons
Hummingbird pattern (located in the back of this kit)



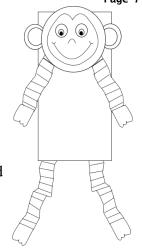
Copy the hummingbird pattern on cardstock or trace it on a piece of poster board. Color the body of the hummingbird. Use shades of green and red to color the body. Draw two eyes on body. Cut out the beak and attach it to the body.

Fold the muffin cup paper in half and in half again. Cut along the folded lines. Use a marker to create lines on the wings by tracing the fold lines of the muffin cup paper. Tape or glue a wing on each side of the body and one on the end of the body to represent the tail feathers.

Monkey Puppet

Brown paper bag Brown construction paper Scissors and glue stick

Color the outer edge of the monkey dark brown and the inner part of the ears and face a light brown. Color the hand and feet pieces dark brown. Cut four 11 1/2 X 1 1/2 inch wide strips of brown construction for the arms and legs of the monkey. Fold the strips accordion style. Glue the hand and feet pieces to the end of the strips. Glue the other end of the strips to the paper bag. Glue the face on the top of the bag.



Walking Stick Insect

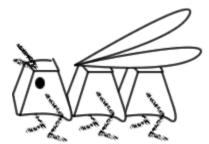
Small dowel stick or real stick Brown pipe cleaners Black sharpie marker



Cut the dowel in 6 inch pieces with scissors. Cut the pipe cleaners in 6 inch pieces as well. Wrap the center of each cut piece around the dowel to secure it. Bend the ends so the insect will stand. Continue this until you have six legs. Draw eyes on the dowel with a sharpie marker (optional)

Grasshopper

Cardboard egg carton
green construction paper or clear tablecloth covering
Green paint and paintbrush
Scissors
Tape and glue
Green pipe cleaners (2 pipe cleaners for legs, 4 inches for antennas)
Newspaper to cover the area



1st

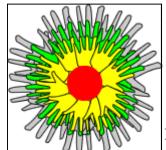
layer

Cut a row of three egg carton cups attached. Lay out your newspaper on the table. Turn the egg carton cups upside down and paint them green. Let them dry. Color the grasshopper wings green. Cut them out and glue them on the top of the egg carton.

Cut the pipe cleaner in 4 inch pieces. Make three holes on each side of the egg carton to place the pipe cleaner legs in. Place the pipe cleaner in the hole about 1/2 inch and bend it over so it will stay secure. Tape it for extra security. Bend the legs so they look like they can hop. Place 2 inch pipe cleaners in the top for antennas.

Large Flowers of the Rainforest

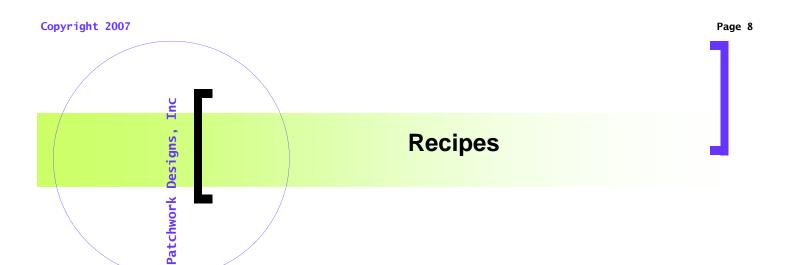
White paper plate Vibrant colors of construction paper Glue and scissors Hands to trace



Trace the participants hands several times to create layers of the beautiful flower. Glue them on the edge of the paper

plate. Changing the color of the hand print cut out on each layer. Trace the bottom of a cup to create the center of the flower and glue it in the center.





Rainforest Products
Rainforest Chocolate Brownies
Five Cup Tropical Salad
Pineapple Boat
Tropical Pizza
Chocolate Dipped Fruit
Brigadeiro (Chocolate Balls)
Abacate Batido (Whipped Avocado Dessert)
Fruit Punch Drink
Trail Mix
Tropical Slushy
Cup of Dirt
Cup of Dirt Made Easy







The Rainforest is a producer of many products. Create something using some of these common items found in your home or use some of our fun ideas and recipes.

Bananas	Cashews	Cinnamon	Mangoes
Coconut	Brazil nuts	Vanilla	Papayas
Oranges	Avocados	Allspice	Mung Beans
Pineapples	Sweet Potatoes	Cloves	Chicle (gum)

Rainforest Chocolate Brownies-Brazil nuts and chocolate can be found in the rainforest. (Omit nuts for possible allergies in children)

Prepackaged Brownie Mix (ingredients needed for mix) Brazil nuts

Obasalska miasa

Chocolate pieces

Optional: Drizzle chocolate syrup on the top.

Prepare the chocolate brownies according to the package. Chop up the brazil nuts and add it to the brownie mixture. Add chocolate pieces to the mixture, stir thoroughly. Make as instructed. Cut and serve.

Five Cup Tropical Salad

1 cup mandarin oranges

1 cup of shredded coconut

1 cup sour cream

1 cup of pineapple chunks

1 cup of miniature marshmallow

Maraschino cherries for garnishing the top (optional)



Combine the coconut sour cream and marshmallows in a large bowl. Drain the fruit. Gently fold in the fruits. Cover and refrigerate for 24 hours. Serve in bowls or desert dishes, garnish with cherries.

Pineapple Boat

Cut a pineapple in half lengthwise, remove all the fruit inside. Refill the shell with a fruit salad purchased or your own variety. Below are a few suggestions.

Orange slices
Pineapple chunks
Banana slices
Strawberries
melon

Tropical Pizza

Premade pizza crust Pineapple chunks Pizza sauce Mozzarella cheese



Place the sauce on the pizza crust. Place the cheese and the pineapple chunks on the pizza. Add any other toppings that you desire. Cook according to the package directions.

Chocolate Dipped Fruit

Chocolate melts (found at grocery or craft store) Fruit (bananas, coconut, apples etc) Kabob sticks or forks for dipping waxed paper



Prepare the chocolate melts according to the directions on the package. Chop up the fruit and place it on a plate. Have the participants use their sticks or forks to dip the fruit in the melted chocolate. Place the fruit on the waxed paper and then dip another piece of fruit. Let cool and enjoy.

Brigadeiro (Chocolate Balls)

1 (12 oz) can of condensed milk 4 tablespoons of unsweetened cocoa 1 tablespoon of butter 1/4 teaspoon of salt 1 cup of chocolate sprinkles wax paper small muffin papers



Combine condensed milk and chocolate powder in a saucepan. Stir constantly over low heat until the mixture pulls away from the sides of the pan. Add the butter and salt. Mix thoroughly over the heat about 2 minutes. Sprinkle a generous amount of sprinkles on wax paper. When the mixture is cool, grease your hands with butter and roll it into balls about 1 inch in diameter and gently roll it in the sprinkles. Place in small muffin papers for serving.

Abacate Batido (Whipped Avocado Dessert)

4 ripe avocados 1/2 cup whipping cream 2/3 cup powdered sugar 6 tablespoons of lime juice blender



Cut avocados into small chunks. Place the avocados in the blender, top with the remainder of the ingredients until smooth. Place in serving dishes or bowls. Serves eight.

Fruit Punch Drink

1 lemon, sliced thin 1 orange, sliced thin

3 tablespoons sugar

2 tablespoons of orange juice

1 bottle of white grape juice

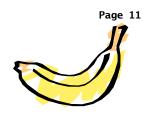
1/2 bottle club soda



Place the sugar and sliced lemons and oranges in the punch bowl and let stand until the sugar is dissolved. Add the orange juice, grape juice, and club soda. Let chill in the refrigerator. When ready to serve place ice cubes in the bowl. Garnish with thin pieces of fresh fruit.

Trail Mix

Nuts (macadamia, peanuts, cashews) Dried Fruit (bananas, coconut, etc) Chocolate (candies, chips, etc. Ziploc bags



Place 1/2 of cup of the desired ingredients inside a bowl. Mix thoroughly with a spoon. Place the trail mix in Ziploc bags to share with others or take on a hike.

Tropical Slushy

1 16 oz. can of Pineapples, natural juices 1 tablespoon of cream of coconut 1/2 cup of orange juice 1 banana, peeled and sliced 2 cups of ice



Place the pineapples in the blender with the juice. Add the cream of coconut, orange juice, and banana. Blend on low speed for about 10 seconds. Stop and add the two cups of ice. Blend until the liquid becomes a liquid consistency resembling a slushy. Serve in glasses.

