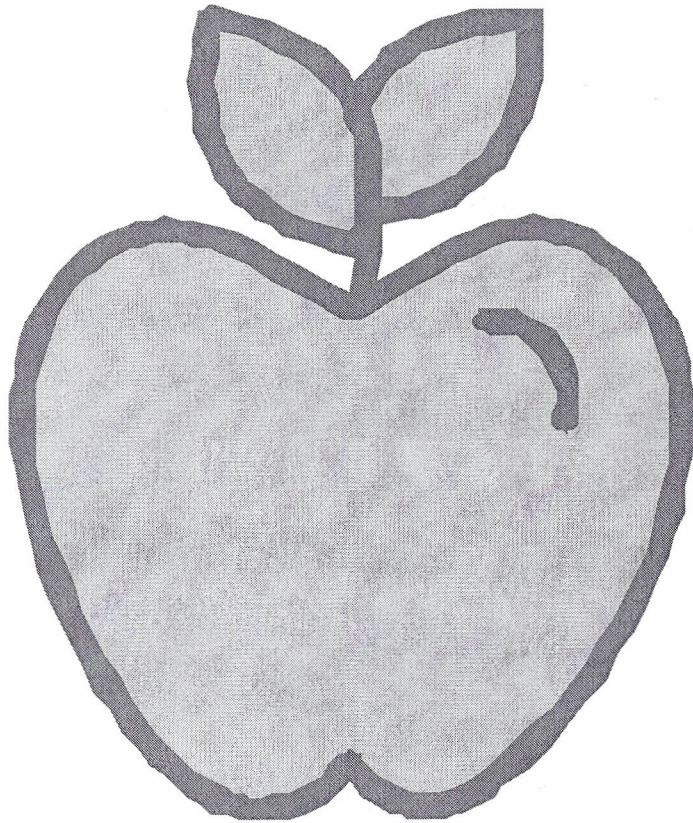


Ag in the Classroom

Alabama Ag in the Classroom



Apple Unit

THE SCIENCE OF APPLES

From Flower to Fruit

In spring apple trees are covered in apple blossoms. In order for the blossoms to become apples, they must be cross-pollinated. This means that the pollen from one flower must travel to another before fertilization can occur. Bees are responsible for this essential task.

When bees travel from blossom to blossom they collect pollen. Pollen is made by the stamens of the blossom. The bee drops pollen from the stamens of one blossom onto the pistils of another blossom. The pollen travels from the sticky tips of the pistils--called the stigma--down a long tube known as the "style," and enters the ovary. It is at this point that fertilization occurs. After fertilization, ovules within the ovary can become apple seeds.

After fertilization occurs and seeds begin to develop, the petals from the blossoms fall off. Next, the ovary starts growing. The ovary is surrounded by a thin protective layer. This layer eventually becomes the core line, or apple core. The outer layer surrounding the ovary becomes the exocarp, or the eating part of the apple. The calyx, stamens, and pistils become the dry, hairy part at the bottom of the apple.

FOR TEACHERS AND STUDENTS

The life of a tree

Growing an apple tree is much more complicated than planting a seed in the ground. This is because a seed from a McIntosh tree will not grow into a McIntosh tree. The reason for this is that the seed is only half McIntosh--the other half of the seed came from the pollen that the bee picked up from another tree. The other tree could have been any variety within a mile or

two of the McIntosh. So when an apple seed is planted, you never know what the tree will look like, or what the apples will taste like. To make all of the trees the same, the grower uses a process called grafting.

To start with, the grower plants small apple trees in his or her nursery called "rootstocks." These rootstocks probably don't produce apples which are good to eat, but they are selected because they grow smaller than other apple trees. This is called "dwarfing," and it makes it easier for the grower to manage the trees.

During the first summer, a bud is taken from a tree of the variety the grower wants. A cut is made in the bark of the rootstock, and the bud is slipped under the bark. The bud is then wrapped tightly with an elastic band. The next spring, the rootstock is cut off above the bud, and a new tree grows from the single bud. This tree will be the same as the one the bud was taken from. The next spring the trees are dug from the nursery and planted in the orchard.

Growers have to wait another three to four years before they get any apples off the tree they planted. Apple trees can live for over 100 years, although most are only kept for 20 to 30 years.

Information taken from Website for
NEW ENGLAND APPLES

Post Office Box 41, Hatfield, MA 01038 413-247-
9966 info@newenglandapples.org

An Apple A Day...

Mom was right!

The average U.S. consumer eats about 19 pounds of fresh apples a year – about one apple per week.¹ That is not a bad start, but why not an apple a day?

Why are apples such a good choice?

- They can be part of a good weight-management plan since they are low in calorie density, low in fat and high in fiber. Apples, along with other fruits and vegetables, help you fill up on fewer calories as compared to many processed, higher-fat foods such as packaged snacks and cookies.
- They may help lower your risk of heart disease as part of a heart-healthy diet and lifestyle plan. Apples are a good source of soluble fiber which helps keep cholesterol low. They contain many beneficial plant chemicals that act as antioxidants.
- Apples can help people with diabetes manage their blood sugar better because of their fiber content.
- Apples may help lower the risk for certain cancers. The National Cancer Institute has reported that foods containing flavonoids, or antioxidants like those found in apples, may reduce the risk of lung cancer by as much as 50 percent.²
- Apples help keep your gums healthy because of the tannins they contain. Tannins can also help prevent urinary tract infections.

How do I select the best apple?

- Choose an apple that is shiny, firm and without bruises or other blemishes.
- Waxed apples have been shown to stay fresh and crisp longer than unwaxed apples. The wax is not harmful to humans and usually only one or two drops is used per apple. Apples are cleaned of all debris and pesticides before they are waxed.

Nutrition Facts

Serving Size 1 medium apple (138g)
Servings Per Container: 1

Amount per serving	
Calories 81	Calories from Fat 6
% Daily Value*	
Total Fat 0.5g	1%
Saturated Fat 0g	0%
Cholesterol 0g	0%
Sodium 0mg	0%
Total Carbohydrate 21g	7%
Dietary Fiber 4g	
Sugars 18g	
Protein 0g	
Vitamin A 1%	Vitamin C 13%
Calcium 1%	Iron 1%

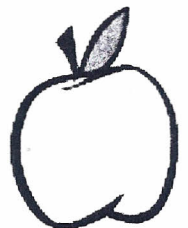
Which apples are best for cooking and baking?

Generally, you want a firm apple with a tart taste such as Pippin, Granny Smith, Jonagold or McIntosh. More mealy apples, such as Delicious varieties, do not hold up as well during baking but they are often acceptable in a pinch.

Port-apple Snack

An apple is already packaged neatly in its own skin, ready to go where you go. Wash your apple under cool running water and then wrap it in a napkin. Here are 7 places to take them:

1. Gym. An apple makes a refreshing, low-cal treat after your workout.
2. Lunch box. Pack an apple with your lunch.
3. Mall. Take them with you to the mall so you are not tempted with higher-calorie snacks.
4. Party. Take a basket of apples to a party. It makes a nice centerpiece and becomes a guilt-free dessert.
5. Friend's house. Take 2 apples and share one with a friend.
6. After-school activities. Kids are hungry when they get out of school. Keep apples ready to go for soccer games, doctor's appointments and choir practice.
7. Refrigerator. Keep them on hand in your refrigerator at home or work for snack attacks. They are a better choice than foods from a box or bag!!



Which apples are best for eating fresh?

Almost all apples are good for eating fresh, either out of hand or in salads, except for more tart, firm varieties such as Pippin or Granny Smith. Many apples, such as Cameo, are good for cooking, baking or eating fresh.

How should I store my apples?

Apples should be stored in a drawer or other container in your refrigerator. While fruit bowls look really pretty, this is not a long-term storage solution for apples.

Keep the peel!

Leave the peel on. It contains a gram of fiber and half the vitamin C found in an apple.

References:

1. www.bestapples.com Washington Apple Commission 09/2002.
2. J National Cancer Institute; January 2002.

The Apple Chain

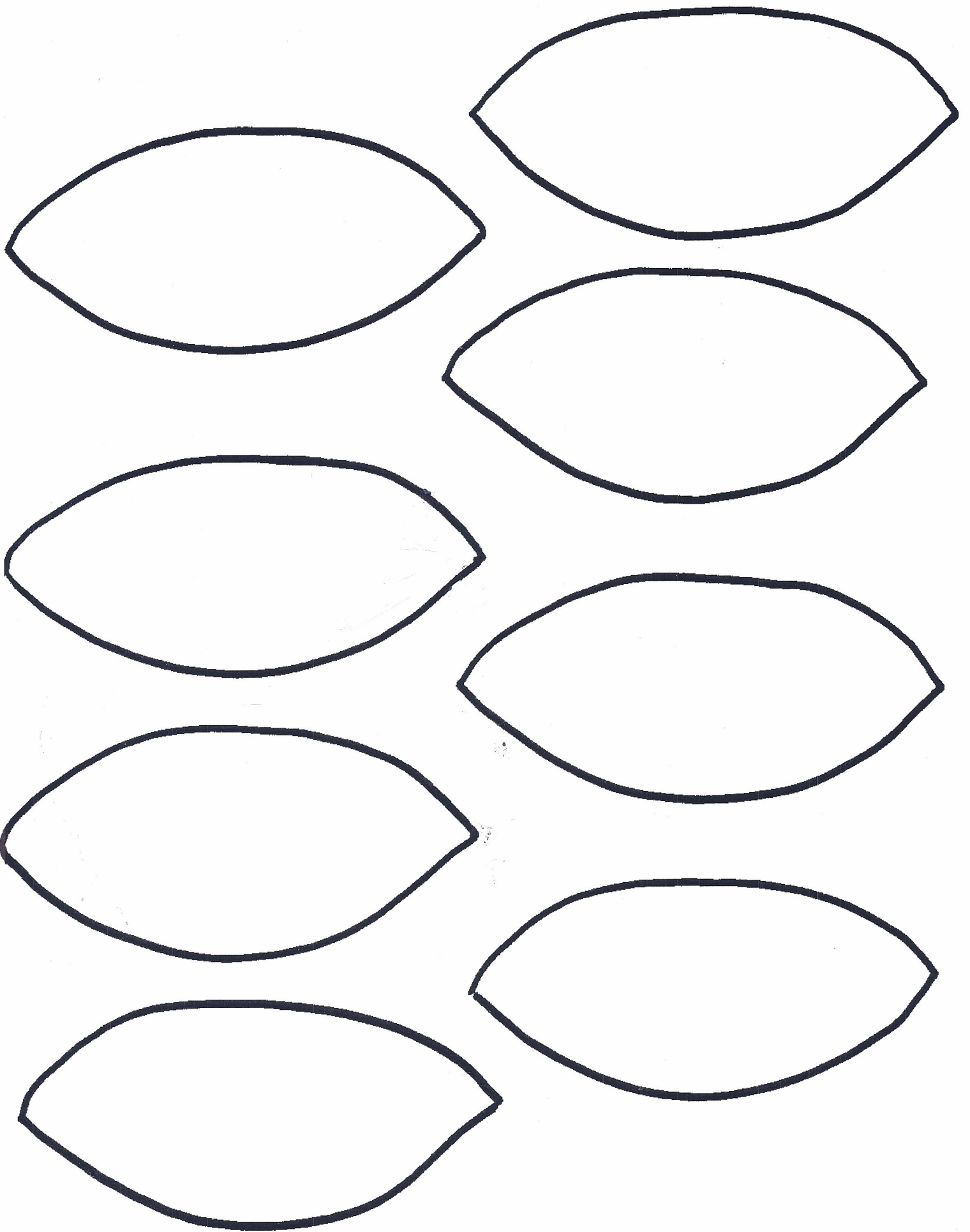
Learn about the stages of apple growth.