Cup of Dirt

1 package of Oreo or chocolate sandwich cookies

1 large package of instant chocolate pudding

1 box of graham cracker crumbs (optional)

1 small bag of miniature M&M's (optional to represent hidden gems) gummy worms (optional)

cups (clear cups work better if you would like to see the layers of the dirt) spoons



Prepare instant pudding as directed on package, refrigerate. Remove the cream from the chocolate sandwich cookie and discard. Place the black halves of the cookies on a firm, clean, surface and crush well. Set aside in a bowl. Place graham cracker crumbs in a bowl.

Remove pudding from refrigerator and place a generous helping at the bottom of the cup. Tap the cup on the counter to level the pudding in the cup. If you choose not to use the optional layers then simply layer the pudding and Oreo crumbs until the cup is full as desired. Make sure you top with cookie crumbs.

Otherwise, layer as follows with optional items:

Begin with chocolate pudding, place graham cracker crumbs, pudding, a worm, chocolate crumbs, M&M's, pudding and continue with items until your creation is complete. Refrigerate until ready to serve.

Cup of Dirt Made Easy

1 package of Oreo or chocolate sandwich cookies chocolate pudding cups gummy worms (optional) spoons cup (to place excess pudding in)



Peel off the top cover of the pudding cup and discard. Spoon out a enough pudding from the cup to sprinkle some cookie crumbs on top. If you are placing gummy worms in the pudding do so before placing the crumbs on top. Be creative and have the worms hanging over the edge. *Serve your creations and dig in!*

Create a "Discovering Rainforest!" book using a file folder. _FUN FOR ALL AGES!!





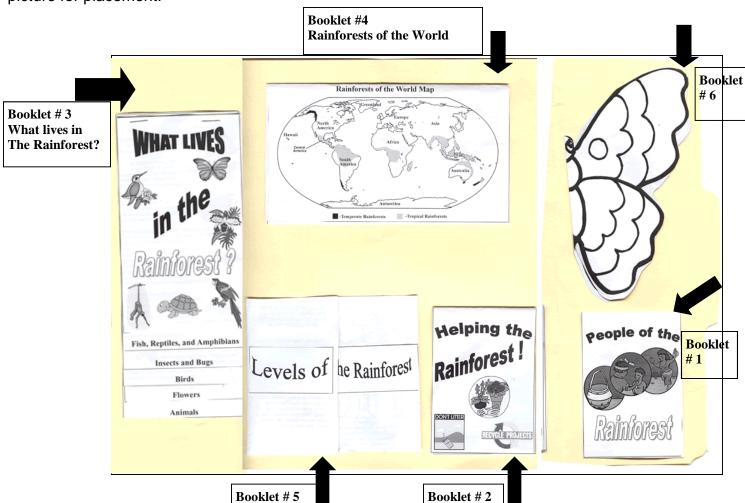
<u>Step One: Prepare</u> Copy all the templates and booklet pages for each participant. Have them color where needed and cut along the outside lines. Folding instructions are included on each page. *They should complete only one booklet at a time.*

<u>Step Two: Gather your supplies</u> Participants will need glue sticks to mount the templates or booklets on the file folder. A stapler will be needed to staple the "What Lives in the Rainforest?" flip book together. Younger participants may need assistance.

<u>Step Three: Create the cover</u> Fold the file folder inwards (in thirds) to form a book (shown below). Younger participants will need assistance. Using the Templates or craft projects located in this kit to decorate the cover of their book.

They can also accent the cover with other items that they would wish to draw on there. Make sure they place there name on the front Of the book.

Step Four: <u>Completing the inside</u> Distribute the booklet patterns for the inside of the book. Make sure they color all areas prior to cutting them out. **They should complete only one booklet at a time.** The other booklets can be placed inside the folder for safe keeping until the first booklet is complete. This keeps the pages from getting lost or mixed up. See the below picture for placement.



Cut along the outside of the rectangles only. Glue the inside of the book (left side with wording) inside the booklet # 1 cover. Make sure it is glued in the correct direction, so that when you open the book, you can read the words. Fold it in half on the line and glue it inside your file folder. Color the items if desired. **Covers Requirement #6**

There is a variety of people that live in or near the rainforest and have lived their for many years. Read more about them below.

Pygmies These people reside in the rainforest of Cameroon in Africa. They live in traditional huts made with branches and leaves. They gather their food from the rainforest. They weave mats and make their own pottery.

Huli People- These people live in Papua New Guinea. They live in large group houses. When they have ceremonies the



men decorate their bodies with paint and wear headdresses. Thy hunt their food and grow their own crops.

Yanomami People-These people live in South America for 1,000 of years. They hunt, fish, and grow their crops. Their houses are in villages. They depend on the rainforest for their fruits and animals.



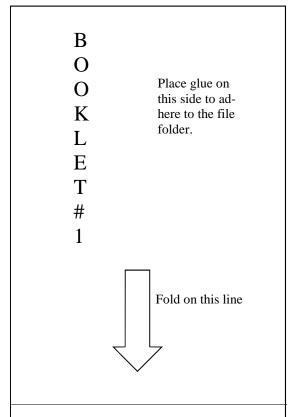
Aboriginal People-

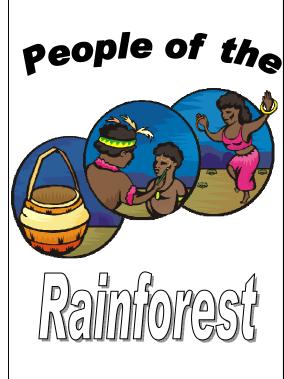
They have lived in in Australia for 1,000 of years. Measures the



temperature in the air. They create works of art by sculpting, rock painting, and basket weaving. Many of them make a living through their artwork. They

Australoid People-They reside in the Southeast Asia area, though very few remain their today. In the past their traditions included creating medical remedies from plants and hunting for their food.





Cut along the outside of the rectangles only. Glue the inside of the book (left side with wording) inside the booklet # 2 cover. Make sure it is glued in the correct direction, so when you open the book you can read the words. Fold it in half on the line, and glue it inside your file folder. Color the items if desired.

Requirement #5 and #8

http://www.kidssavingtherainforest.org/donations.php.htm

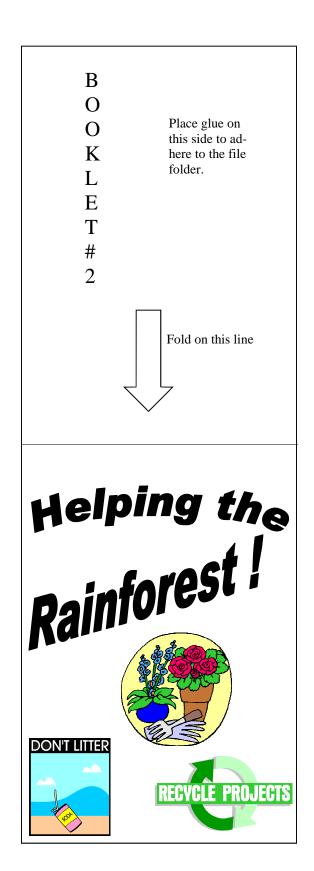
The rainforest is a unique and wonderful place on our earth. It converts large quantities of carbon dioxide into clean oxygen, becoming the largest source of air that we breathe. Though everyday it is being destroyed, soon it will disappear. There is a variety of ways that you can help preserve the rainforests of our world.

Choose a program to participate in. There are several programs that you can participate in that help the rainforest. Here are some ideas:

- Protect-an-Acre this program protects the rainforest while assisting the people that live in the forest by helping them keep their land.
- 2. **Adopt-a-Tree.** You can sponsor the planting of a rainforest tree in your name.
- 3. **Adopt-an-animal**. Sponsor an animal in the rehabilitation center. Name the animal and receive a certificate for your help.
- 4. **Feed-an-Animal.** Feed an animal in the rehabilitation center for a year.
- Monkey Bridge Maintenance. Help maintain and construct the bridges for the monkeys to protect them from power lines.
- Collect money for the rainforest. Have bake sale, rainforest event, or rummage sale and donate all the funds collected to the rainforest through a program.

What can you do at home? Protecting the rainforest can start at home. Instead of throwing things away, there are other options. Here are a few tips:

- 1. **Recycle.** Start recycling your newspapers, cans, aluminum foil, glass bottles and jars.
- 2. **Re-use items.** Re-use your grocery bags to line your trash cans. Recycle plastic containers such as butter tubs to store items in.
- 3. **Donate your items.** If you have out grown your clothing or have unwanted items in your home, donate them to a charity.
- 4. **Save electricity.** Turn off the lights, appliances and TV if you are using it. If you are going out of town, turn the thermostat down.
- Conserve Outside. Put up birdfeeders. Use mulch to conserve the water in your garden and pull weeds instead of using herbicides.
- 6. **Spread the Word** Encourage people in your family to conserve, recycle, and protect our environment.



Cut along the outside of the rectangles only. Starting with the bottom page they are to be stacked on top of each other. Each layer gets shorter and shorter as it progresses to the top. After all the pages are layered upon each other, make sure they are straight and staple them together to form a book. The last page will not be numbered because it is on top. Place glue on the back of book. Place it on the left side of the folder. Covers Requirement #3

Page 1, the bottom page

Jaguar This animal can swim and climb but prefers to hunt their prey by sneaking up on it and pouncing on it. It is an endangered species.



Tamandua This animal uses its tail to assist it to move through the trees. It likes to eat ants, termites, and has a 16- inch tongue to snap them up. It also can give off an unpleasant smell to let the other animals know it is near.

Three-toed sloth This animal spends most of its time hanging upside down in the trees. Algae and other small animals like to live in its fur so it sometimes appears

green.



Spider Monkeys This animal is very acrobatic and likes to swing from tree to tree. It uses its strong tail to help them leap more than 30 feet at a time.

Coatis This animal is a relative of the raccoon. They eat fruits and flowers on the ground of the rainforest. If they are

scared they run up the tree for shelter or a place to hide.

Giant Armadillo This animals body is covered with armor even it s tail. It uses its claws to dig for insects and scoops them up with its long tongue.

Orangutans They are large ape that lives mostly in trees. They have long arms that assist them in swinging from tree to tree in the rainforest. They have long reddish brown hair and grasp things with hands and feet. They live in the tropical rainforests of Asia.



Page 2

Orchids They are epiphytes or air plants. The grow at different heights. There are over 20,000 know species and are most common in the tropical rainforests.



Bromeliads These flowers are related to the pineapple family. They have thick waxy leaves that form a bowl in the center of the flower to catch the rainfall. They can hold several gallons of water to help them survive. They occupy the canopy of the rainforests.

Hibiscus This is a beautiful flower in the tropical rainforest and also native to Hawaii. The center of the flower, pistil and stamen, pops out. The color the flower is very vibrant.

Rosy Periwinkle This flower is native to the tropical rainforest of Madagascar. It is pink in color and gives us two very important fighting medicines that help with leukemia and Hodgkin's' Disease



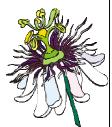


Heliconia This flower is bright pink in color. The bracts are waxy with small flowers peeping out of it. Hummingbirds use them as a food source.

Queen Victoria Lily This flower has large

leaves or pads up to 6 feet across. The flower is the size of a soccer ball and only opens at night. It only grows in the water.

Passionfruit This flower is known for it's white flowers with purple crown of blooms. It is located it the tropical rainforest and has been used in medications as a sedative.



Flowers

Animals

Page 3

Hummingbirds They are small birds sometime no larger than your fingers. They like to hover over flowers and lake the nectar with their long tongues. Their wings beat 80 times a second and they can fly upside down and backwards.



Scarlet Macaw
This bird is located on the front of the Discovering the Rainforest patch. They are found in the tropical rainforests of Brazil, Belize, Peru, Ecuador, Guatemala, Colombia, and Mexico. They eat fruits and seeds and their beaks are so strong that they can crack open Brazil nuts. They live in the canopy. Their wings help them fly swiftly through the trees.



Kookaburra It has a loud call that sounds like human laughter. It resides in Australia, Tasmania and New Guinea rainforests. They like to eat earthworms, insects and small reptiles. They live in a hole in a tree.

Quetzal They do not fly very well. They primarily live in the rainforests of South and Central America. They are very colorful birds and lay light blue eggs.



Toucan This large beaked bird lives primarily in the South and Central America rainforests. They have a croaking call and are a very poor flyer. They like to hop around and live in trees.

Birds

Page 4

Morpho Butterfly This butterfly has iridescent blue wings and are about 6 inches wide. They reside in South and Central America rainforests.



Queen Alexandra Birdwing Butterfly This has a

wing span of 12 inches. The largest butterfly in the world. It is *poisonous* and animals avoid them because they know it will make them sick. They live in the tropical rainforests. The male has blue and green wings and the female is brown and tan.

<u>Dragonfly</u> This insect can catch bugs while it is flying. It is mainly found near the water has 4 long wings that are transparent in appearance.



<u>Leafcutter Ants</u> These insects work together to cut out leaves and carrying them back to their nest on their back. They grow their own food in underground gardens from the leaves that

have been chewed into a pulp, creating a fungus.

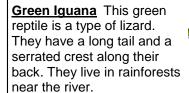
<u>Io Moths</u> These moths have eye spots on the back of their wings. They keep them hidden until they need to *protect* themselves, then they flash them to their enemies. Males are yellow and females are brown.



Insects and Bugs

Page 5

<u>Turtle</u> The turtle has a shell that protects it from enemies when they pull their body inside.





<u>Suriname Toad</u> This amphibian is flat. It does not have a tongue or teeth so it uses it's long fingers to gather its food.



<u>Arawana Fish</u> These fish can leap out of the water and grab their food. They have even been known to take birds off their branches.

<u>Gecko</u> This reptile can *protect* it's self by releasing it's tail if it is in danger. It will grow a new one back later. They have bristles on the



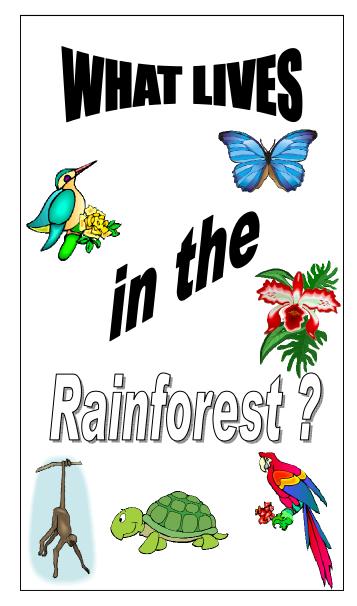
bottom of their feet that helps them climb.

Red-Eyed Tree Frog This amphibian has red eyes used to scare their predators away. They have bright green skin with yellow stripes. Their long legs have suc-

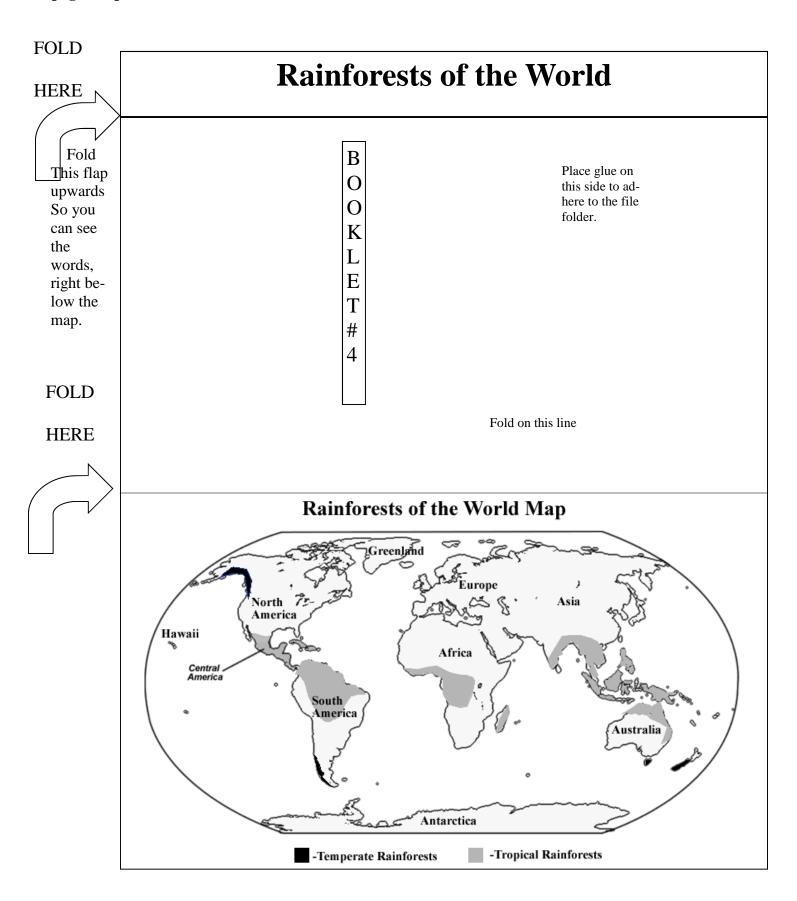


tion cups on their toes so they can attach to items in the rainforest.