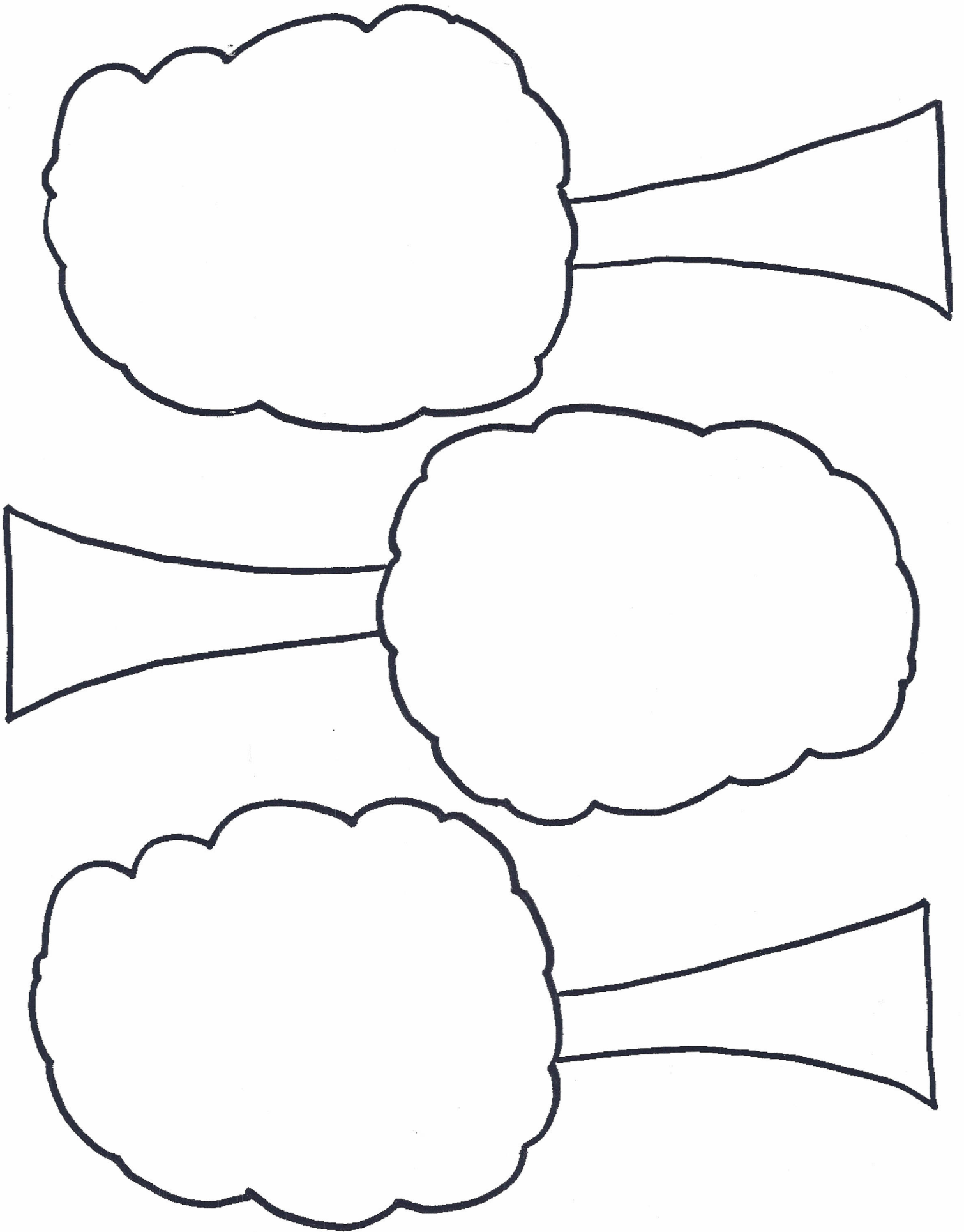
Materials:

- 2 red paper plates
- Hole punch
- Stapler and staples
- Construction paper (green, yellow, pink, brown)
- Tape
- Scissors
- 5 pieces of yarn, 6-8 inches each

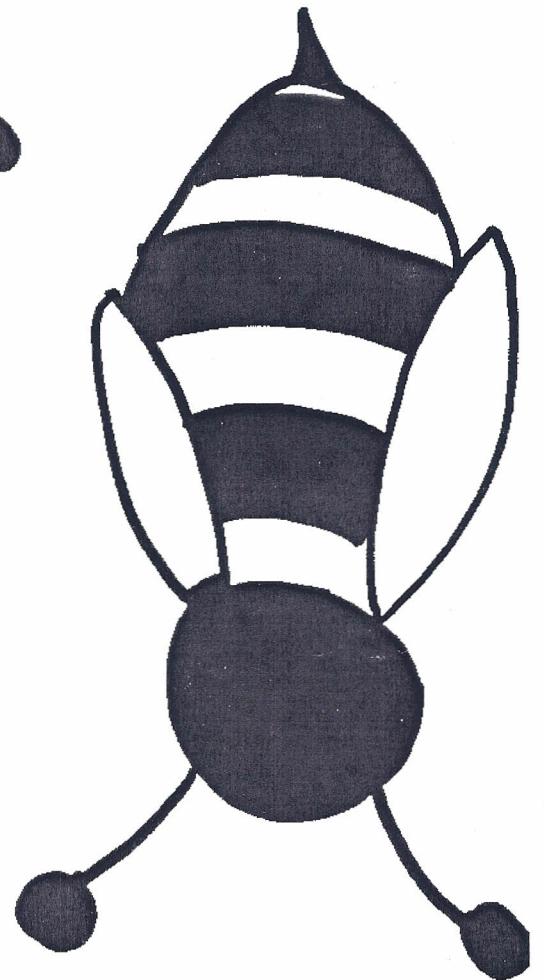
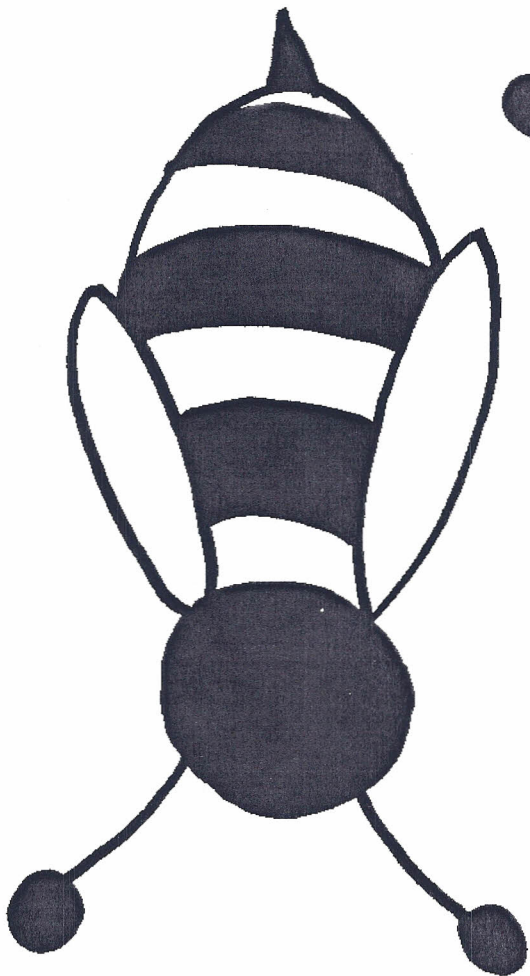
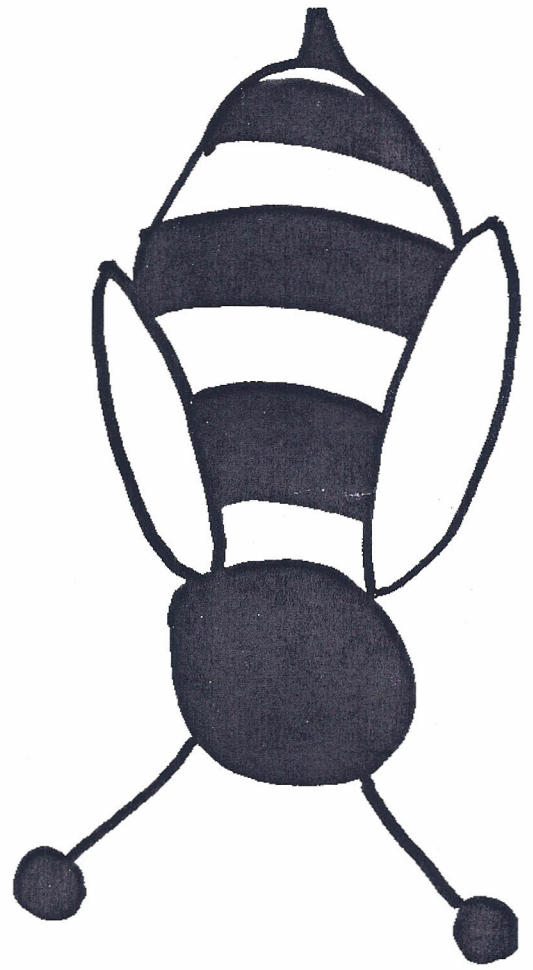
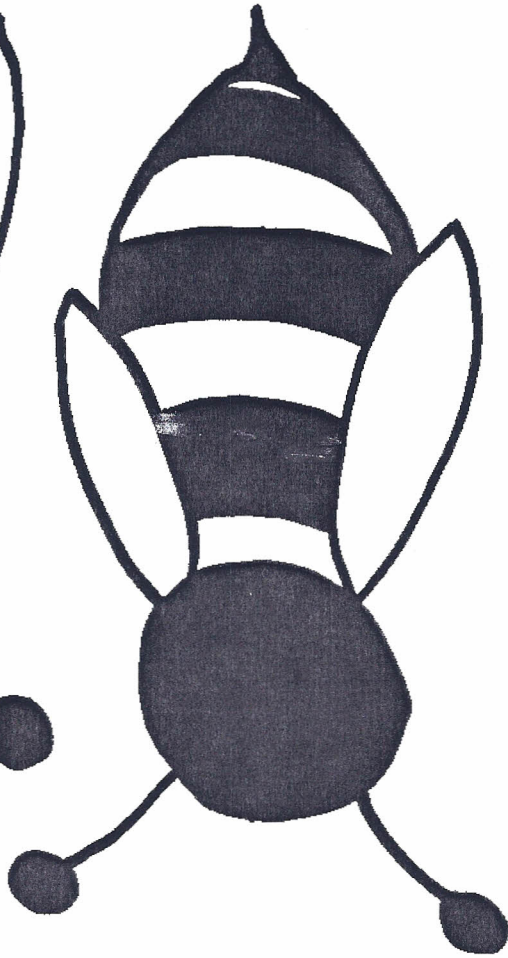
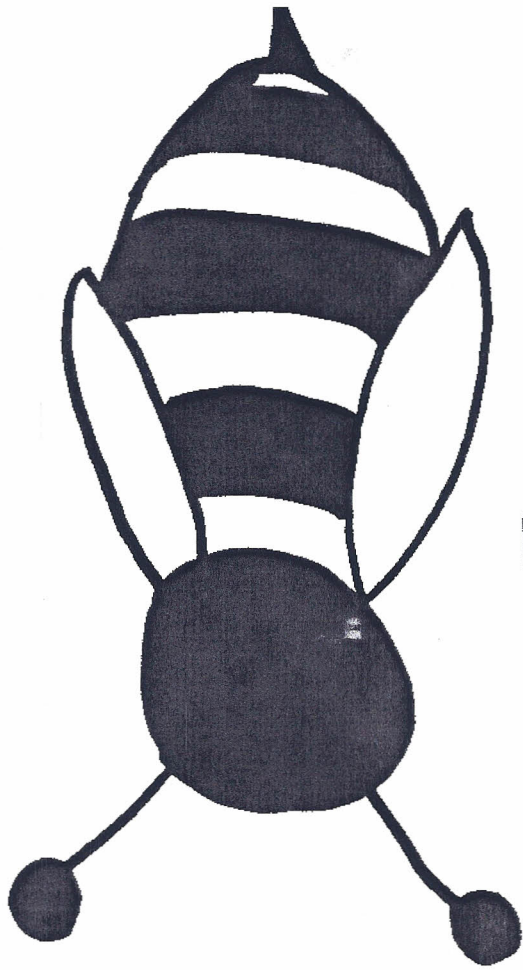
Directions:

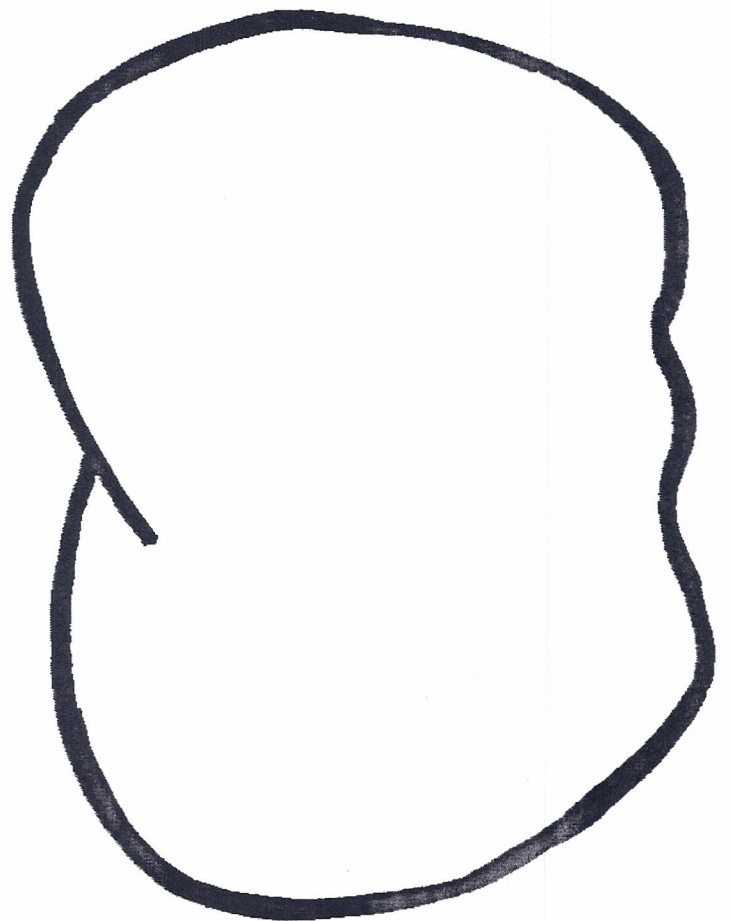
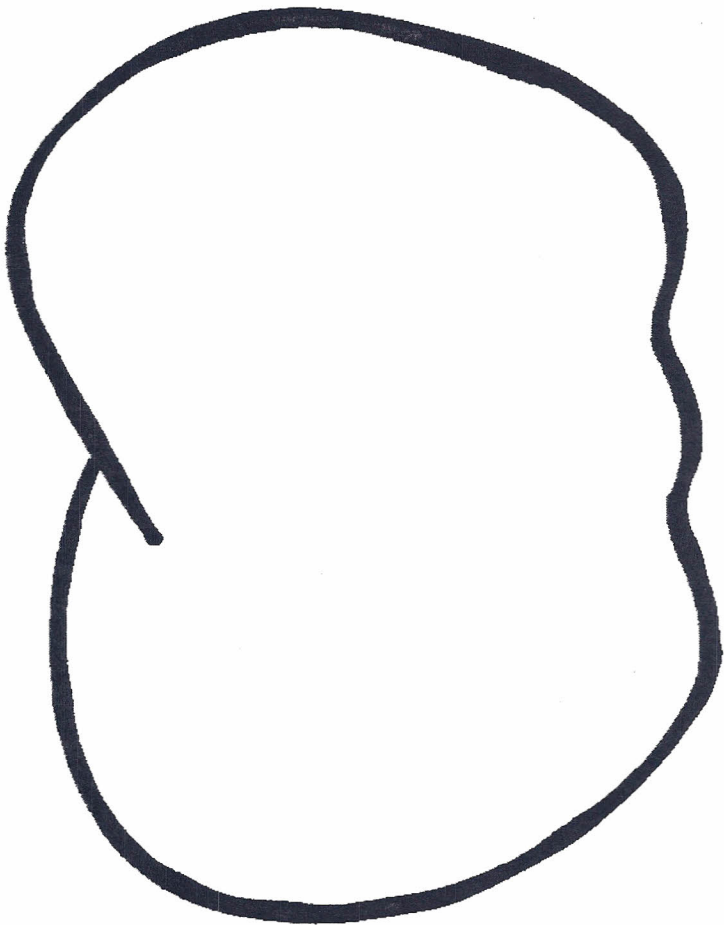
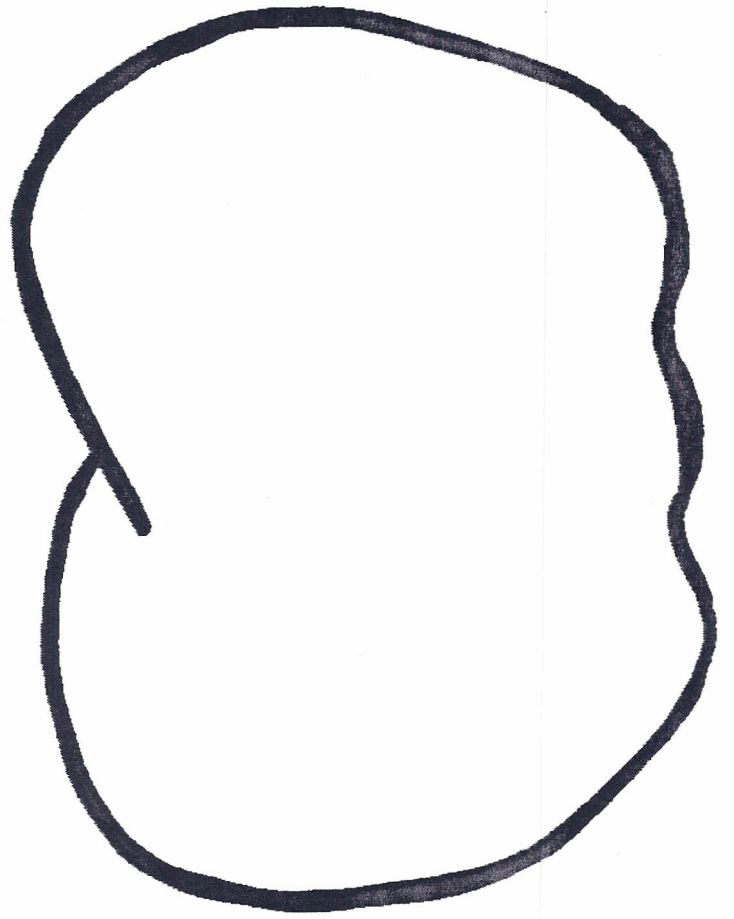
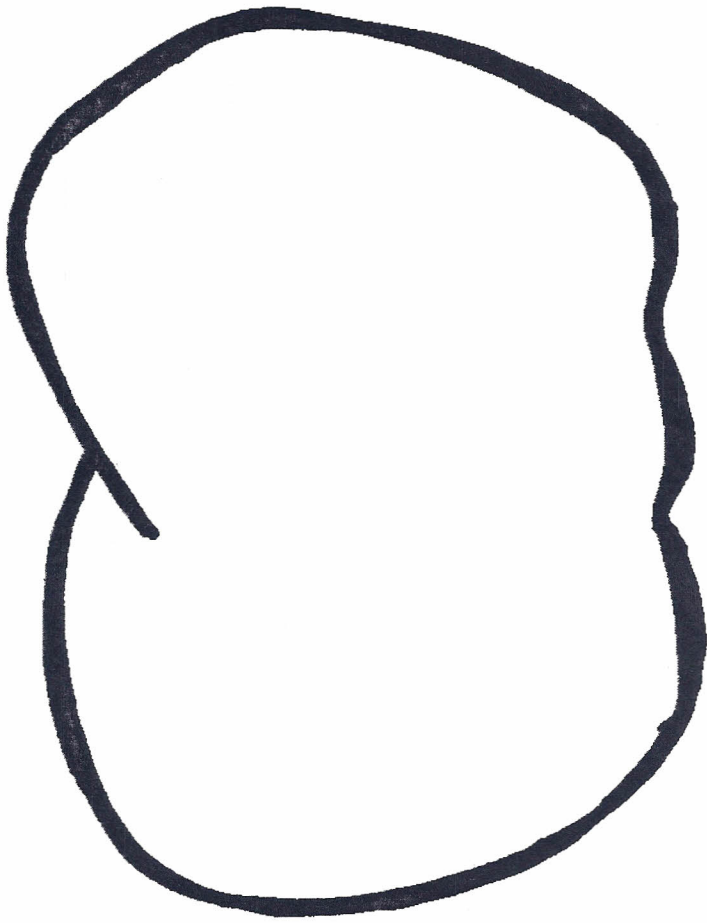
1. Learn about apples by teaching your apple unit.
2. Have the students make one of each item out of construction paper: seed, tree, blossom, bee and little green apple. Have the students punch a hole on each side of the items you made with construction paper, except the seed which only needs one side punched.
3. Have the students staple two red paper plates together around $\frac{2}{3}$ of the edges. They should leave the other $\frac{1}{3}$ open.
4. Have the students tape a piece of yarn to the inside of the stapled paper plates and extend the yarn out of the opening.
5. Have the students add a stem to the red paper plates to make them look like an apple. Have the students tie the green apple to the yarn coming out of the apple. Tie the bee to the little green apple. Tie the blossom to the bee. Tie the blossom to the tree. Tie the tree to the seed. These should all form a chain.
6. Have the students tuck the green apple, bee, blossom, tree and seed into the apple. Starting with the seed, they can slowly pull the shapes out of the apple and tell the story of how apples grow.











Top 5 Varieties of Apples

Red Delicious - bright to dark red and sweet-tasting
Golden delicious - golden to light yellow-green, keeps
its shape and flavor during baking
Gala - crisp, yellowish-white sweet flesh with red or
golden skin with red striping
Fuji - super sweet, super juicy, super crisp great
for snacking
Granny Smith - green, crisp, great for salads
and fresh eating

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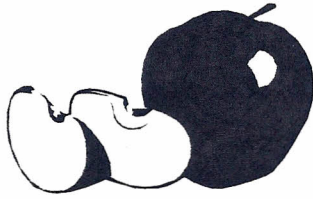
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A Slice of Soil

- Objectives:
1. To teach children that land suitable for growing food is precious
 2. To teach children that arable land is scarce.
 3. To emphasize to children that we need to take care of the arable land.



One of the most important natural resources on the earth's surface is soil. Many living things depend on it as a source of food, either directly or indirectly.

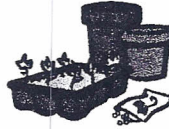
Our food producing land remains the same and yet world population continues to grow. Consequently, each person's food portion becomes smaller and smaller. It is the responsibility of each generation to use the soil wisely to ensure the future. You can conduct the following demonstration to show how little of the earth's surface is actually used for food production as compared to growing population

Materials: Large apple (Soft apples work better.)
Paring knife

- Procedures:
1. Cut the apple into four equal parts. Three parts represent the oceans of the world. The fourth part represents the land area.
 2. Cut the land section in half lengthwise. Now you have two $1/8^{\text{th}}$ pieces. One section represents land such as deserts, swamps, antarctic, arctic, and mountain regions. The other $1/8^{\text{th}}$ section represents land where man can live and may be able to grow food.
 3. Slice this $1/8^{\text{th}}$ section crosswise into four equal parts. Three of these $1/32^{\text{th}}$ sections represent the areas of the world which are too rocky, too wet, too hot, or where soils are too poor for production as well as areas developed by man.
 4. Carefully peel the last $1/32^{\text{th}}$ section. This small bit of peeling represents the soil of our earth on which mankind depends for food production.
 5. Share the juicy apple with a friend!



Grow Your Own Apple Tree



Objective: Students will make predictions and draw conclusions about conditions required for the germination of apple seeds.

Alabama COS - SCI: 1.1, 1.4, 1.5, 1.7, 2.1, 2.2, 2.4, 2.5, 2.7, 3.1, 3.4, 3.5, 3.26, 4.1, 4.4, 4.5, 5.1, 5.4, 5.5, 6.1, 6.5, 6.7

Materials: apple seeds - 4-6, gathered from lunch leftovers
(seeds should be rinsed and dried)
potting soil - 1 small bag
water
ziplock bag
permanent marker - black, fine-point
two 2-liter bottles - cut 4 inches off top and use bottom to create planters
access to a refrigerator

Procedure:

NOTE: The following can be done as a demonstration or in cooperative groups.

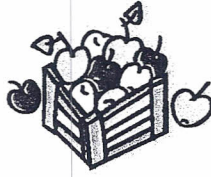
1. Show the rinsed & dried apple seeds to the class and ask what will happen if the seeds are planted.
2. Put 2-3 tablespoons of potting soil in a ziplock bag, add water to make the soil slightly damp. After placing 2-3 seeds in the soil, squeeze air out of the bag, close, and place in refrigerator. Save the rest of the seeds for later.

SIX WEEKS LATER

4. Remove bag from refrigerator and plant seeds in 2-liter planter (about $\frac{1}{4}$ inch deep). Label the container with the date and the letter R for "refrigerated." Add water to the container.
5. Add potting soil to the second 2-liter container and plant the seeds saved earlier. Label this container with the date and the letters NR for "not refrigerated." Add water to the container.
6. Place in a well-lighted spot and water as needed. Observe for signs of growth.

Anderson's Apple Farm

"Selling Only the Best for 40 Years"



Variety	Small Basket	Medium Basket	Bushel Basket
Golden Apple	\$2.25	\$4.50	\$9.85
Mac's Red Apple	\$3.65	\$4.80	\$10.50
Bob's Better Apple	\$4.15	\$5.15	\$10.95

Anderson's Specialties:

Apple Butter \$3.45/pt; \$5.85/quart

Dried Apple Rings \$2.75/pound

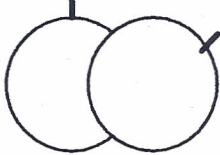
Apple Pies \$6.25 each

Use the price charts above to answer the following questions.

1. If Jennifer purchases a medium basket of Mac's Red Apples, a pint of apple butter, and an apple pie, what is the cost? _____
2. Susan buys two apple pies and a quart of apple butter. How much change does she receive if she pays with a \$20 bill? _____
3. Kirsten buys two medium baskets of Golden Apples, three small baskets of Bob's Better Apples, and a pint of apple butter. What is the total cost? _____
4. Miller buys three pounds of dried apple rings, two pints of apple butter, and 2 medium baskets of Mac's Reds. What is the total cost? How much change will he receive if he pays for his purchases with two twenty dollar bills? _____
5. Jan buys a bushel each of Golden and Bob's Better apples. Will \$20 cover the cost of her purchases? If not, how much more money does she need? _____
6. Jimmy buys five apple pies to sell at the school fair. If he sells them for \$12.50 each, how much profit has he made? _____

Writing Connection: Using the chart from Anderson's Apple Farm, write a math problem and its solution. Explain how you solved the problem.

Seed Packet Reading

<p style="text-align: right;">\$1.50</p> <p style="text-align: center;">Bob's Better Apples</p>  <p style="text-align: center;"><i>guaranteed delicious</i></p> <p style="text-align: center;">Prairieview, Wisconsin</p>	<p style="text-align: center;">packaged for 2006</p> <p>Bob's Better Apples are guaranteed to be the sweetest apples you have ever planted.</p> <p>Planting directions: Place seeds in container of damp soil and place in a cool place for six weeks. Transfer seeds to 5-gallon containers of soil by placing 3-4 seeds 1/4 inch deep in each container. Place in sun. Transfer seedlings to the ground when they are 4 feet tall. Apples prefer loam soil and do well in full sun. Trees mature and produce fruit the fourth year after planting.</p>
--	---

Directions: Use the seed packet shown above to find the answers to the following questions. Answer the questions in complete sentences.

1. How long does it take for the apple trees to mature and produce fruit? _____
2. Where were the seeds packaged? _____
3. What should you do before placing the seeds in 5-gallon containers of soil? _____
4. What variety of apples will the seeds produce? _____
5. What type of soil is best for the apples? How much sunlight do they require? _____
6. When should seedlings be transplanted? _____
7. How deep should the seeds be planted? _____
8. What year were the seeds packaged for? _____
9. How much do the seeds cost? _____

Writing Connection: Create an advertisement for a plant nursery that encourages gardeners to purchase seeds for spring planting.

An Apple Orchard of Your Own



Farmers use math each day. Solve the following problems to see what your income and expenses might be.