Fish, Reptiles, and Amphibians



Booklet #4 (matchbook) Cut along the outside of the rectangle only. Fold along the center line. Fold the flap upwards so you can see the words below the map. This booklet will resemble a matchbook. Glue the information about the rainforests around the world inside. Place it in the center of your folder. **The inside of this booklet is on the next page. Requirement #1**



All the rainforests have tall trees, rain, and humidity. They create a large amount of carbon dioxide for the world and homes for many animals and humans. We receive a lot of or products from the rainforests around the world including fruits, coffee, chocolate, spices, and medications. Read below the unique information about some of the rainforests around the world.

Amazon Rain Forest South America

This is where the largest rainforest and river in the world are. It also contains a large variety of butterflies including the blue morpho butterfly

and butterflies that are one foot wide. Orchid flowers, brazil nut and rubber trees, toucans, and macaws are just few of the species in this rainforest.

Rainforests of Asia

The giant flying lemur is one of the unique animals that reside in the rainforests of Asia. The Tapang tree is the tallest tree in the world and you can find it in the Asian rainforests. Orangutan, flying lizards, tigers, and the birdwing butterfly are just a

few of the species in this rainforest. Camouflaging in the rainforest is a common way for the species to protect themselves such as the flower mantid is the color of flower it lives on. Walking sticks and leaf beetles blend into the trees as well.



African and Madagascar Rain Forest

The African rainforests are located mainly on the west coast and central part of Africa. It holds a land of chimpanzees, flying squirrels, okapi, duiker, and the crowned eagle. Each year a large amount of the African rainforest are cut down by logging companies, leaving only 80% of original rainforest. It has about

75 inches of rainfall each year.



Australia Rain Forest

The Daintree rainforest of Australia is over 135 million years old, the oldest in the world. Take a tour into the rainforest that has tree kangaroos, laughing kookaburras, spider monkeys, quetzals, jaguars, and monarch butterflies. There are many unique species that can only be found in this rainforest.



North America Rain Forests

The Hana Rainforest, located in Maui, Hawaii, is the largest rainforest in the United States. Hawaiian rainforests have more than 10,000 plants that can not be found anywhere else in the world. View hibiscus flowers, macaws, heliconias, parrots, and beautiful waterfalls.



Cut along

the

rectangle and

evels

5 # T E L X O O B

on the inward solid line,

cover the opening. the book making sure not to and glue them on the front o the below boxes of lettering fold the flaps inward. Cut out Covers Re-

quirement #4

Color the layers of the rainforest. Add animals, insects and other things that you might find in the rainforest to the picture.

The soil of the rainforest is thin and poor. There is a waxy feel to the leaves and the water rolls off the leaves onto the roots of the plants to keep them hydrated. It rains about 8 feet a year in the rainforest.

An *ecosystem* is the co-dependant organisms and environment of a specific area. Each needs the other in order to function, any change affects the others. The rainforest ecosystem has more variety than the ocean.



the layer made by the thick leaves at the top of most trees. These trees form the roof of the rain forest.

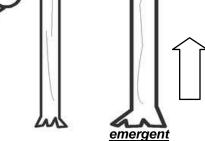


the ground level that is covered in shrubs and small plants and is home to many animals, even large ones like jaguars.

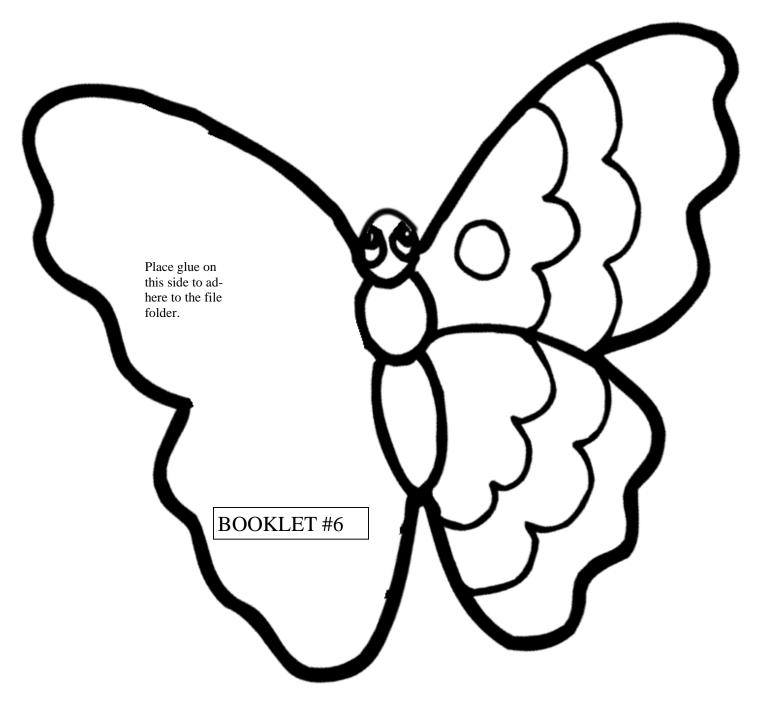


understory

this layer is very dark because little light gets through the thick canopy.



the tips of the thickest and tallest trees that stick out above the canopy. Their height range from 120-150 feet tall.



Endangered Species of the Rainforest- First, color the butterfly wing.

Then, cut out the butterfly.

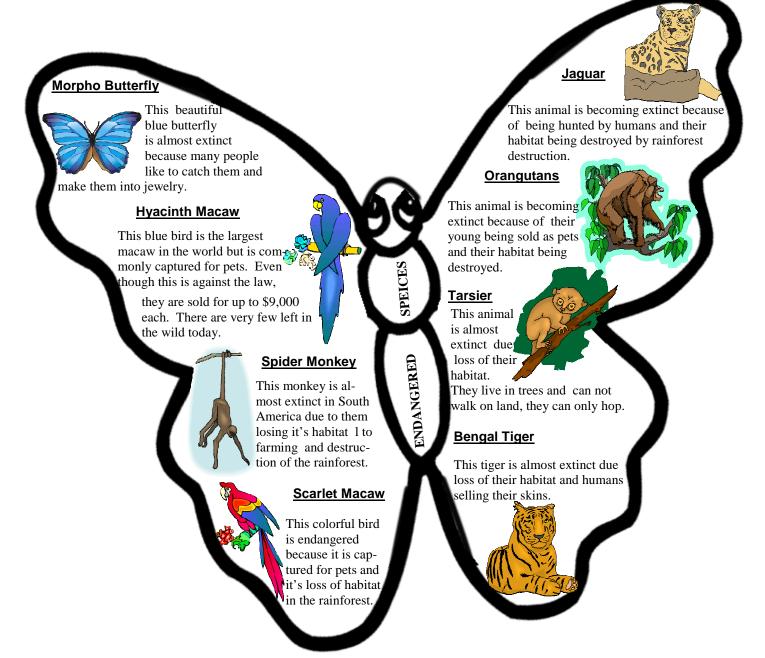
Make sure you DO NOT cut them through the middle.

This is will create a book shaped like the butterfly.

Glue the information located on the next page inside this decorated cover. Fold the butterfly in half. Place glue on the back of the folded butterfly and place it inside your folder on the left hand flap. **Note:** The inside and outside will not match up perfectly around all the edges.