<p>1. You buy 25 acres of land for a new orchard. The land costs \$3,285/acre. What is the total cost of the land?</p>	<p>2. You plant 193 trees per acre on each of twelve acres in your orchard. How many trees do you plant?</p>
<p>3. You must buy apple trees to replace those lost in a winter storm. If you buy 18 Ginger Gold at \$15.95 each and 23 Cumberland Spur at \$14.95 each, what is the total cost of your purchase?</p>	<p>4. Starter tablets must be planted with each new tree and are sold in packages of 100 for \$15.95. If you plant three tablets with each of 75 new trees, how many tablets are needed? How much will it cost?</p>
<p>5. Fruit tree spray to protect apple trees from insects and diseases costs \$22.99 a quart. How much will it cost you to buy a gallon of the spray?</p>	<p>6. If each of your 225 Cumberland Spur apple trees produces twelve bushels of fruit, how many bushels will you harvest from the trees? If the apples are sold for \$4.99 a bushel, how much will you earn?</p>
<p>7. You harvest 2,952 apples during the first two days of September. If you package them in decorative boxes of 24 for sale on the Internet, how many boxes do you have?</p>	<p>8. Your orchard sells 234 boxes of apples for \$20 each and an additional 133 boxes for \$32 each. What is your income from the sales?</p>

The Farm Journal

Vol. XIV, Issue 26

Prairie View, Alabama

May 20, 2005

APPLES

FOR SALE. Apples - your choice of golden or delicious. \$4.50/bushel - You pick. Anderson's Orchard - Tuscaloosa (205) 333-6666.

FOR LEASE. 30 acre orchard. Monroe County. (205) 444-8888. Call for more information.

WANTED. Organic fertilizer for orchard. Shelby County. (205) 222-4444.

FOR SALE. Apples - Ginger Gold or Cumberland Spur. \$5.25/bushel. Autauga County. (334) 555-2222.

FOR SALE. Starter tablets for young trees. \$16.99/100(includes shipping). Call to order. (334) 111-2222.

FOR SALE. Protect your trees from insects and disease. Milton's Tree Spray. \$23.50/qt. Call to order. (205) 444-3333.

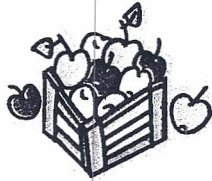
FOR SALE. Young apple trees. Ginger Gold - \$14.95, Golden Delicious - \$13.99. Discount in amounts over 50. Limestone County. (205) 666-7777.

Use the farm advertisements above to answer the following questions:

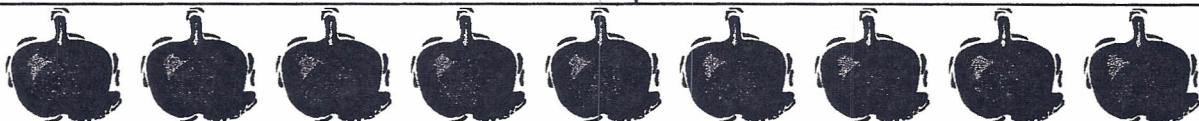
1. What types of apples are available for \$5.25/bushel? _____
2. What number should you call to order tree spray? _____
3. When and where was the journal published? _____
4. What types of apple trees are available for sale? _____
5. What is Milton's Tree Spray used for? _____
6. If you wanted to lease land for an apple orchard, what number would you call? _____
7. What is the cost for 300 starter tablets? _____
8. Where can you pick your own apples? _____
9. What type of fertilizer is available in Shelby County? _____
10. You want to plant Golden Delicious apple trees. How many must you buy to get a discount? _____
11. How much can you save by picking your own apples? _____
12. You want to add new trees to your orchard. In which county are young trees for sale? _____

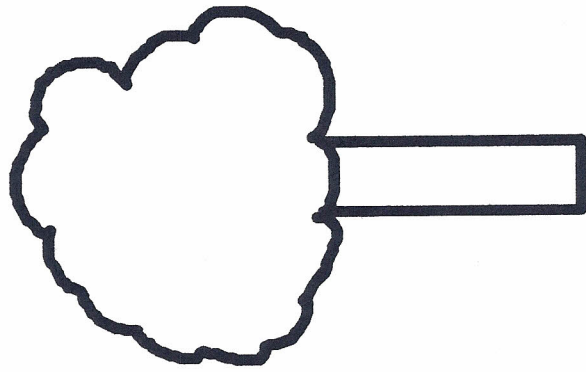
Writing Connection. Using the information provided above, write a question to share with the class.

Apple Math



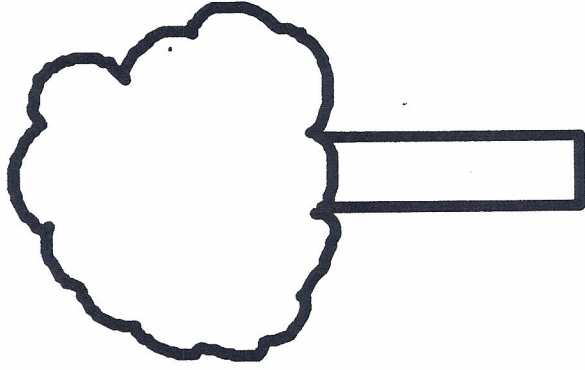
<p>Sam's mother bought 14 red apples and 12 green apples. How many apples did she buy in all?</p>	<p>Kira has three apple trees. Each tree has 9 apples. How many apples are on her trees?</p>
<p>Jimmy bought 4 apples for 35 cents each. How much did he spend on the apples?</p>	<p>Susan bought apple juice for 99 cents and two apples for 25 cents each. How much did she spend?</p>
<p>Mr. Bob bought five bags of apples. Each bag had six apples in it. How many apples did he buy all together?</p>	<p>Marcie is going to put 32 apples into bags to sell. If she puts 4 apples in each bag, how many bags can she fill?</p>
<p>Dakota's grandmother buys 22 apples. If she uses 14 to make pies, how many are left?</p>	<p>Fred picks 24 apples on Monday, 35 on Tuesday, and 42 on Wednesday. How many did he pick in all?</p>





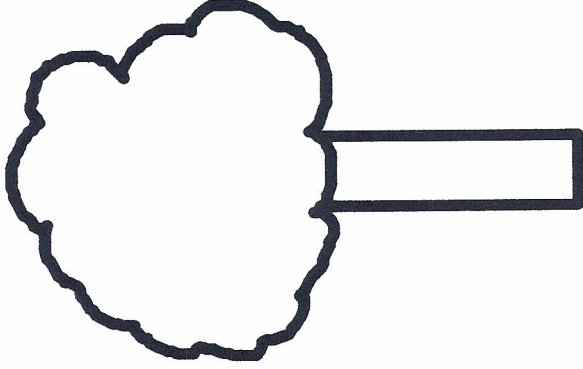
Spring

In spring, the tree gets new leaves. Apple blossoms turn into little green apples.



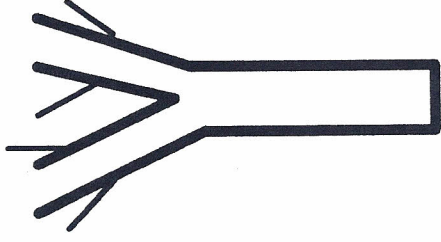
Summer

In summer, the green apples grown larger and larger.



Fall

In fall, the apples turn red. They are ready to pick and eat.



Winter

In winter, the tree loses its leaves. It's time for the tree to rest.

Applesauce Cinnamon Dough

This extremely fragrant dough has a very unique texture.

What you will need:

- $\frac{1}{2}$ cup cinnamon
- $\frac{1}{2}$ cup applesauce
- 1 plastic zip bag

Directions:

1. Pour cinnamon and applesauce into a zip bag.
2. Seal the zip bag and knead until the mixture turns to dough.
3. Allow your Applesauce Cinnamon Dough creations to air-dry for 12 hours or until hard.

Tips and Ideas

- Roll some dough out about $\frac{1}{4}$ -inch thick, then use cookie cutters to create fragrant tree ornaments, package ties and air fresheners. Make a small hole toward the top of the cut-out before the dough dries so that it can be hung with a string or ribbon.
- Applesauce Cinnamon Dough can also be molded by pushing it into candy molds.



Mmm...Mmm...Good!

Apple Nut Crunch

Ingredients:

13 small apples, peeled, seeded, and thinly sliced

1 1/3 cups peanut butter

1/3 cup honey

1/3 cup water

1 1/2 cups granola

Directions:

1. Stir honey into peanut butter, then add water and mix thoroughly.
2. Add apples and stir until apples are coated.
3. Spoon mixture into muffin cups lined with foil liners.
4. Sprinkle with granola.
5. Bake at 300 degrees for 30 minutes or until apples are tender.

Apple Cake Recipe

Ingredients:

2 cups self-rising flour

1 teaspoon cinnamon

3 eggs

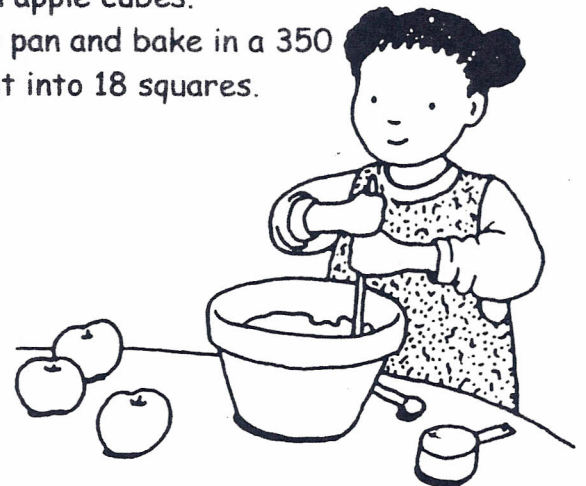
1 3/4 sugar

1 cup vegetable oil

4-5 peeled apples

Directions:

1. Give one group of children plastic knives and instruct them to cut the apples into small cubes.
2. Have another group measure the dry ingredients and mix them together in a small bowl.
3. Give a third group the eggs and sugar to beat together until well blended in a large bowl. Then add the oil and beat again.
4. Stir in the dry ingredients until moist. Fold in apple cubes.
5. Pour the batter into a greased 11"x15" baking pan and bake in a 350 degree oven for 45 minutes. Let cool, then cut into 18 squares.



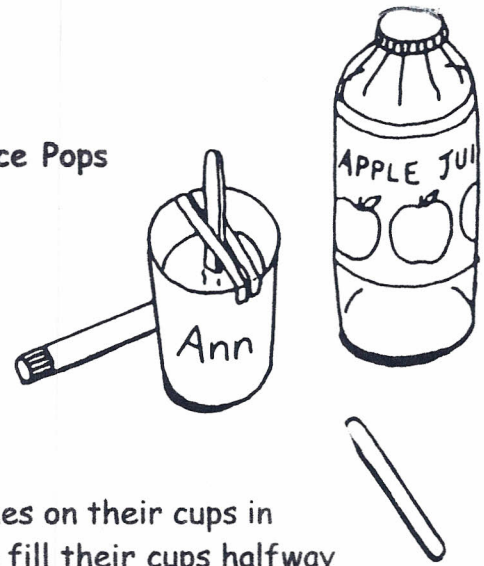
Frozen Apple Juice Ice Pops

Materials:

- permanent marker
- 6 oz. plastic cups
- apple juice
- craft sticks
- tape

Directions:

1. Show children how to write their names on their cups in permanent marker. Have the children fill their cups halfway with apple juice
2. Tell each child to insert a craft stick into the juice. Show each child how to use tape to hold the craft stick in place in the middle of the juice.
3. Before placing the cups in the freezer, discuss the properties of the juice as a liquid. After the juice is frozen, discuss the changes that have taken place.
4. Have the children remove the tape from the craft stick. Then show the children how to carefully squeeze the frozen pop from the bottom of the cup. Enjoy!



Math with Apples: Seed Estimations

This small group activity gets to the core of estimation! Ask each group to study a different apple and estimate how many seeds are inside. Then have each group share its estimate and explain the reasoning behind it. Next reveal that most apples, regardless of type or size, contain five to ten seeds. Ask students how this knowledge can be used to estimate the total number of seeds in the groups' apples. After some discussion, have the groups count off by fives and then by tens. Write both numbers on the chalkboard and lead students to conclude that the total seed count should be between these two numbers. Record an estimate from each group. Then give each child a napkin and a plastic knife. Slice each group's apples and distribute the slices among the members. Each child uses his plastic knife to remove any seeds from their slice(s). On the board record a seed count for each group's apple, then total these numbers for a class count. Give the group with the closest estimate a round of applause. Now it's time to eat those apples!

An Apple A Day Activities

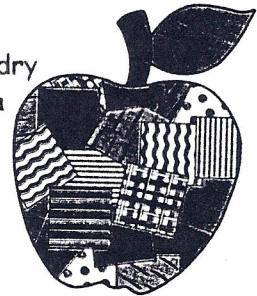


Apple Brainstorming:

Gather the children and tell them that the group will be brainstorming about apples. Explain that students should name all of the things they can think of that can be made with apples. As the children brainstorm and create the list, write the items. When they can think of no more items, have them help you count the number of item in their list. Having a sample to taste of the foods would be a great snack.

Pretty Patchwork Apples

Johnny Appleseed would have to agree, these pretty patchwork apples are definitely the pick of the crop! Start with a large, tagboard apple cutout and a supply of two-inch fabric squares. Using a paintbrush, brush a thin coating of glue on the back of a fabric square; then press the square of fabric onto the apple cutout. Continue in this manner, slightly overlapping the fabric squares, until the entire apple cutout is covered. Let the project dry overnight; then trim away any fabric that extends beyond the tagboard cutout. Attach a brown stem and a green leaf to complete the project.



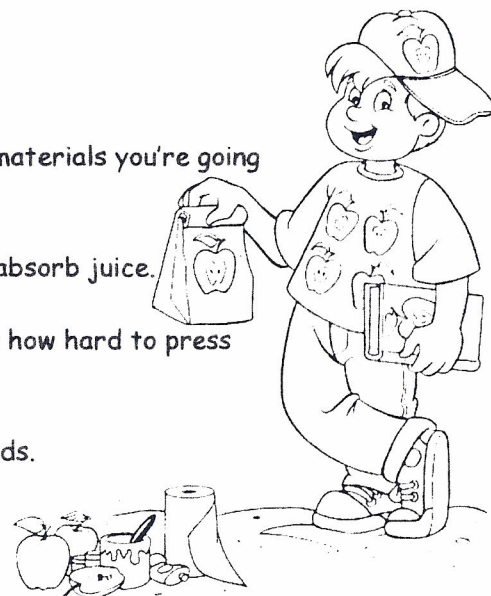
How to make AppleStamps

Here's what you need:

- Apples
- Sharp knife
- 3 small paint brushes
- Red, green and black paint (for fabric or paper, depending on materials you're going to stamp)

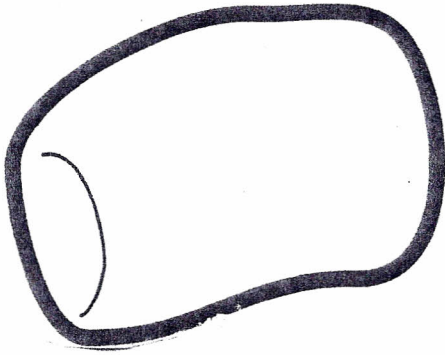
Here's what you do:

1. Slice the apple in half. Blot out side on paper towel to absorb juice.
2. Apply red paint to apple's cut side with brush.
3. Test AppleStamp on scrap paper or fabric to determine how hard to press and see how much paint to use.
4. Now press your AppleStamp onto the real surface.
5. To finish, paint on green leaves and black stem and seeds.
6. Let dry completely.

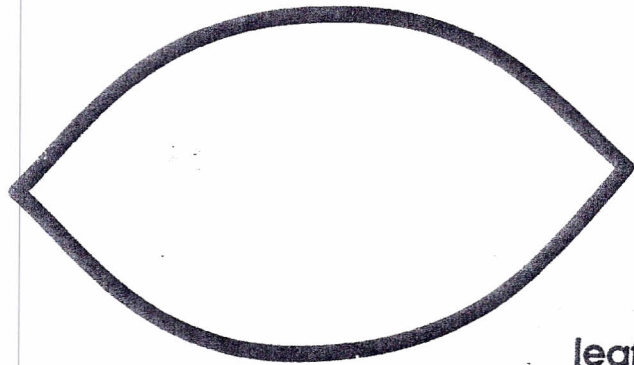


Pretty Patchwork Apple Pattern

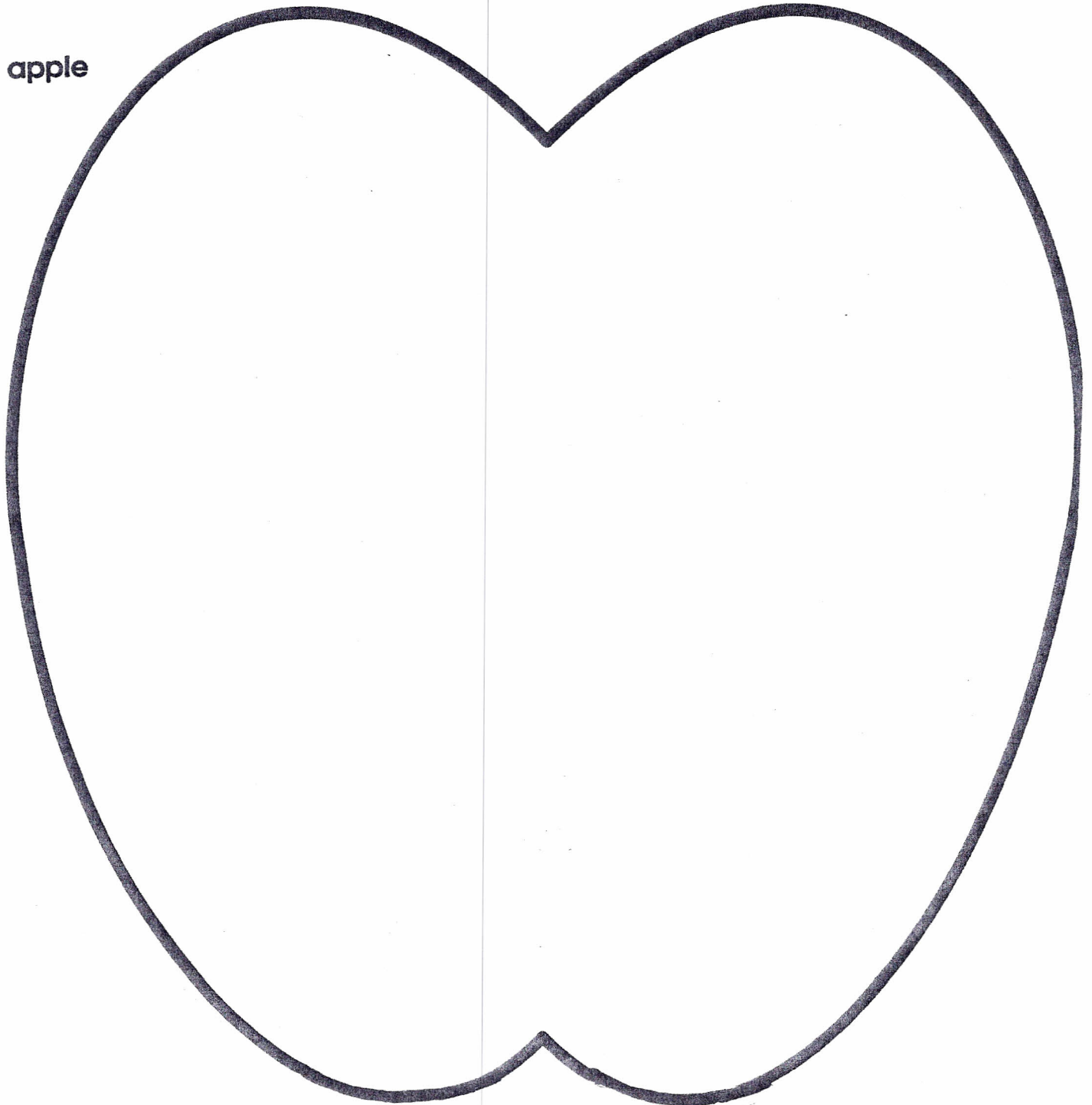
stem



leaf



apple



The Little Red House With No Windows and No Doors But With a Star Inside

Flannel Board Story (L.)

Characters: a boy a girl

mother father

wise grandma apple tree

the wind

Boy: Mom, I'm tired of playing with my toys and I can't find anything to do.

Mother: You know, one time I heard about a little red house with no windows and no doors,

but with a star inside. Why don't you go out and see if you can find it?

So the boy went over to his neighbor's house and he asked the girl who lived there if she had

ever heard of a little red house with no windows and no doors, but with a star inside.

Girl: I've never heard of such a thing! But come along and ask my father. He knows about a

lot of things.

Boy: Mr. Henry, I'm looking for a little red house with no windows and no doors, but with a

star inside. Can you tell me where I can find it?

Mr. Henry scratched his head.

Mr. Henry: I've never heard of such a thing. But you know what you can do? Go over to Grandma's. She's very old and very wise and she might be able to help you.