Covers Requirement #14

BOOKLET #6

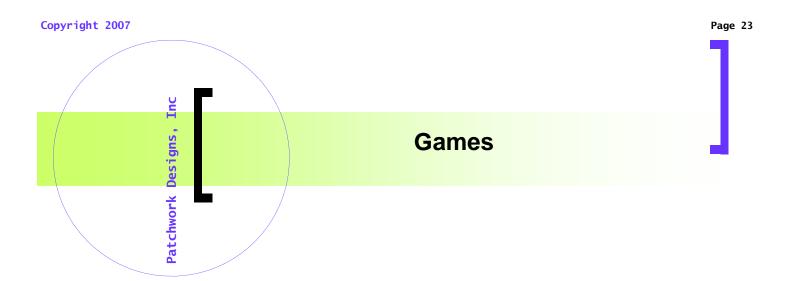


Cut out the butterfly on this page.

Make sure you DO NOT cut it through the middle.

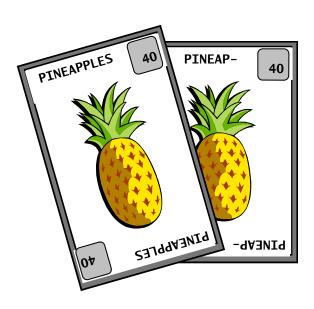
Glue this information inside the butterfly located on the previous page. Fold the butterfly in half. Place glue on the back of the folded butterfly and place it inside your folder on the left hand flap.

Note: The inside and outside will not match up perfectly around all the edges.



Rainforest Preservation Game
Rainforest Trading Card Game
Rainforest Memory Card Game





Rules of the Rainforest Preservation 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.

Volunteers: You will need a banker (manages the money); property manager (manages the exchanging of trees for acres); Veterinarian (manages the adoption of the animals).

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.

Place the tree cards on the adopt a tree card stack on the board. Issue the banker the money to manage; the acre cards to the property manager; and the animal cards to the veterinarian.

The banker issues everyone ONE \$1, \$5, \$10, and \$20 rainforest bucks. The players can not go backward only forward on the board. Every time they pass the binoculars they will receive \$20.00 from the banker. They do not have to land directly on start.

Adopting: The players must give their money to the banker in order to take a tree from the pile, adopt a tree or animal. They can only adopt one item per turn. For example, if they adopt a tree at the beginning of their turn then roll the dice and land on an animal. They can not adopt an animal because they already adopted a tree their turn.

Adopting trees: You will need to adopt five trees or one acre. The price is noted on the front of the cards. You can adopt one tree at the beginning of each of your turns, before you roll the dice. Five trees are traded in for an acre. If they land on a card that states they need to loose an animal or a tree, they must give up the item in their possession. Example: If they have an acre and they loose a tree. Then they need to give up the acre and receive 4 trees back. If you don't have a tree card then you need to pay the value of the tree card of \$10.00. If you don't have \$10.00, then you do not do anything, expect place the card on the bottom of the stack.

Landing on a leaf: If they land on a leaf they draw an "Up's and Down's" card from the stack on the board. This will have money that they collect or money/ item card that they loose according to the data on the card.

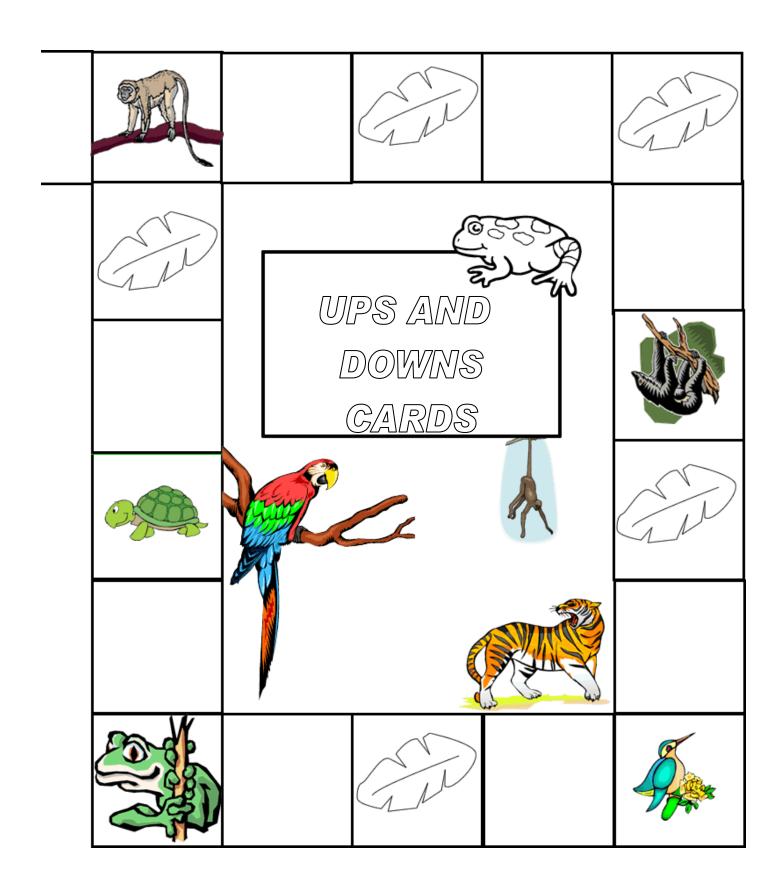
Landing on an animal or species: If they land on an animal card then they can choose to adopt an animal if they have enough money to adopt it. All animals cost \$25 each and the participants can choose which animal they wish to adopt. If they land on a card that states they need to loose an animal, they must give up the item in their possession or pay \$25.00. Example: If they have two animals and the card says your animal got sick then you need to put your animal back in the pile. If you don't have an animal card then you need to pay the value of the animal card of \$25.00. If you don't have \$25.00, then you do not do anything, expect place the card on the bottom of the stack.

Winning the game: The goal of the game is to adopt one acre of the rainforest and have 3 animals that habitat it. 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 leaf cards along the way, you could loose trees or animals before you get back to start. Participants will use math skills as they play the game. In addition, let them know that they can actually adopt trees, donate funds, or help with medical bills.

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







Adopt A Tree Game Cards

Make at least *five copies* of these game cards so the participants can adopt a tree. Five collected trees can be turned in for one adopted acre. They will need one acre and three animal cards in order to win the game.

Don't forget along the way there will be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest. These cards will be mixed in with

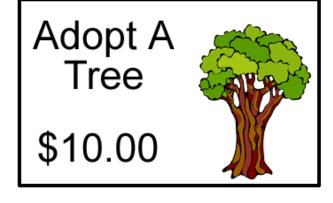
the cards.



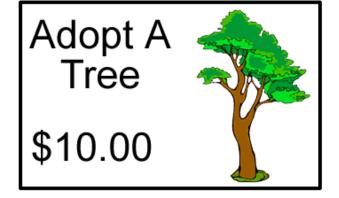


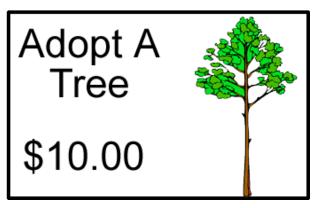












Adopt An Acre Game Cards

Make at least *three copies* of these game cards. Five collected trees can be turned in for one adopted acre. They will need one acre and three animal cards in order to win the game. They can turn in their trees at the beginning of their turn. All the trees that they turn in will be placed at the bottom of the pile of the adopt a tree stack. Please ask for a volunteer at the beginning of the game to be the person that is in charge of holding the acre cards for the game. They will need to assist in all the exchanges.

















Adopt An Animal Game Cards

Make at least *four copies* of these game cards so the participants can adopt an animal. They will need one acre and three animal cards in order to win the game.

Don't forget along the way there will be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest.





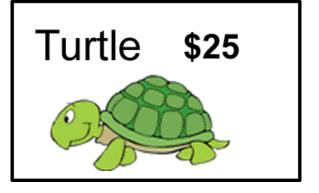












Adopt An Animal Game Cards

Make at least *four copies* of these game cards so the participants can adopt an animal. They will need one acre and three animal cards in order to win the game.

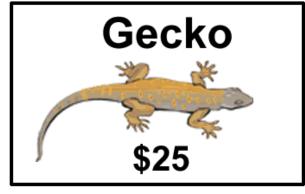
Don't forget along the way there will be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest.









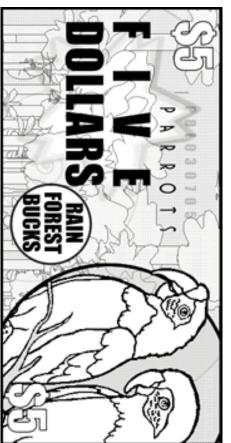


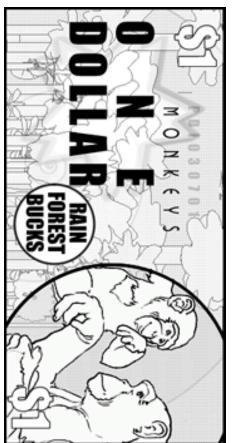


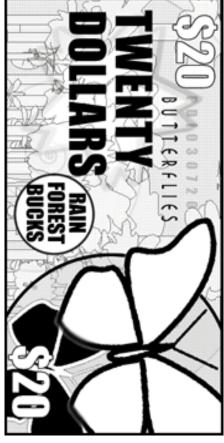




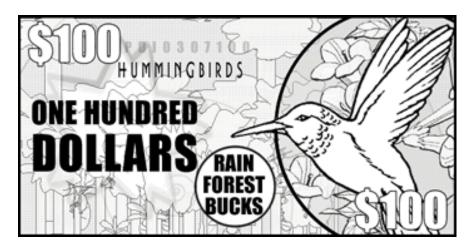


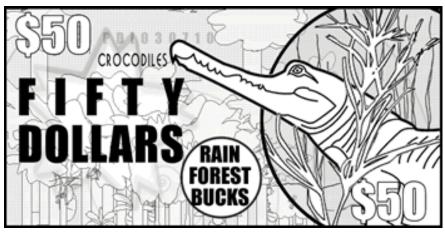






Make several *copies* of these for the participants to use in the game.





"Ups and Downs" Game Cards

Make at least one copy of these game cards so the participants can draw one when they land on a leaf on the board. These cards can either give you money or take money away. There will also be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest.

You took an injured monkey to the local animal hospital.

PAY \$30.00

You helped build a bridge for the monkeys in the Rainforest.

\$50.00



Purchase a T-shirt to help save the Rainforest.



You saved a tree from being cut down.



COLLECT

\$10.00



Help buy vitamins for the baby animals in the local nursery.



PAY

\$15.00

You helped the native people of the Rainforest sell fruit at the market.



COLLECT

\$25.00

Help rebuild a home for a native family that lives near the Rainforest



\$30.00

You recycled products to help save money and our earth.



\$15.00

"Ups and Downs" Game Cards

Make at least one copy of these game cards so the participants can draw one when they land on a leaf on the board. These cards can either give you money or take money away. There will also be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest.

You took an injured bird to the local animal hospital.



PAY

\$30.00

You took a tour down the Amazon River.

PAY \$30.00



You picked a rare flower in the rainforest.



PAY

\$15.00

You lost your camera on the Rainforest tour.



PAY

\$10.00

You littered and got caught!



PAY

\$15.00

You discovered a rare plant that can be used as a medication.



COLLECT

\$25.00

You started a club to help save the Rainforest.



COLLECT \$30.00

You recycled products to help save money and our earth.



COLLECT

\$15.00

"Ups and Downs" Game Cards

Make at least one copy of these game cards so the participants can draw one when they land on a leaf on the board. These cards can either give you money or take money away. There will also be various cards that will ask the participants to give a tree back or animal back to the pile, due to injuries, illness, or destruction of the rainforest.

One of your animals was injured in the Rainforest.



A monkey fell out of a tree today.



An acre of the Rainforest was lost today.



One of your trees was cut down today.



There is a food storage in your rainforest. You must relocate your animal.



The monkey bridge needs maintenence. Take your animal to the shelter.



A tree was used to supply food and help others.

PUT ONE OF YOUR TREE CARDS BACK!

A tree was cut down today.



PUT <u>ONE</u> OF YOUR TREE CARDS BACK!

Rainforest Trading Card Game

The game cards are located on the next page. Please make <u>nine copies</u> of this page for the cards. Copy them on cardstock if possible. If not, glue them on index cards so the players can not see through them.

The rainforest has many products that are exported to many different countries. In this game, you will trade your crops to get a crop that you want.

- You will can play with 3-6 players.
- You need to cut the *item cards* out first.
- The game starts out with choosing the *trade items* that will be in play.
- Out of 6 crops, choose one for each person playing.
- There are nine cards for each *item*.
 - The *items* are:

Pineapples(40)

Coconuts (30),

Chocolate (100)

Coffee (75)

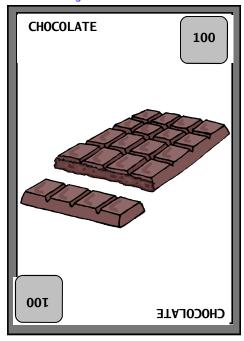
Tea (60)

Bananas (50)

- Players sit in a circle or around a table.
- Shuffle the *item* cards together and then deal nine cards to each player.
- Allow the players to sort their cards, and then when everyone is ready, start the game.
- Players want to get all of their cards to be of one trade item, so they should try to get the *item* that they have the most of when the game starts.
- To do this, try to trade with other player.
- If you want to get rid of two *coffee* cards, in the hopes of getting two *banana* cards, then you hold your cards face down in the center of the ring or table, saying "two, two, two" repeatedly, until someone else says two and agrees to trade with you.
- After trading, look at the cards that you just traded for, and if you don't want them, try to trade them again for different cards.
- You can trade one to four cards, but if you are trading cards, they have to be the *same trade item*.
- You cannot trade cards that have different *items* on them.
- If you are trying to trade a high number, such as three or four, and no one is answering your call, you can drop your bid, splitting the trade items into different groups so that you can trade one or two cards at a time.
- When someone has all nine cards of one trade item, they put their hand face up in the center and yell "SOLD!"

OPTIONAL: PLAYING WITH POINTS

- Each card has a score on it, so write down how many points the winner received this round.
- The winner of the game is the first person to reach 500 points.
- Gather the cards, shuffle, and re-deal to play the next round.
- You may also play without keeping score.



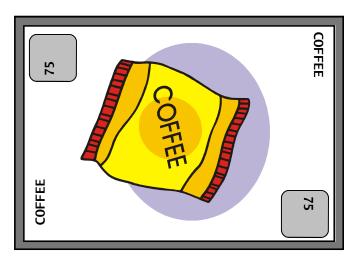


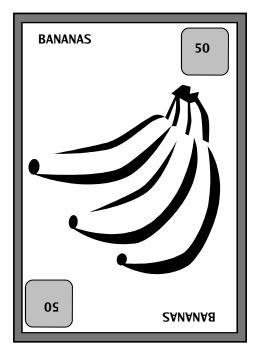
Trade Item Cards for Rainforest Trading Game

You will need to copy this page **nine times** to play this game.

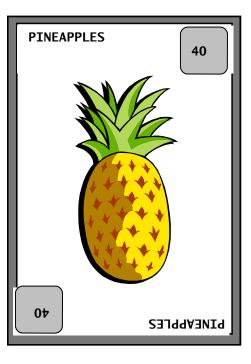
There should be <u>nine</u> cards for each *trade item*.

Print these cards on Cardstock so that they are more sturdy and last longer. In addition, you can laminate the cards as well. Directions for playing this game is on the previous page of this book.





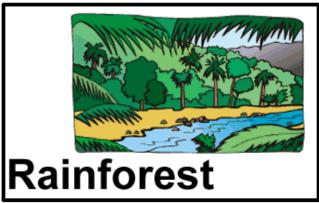




Rainforest Memory Card Game-Page 1

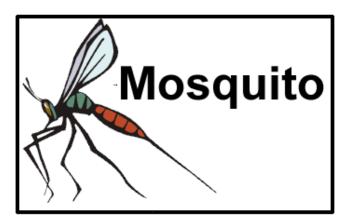
Make *two copies* of these game cards. Mix them up and place them face down on the table. Have the participants try to match the cards by using their memory. The player with the most matches at the end, wins.