So the boy trotted over to Grandma's house. She was there sitting on the porch watching the

world go by..

Boy: Grandma Henry, I'm looking for a little red house with no doors and no windows, but with a star inside. Do you know where I can find it?

Grandma Henry: Well, I don't know that I've ever heard of such a thing. But I do know that

the wind has been around a long time and has seen just about everything. Why don't you go up the hill where the wind blows the best. Maybe it will tell you the answer to your riddle.

The boy trudged up the steep hill. It was a hot day, so he plopped himself down in the shade of

the old tree that stood on the top of the hill and he struggled to hear an answer in the whoosh of

the wind. And as he sat listening, an apple fell from the tree and bounced off his head.

The boy

picked up the apple.

Boy: This looks like a little red house. There are no doors in it ... and no windows! But where

is the star?

The boy rushed down the hill and into his house.

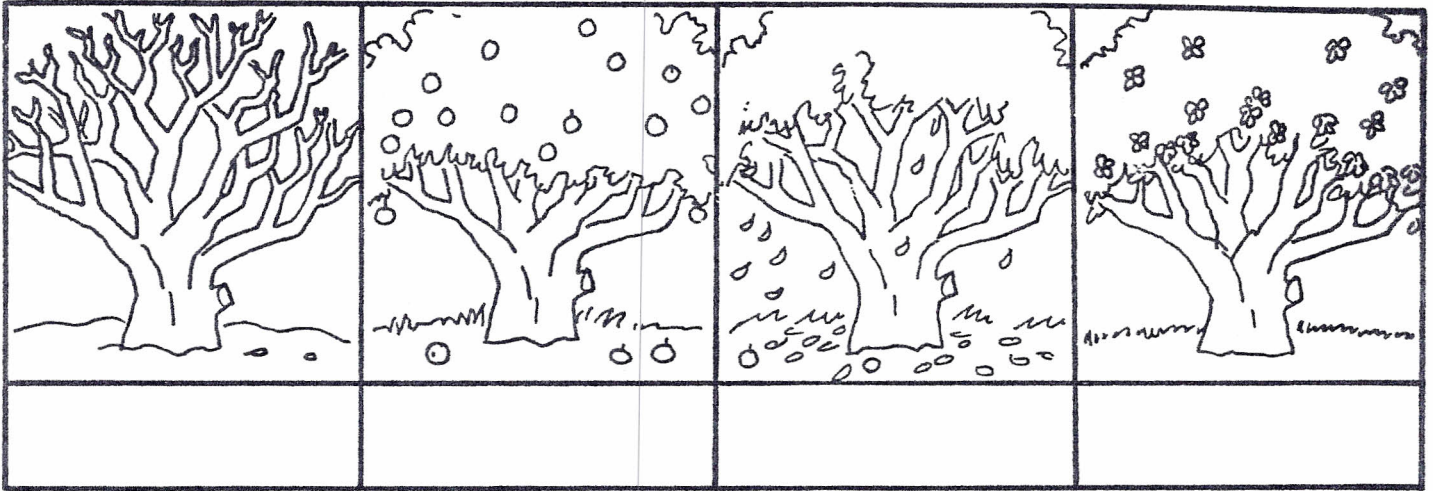
Boy: Mom! Mom! This apple looks like a little red house with no doors and no windows, but I

can't find a star.

Mother: Look! When I cut it in half, what do you see?

(Teacher takes out a real apple and cuts it in half horizontally to reveal the star inside.)

Someone You Should Know



John Chapman loved apple trees.
 He wanted to share the apples.
 John planted apple trees wherever he went.
 People called him Johnny Appleseed.

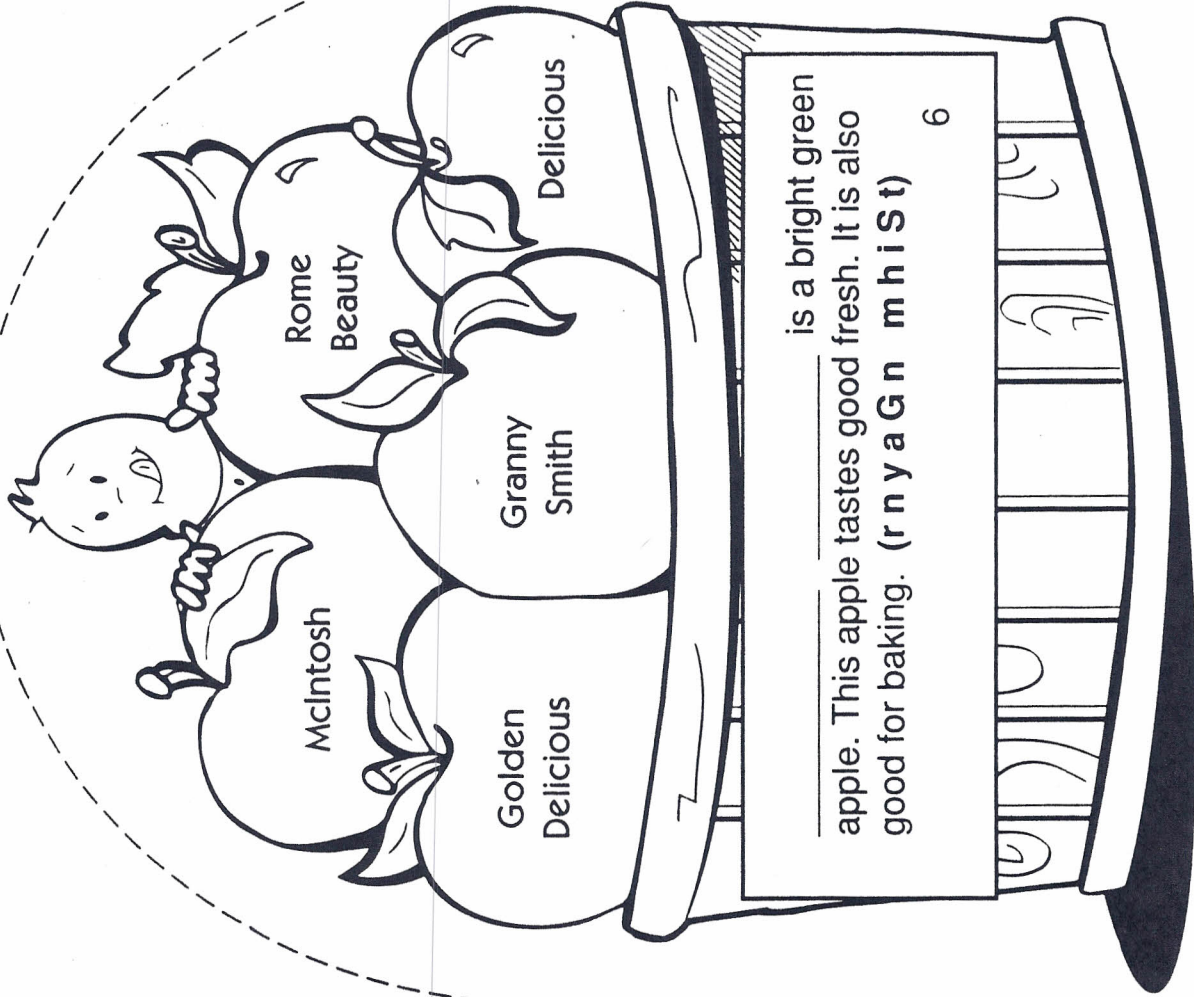
Cut and paste the name of the season under each apple tree.

Spring	Summer	Fall	Winter
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The Pick of the Crop

Booklet project

Duplicate on white construction paper. Instruct each child to write their name on booklet page 1 and the name of an apple on each remaining booklet page. To discover each apple name, the student refers to the apple names in the artwork as they unscramble the letters in parentheses. Next read the sentence and color the corresponding apple as described. To assemble booklet, cut on the dotted lines. Then staple the pages to the large cutout in order.



A Book of Apples

by _____ 1

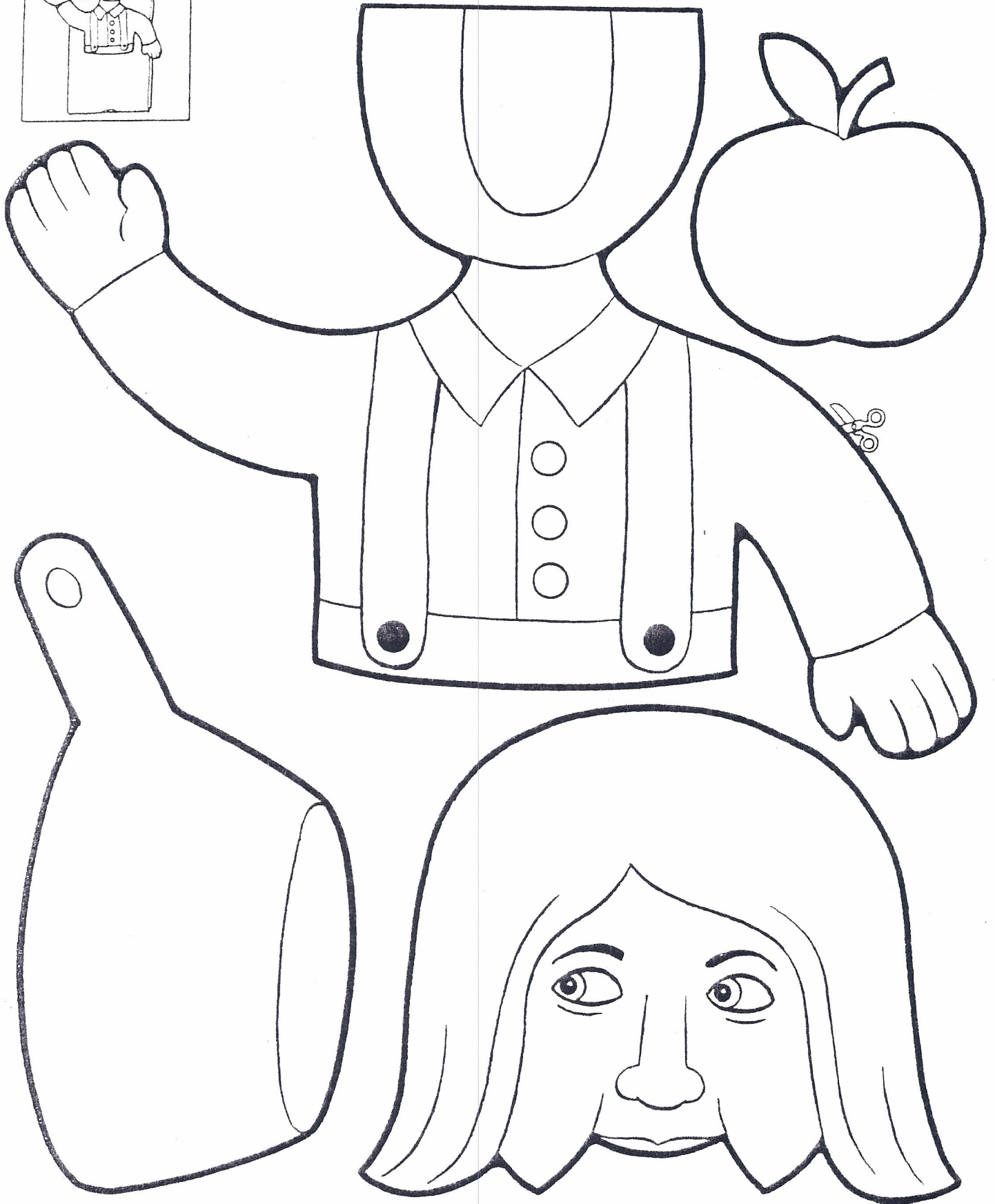
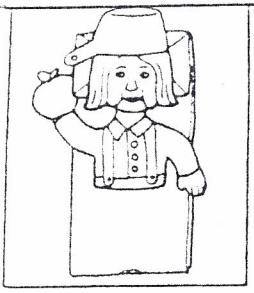
_____ is a dark red apple. It is sweet and crisp. This apple tastes good fresh. (s e l c d i i o u) 2