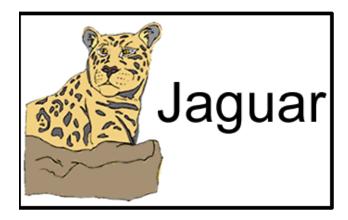


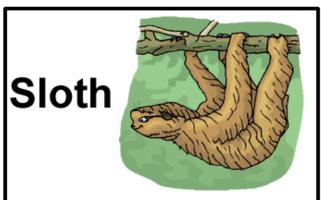


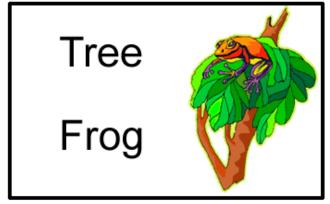


Memory Card Game-Page 2

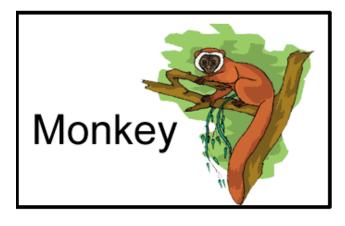
Make *two copies* of these game cards. Mix them up and place them face down on the table. Have the participants try to match the cards by using their memory. The player with the most matches at the end, wins.

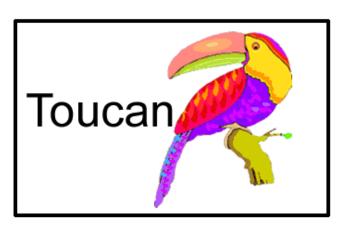


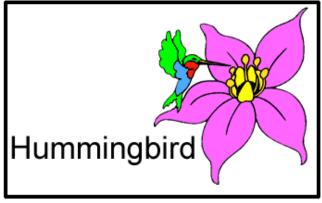


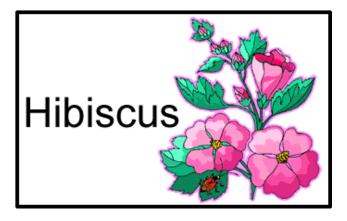






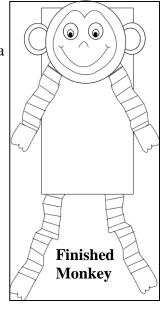


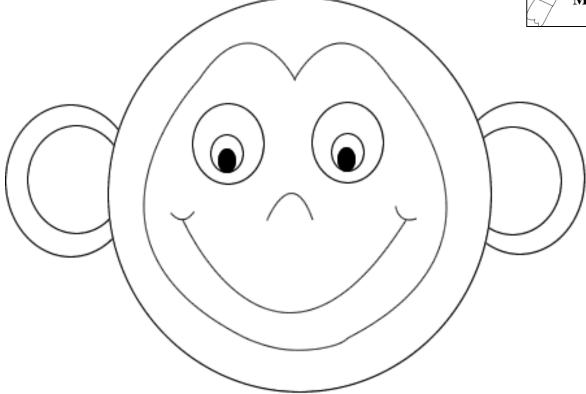


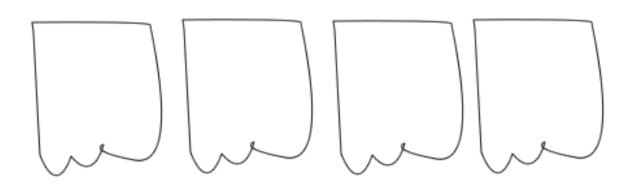


Monkey Puppet

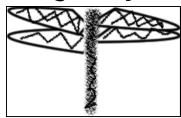
Color the outer edge of the monkey dark brown and the inner part of the ears and face a light brown. Color the hand and feet pieces dark brown. Cut four 11 1/2 X 1 1/2 inch wide strips of brown construction for the arms and legs of the monkey. Fold the strips accordion style. Glue the hand and feet pieces to the end of the strips. Glue the other end of the strips to the paper bag. Glue the face on the top of the bag.



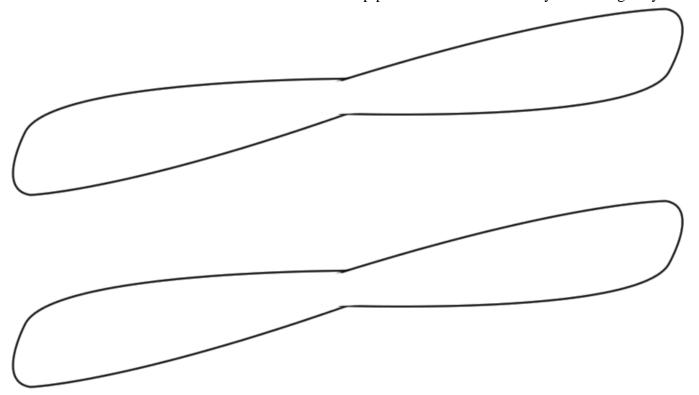




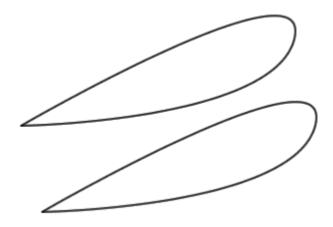
Dragonfly Craft



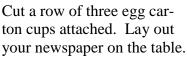
Cut out the dragonfly pattern and trace it on clear tablecloth material. Cut the pattern out. You will need two for each dragonfly. Take the green pipe cleaner and fold it in half twisting it together about three times to create the head of the dragonfly. Decorate your wings with a black sharpie creating unique lines on the wings. Slide the wings in between the pipe cleaner. Twist it together to secure the wings. Twist the remainder of the pipe cleaner to form the body of the dragonfly.

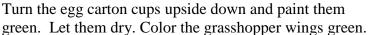


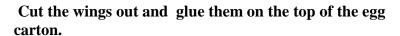
Grasshopper Craft



Grasshopper Wing template



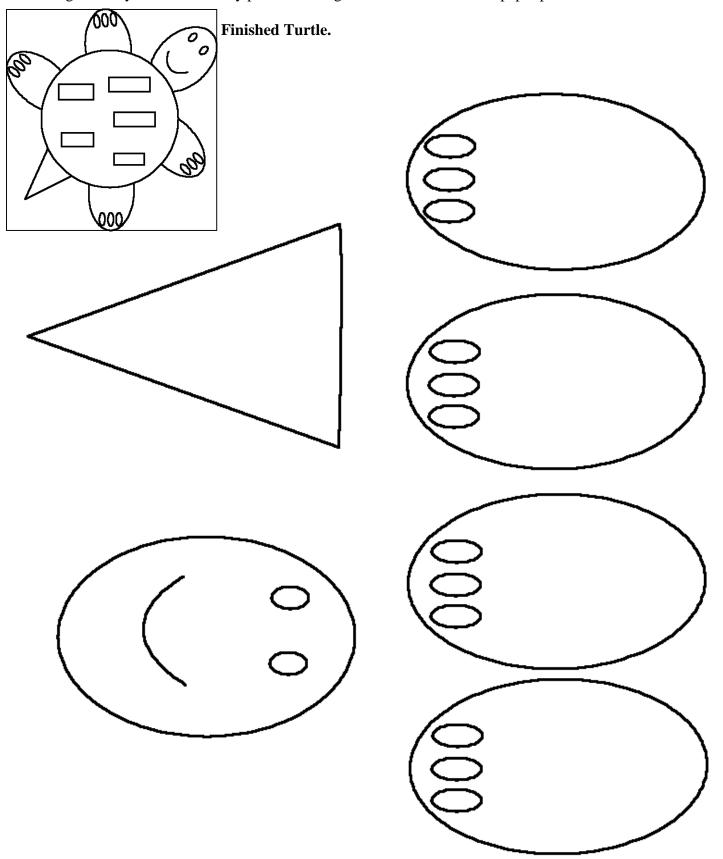




Cut the pipe cleaner in 4 inch pieces. Make three holes on each side of the egg carton to place the pipe cleaner legs in. Place the pipe cleaner in the hole about 1/2 inch and bend it over so it will stay secure. Tape it for extra security. Bend the legs so they look like they can hop. Place 2 inch pipe cleaners in the top for antennas.

Turtle Craft

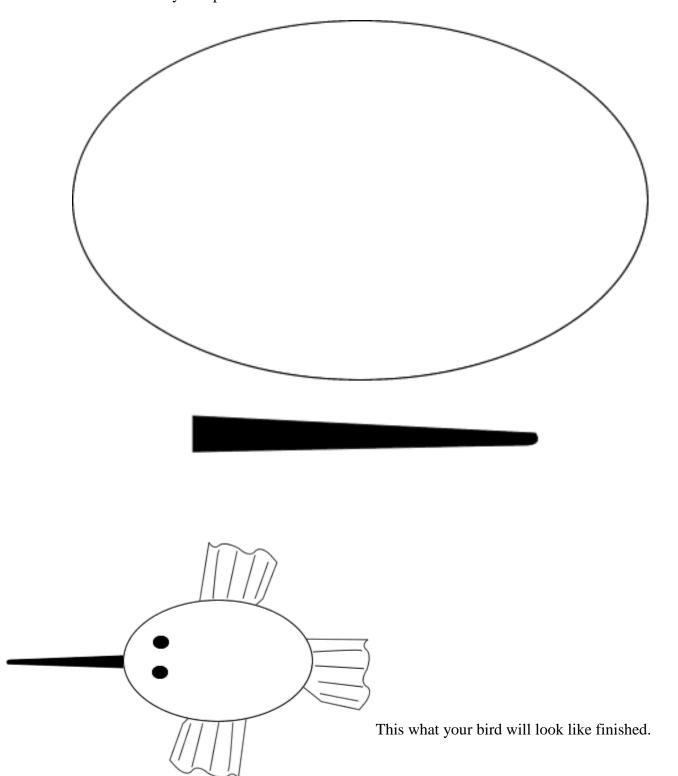
Draw rectangular squares on the white paper plate with the green marker. Color the paper plate and body parts with the green crayon. Cut the body parts out and glue them underneath the paper plate.



Hummingbird Craft

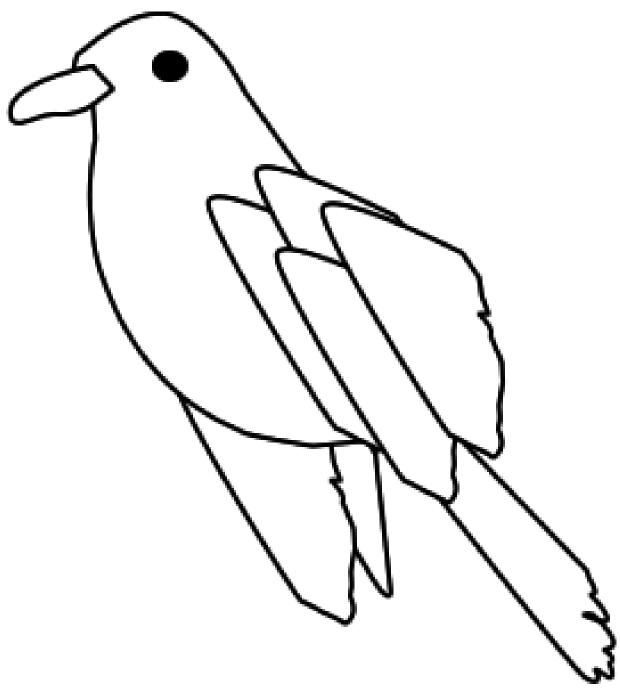
Copy the hummingbird pattern on cardstock or trace it on a piece of poster board. Color the body of the hummingbird. Use shades of green and red to color the body. Draw two eyes on body. Cut out the beak and attach it to the body.

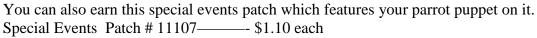
Fold the muffin cup paper in half and in half again. Cut along the folded lines. Use a marker to create lines on the wings by tracing the fold lines of the muffin cup paper. Tape or glue a wing on each side of the body and one on the end of the body to represent the tail feathers.



Parrot Puppet

Color the bird's body green, the beak yellow and the small tail red. Color each wing piece a different color. Suggested colors are yellow, red, green and orange. Cut out all the pieces and glue the feathers on top of the birds body. Attach a popsicle stick to the body and play with your puppet.

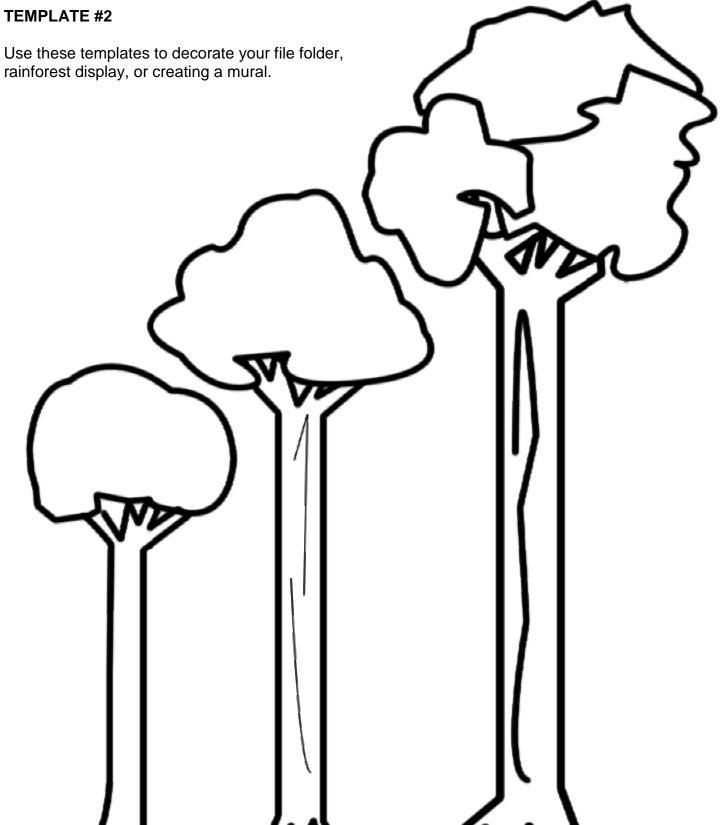




Tiger Paper Bag Puppet

Copy the pattern on paper and color it orange. Cut it out. Glue it on a paper bag top and prepare an animal puppet show.





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 ()	Referred By:	
Email Address:	,	
Discover/Mastercard/Visa#		or Check #
Expiration Date:	Have you ordered before?	

Item #	Description	Quantity	Unit Price	Total Price
4547	Discovering the Rainforest		\$1.75	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
SUBTOTAL			TAL \$	
Regular Shipping & Handling (view chart on the next page)			ge) \$0.00	
	Sp	ecial Shipping (r	next day, priority mail	etc) \$0.00
			TO	TAL \$

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.

Bibliography

Books:

- Aldis, Rodney. Ecology Watch Rainforests. New York: Dillon Press, 1991.
- Allman, Barabra. All About the Rainforest. Monterey, CA: Evan Moor, 2005.
- Ansel, Sheri. Rainforests, Habitats of the World. Austin, Texas: Raintree Streck-Vaughn Publishers, 1993.
- Fredericks, Anthony. <u>Exploring the Rainforest, Science Activities for Children.</u> Golden, Colorado: Fulcrum Publishing, 1996.
- Press, Judy. At the Zoo! Explore the Animal World with Craft Fun. Charlotte, Vermont. Williamson Publishing, 2002.
- Press, Judy. Alphabet Art with A to Z animal Art and Fingerplays. Nashville, Tennessee. Williamson Publishing,1998.
- Ross, Kathy. Crafts for Kids Who Are Wild about The Wlld. Brookfield, Connecticut: Millbrook Press, 1998.
- Ross, Kathy. Crafts for Kids Who Are Wild about Insects. Brookfield, Connecticut: Millbrook Press, 1998.
- Time Life Books. Into the Rainforest. Hong Kong: Orpheus Books, 1996.

Websites:

http://rainforestheroes.com/kidscorner/fun/

http://www.therainforestsite.com/

http://www.kidssavingtherainforest.org/

http://rainforestheroes.com/kidscorner/protect/s07_indigenous.html

http://www.pygmies.info/

 $\underline{http://www.srl.caltech.edu/personnel/krubal/rainforest/Edit560s6/www/plants.html}$

http://www.phytochemicals.info/plants/passion-fruit.php

http://www.pbs.org/wnet/africa/explore/rainforest/rainforest_resources_lo.html

http://www.daintreerainforest.com/index.html

http://www.srl.caltech.edu/personnel/krubal/rainforest/Edit560s6/www/people.html

http://www.sunshinehelicopters.com/maui/eastmaui/rainforest.html

http://en.wikipedia.org/wiki/Heliconia

http://www.enchantedlearning.com/subjects/rainforest/

http://www.savetherainforest.org/savetherainforest_002.htm

http://rainforests.mongabay.com/0703.htm

http://en.wikipedia.org/wiki/Hyacinth Macaw

http://en.wikipedia.org/wiki/Bengal tiger