_____ is a red apple with yellow or green marks on it. This apple is good to use when baking. (o m e R u y B t a e) 3

_____ is a bright red apple. It tastes good fresh. (c i M t h o s n) 4

_____ is a golden yellow apple. It tastes good fresh. It is good for baking, too. (d G l o n e o l c D s e i i u) 5

Johnny Appleseed



Johnny Appleseed Song

(sung to "Do You Know The Muffin Man?")

Do you know the apple man,
The apple man, the apple man?
Do you know the apple man?
He planted apple seeds?

He wore a pot upon his head,
Upon his head, upon his head.
He wore a pot upon his head.
His name was Johnny Appleseed.

John Chapman was his real name,
His real name, his real name.
John Chapman was his real name,
But, we call him Johnny Appleseed!





Now Presenting...

John Chapman

This is the story of an unusual man who touched the lives of many pioneers in the Midwest.

Characters

Narrator..... _____

Nathan (a pioneer boy) _____

Elizabeth (a pioneer girl) _____

John Chapman..... _____

Pioneer Mother _____



John Chapman

..... Characters

Narrator

John Chapman

Nathan

Pioneer Mother

Elizabeth

.....

Narrator: John Chapman was born in Leominster, Massachusetts, in the year 1774. He grew up to become a very special man. His dream was to plant apple trees all over the Midwest. He wanted pioneers to have apple trees for food when they settled the new lands. Let us take up our story in the year 1802. John Chapman, now 28 years old, is busy planting apple seedlings in the state of Ohio.

Elizabeth: *(excitedly; out of breath)* Nathan! Nathan! Come with me! I just saw the strangest thing!

Nathan: What is it?

Elizabeth: It's a man with a pan on his head! He's down by the river.

Narrator: The children run down to the river to find the man.

Elizabeth: Look! There he is!

Nathan: Hello, sir. I am Nathan Smith. My family is moving west to Illinois. Our wagons are right over that hill.



John: Hello, Nathan. My name is John Chapman, but most people call me Johnny Applesseed.

Nathan: Why do they call you that?

John: Because I spend so much time planting apple trees.

Elizabeth: Do you live here?

John: No, I'm just here planting apple trees. I want people to have apples for food when they build their homes here. As soon as I plant these last trees, I will be on my way.

Elizabeth: (*giggling*) Why are you wearing a pan on your head?

John: This is my cooking pan, and it fits just right.

Elizabeth: Did you lose your shoes in the river?

John: I don't much like shoes. Mostly, I like to go barefoot.

Nathan: May we help you plant these seedlings?

John: That would be wonderful. Let me show you how.

Elizabeth: Mama says we'll have to plant our own apple trees when we reach Illinois. It will be good to learn now how to do it. We will have to plant 50 trees on our new farm. That's what the law says.



John: Then it's a good thing that we've met here today! I hope some day to see apple blossoms all across this land. I have several nurseries where I raise these little apple trees. That is where these seedlings came from.

Nathan: *(out of breath)* It's mighty hard work digging this hole!

Elizabeth: But it would be easy work to eat an apple pie made from the apples that will grow on this tree.

Nathan: You sure must like apples a lot, Mr. Chapman.

John: I surely do! And I like berries and roots, too. That's what I eat most of the time. I live off the land. And this glorious land certainly does offer me plenty!

Elizabeth: And there will be even more by the time you finish planting these trees! People will certainly be thankful to you.

Mother: *(yelling)* Nathan! Elizabeth! Where are you?

Nathan: We're over here, Mama. We're learning to plant apple trees.

Mother: So I see . . . You must be the man we've been hearing about everywhere we go. Are you the gentleman who plants apple trees all over the countryside?



John: Few people have called me a gentleman, ma'am. Most people just call me Johnny Appleseed. And I guess I've just about finished up my work here. Why don't you take these last seedlings to plant at your new home? And perhaps we'll meet once again in Illinois. I'm headed that way.

Elizabeth and Nathan: Good-bye, Johnny Appleseed! Thank you! Until we meet again in Illinois!

Narrator: And so John Chapman moved on westward, planting apple trees and seeds as he went. He planted apple orchards in Pennsylvania, Ohio, Kentucky, Illinois, and Indiana. He also started many apple tree nurseries. He was a man with a wonderful dream, and he worked hard to make it come true!

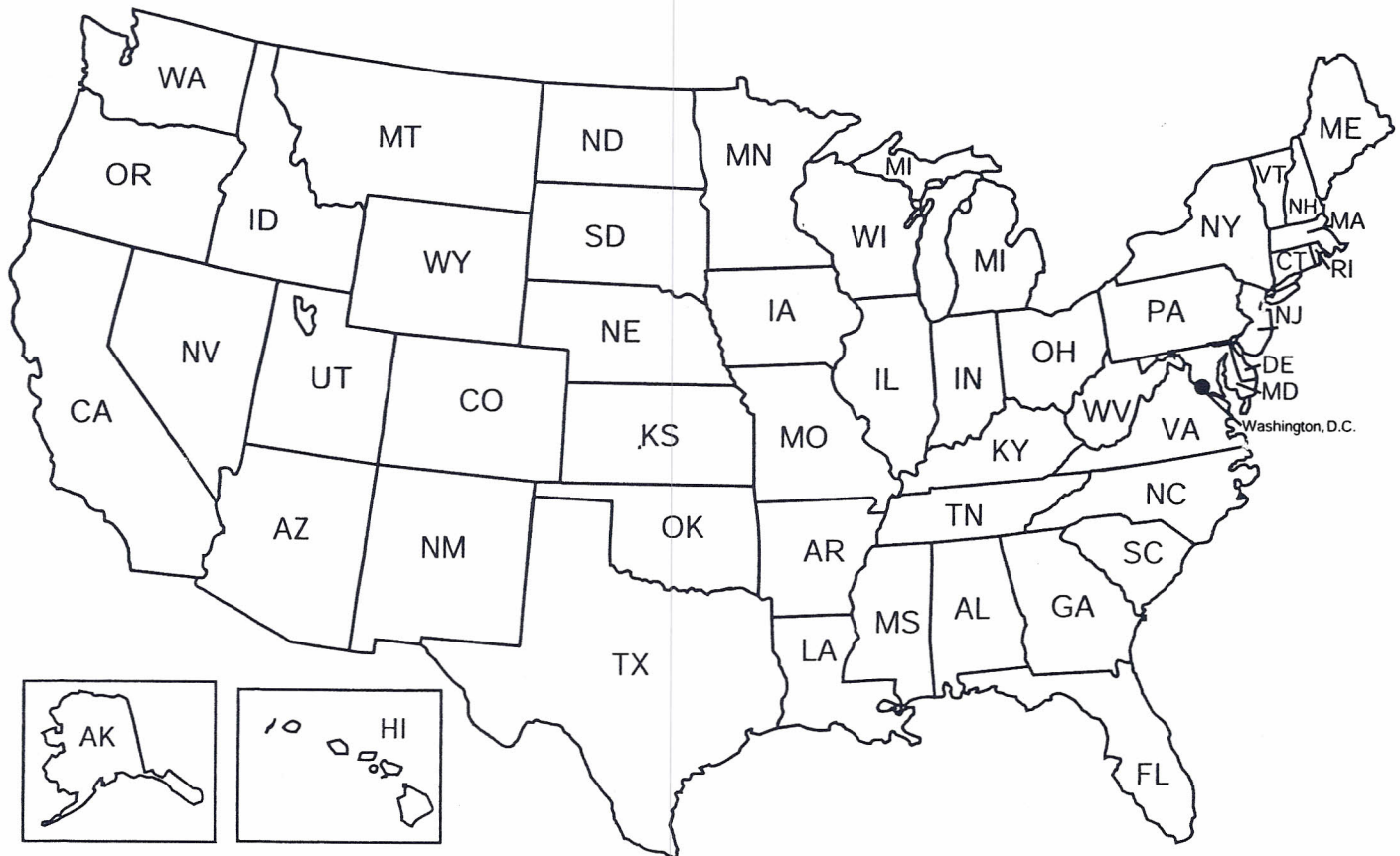
Name _____



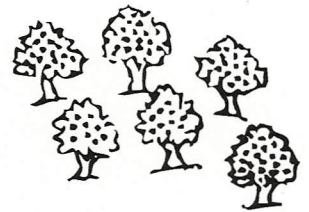
John Chapman Travels West

John Chapman planted thousands of apple seeds and seedlings. The script lists the six states where he planted apple orchards.

- Find the states where John Chapman planted apple trees. Color these states red.
- Find the state where you live. Color it green.
- Make a blue dot in the state where you were born.
- Color the states you have visited purple.

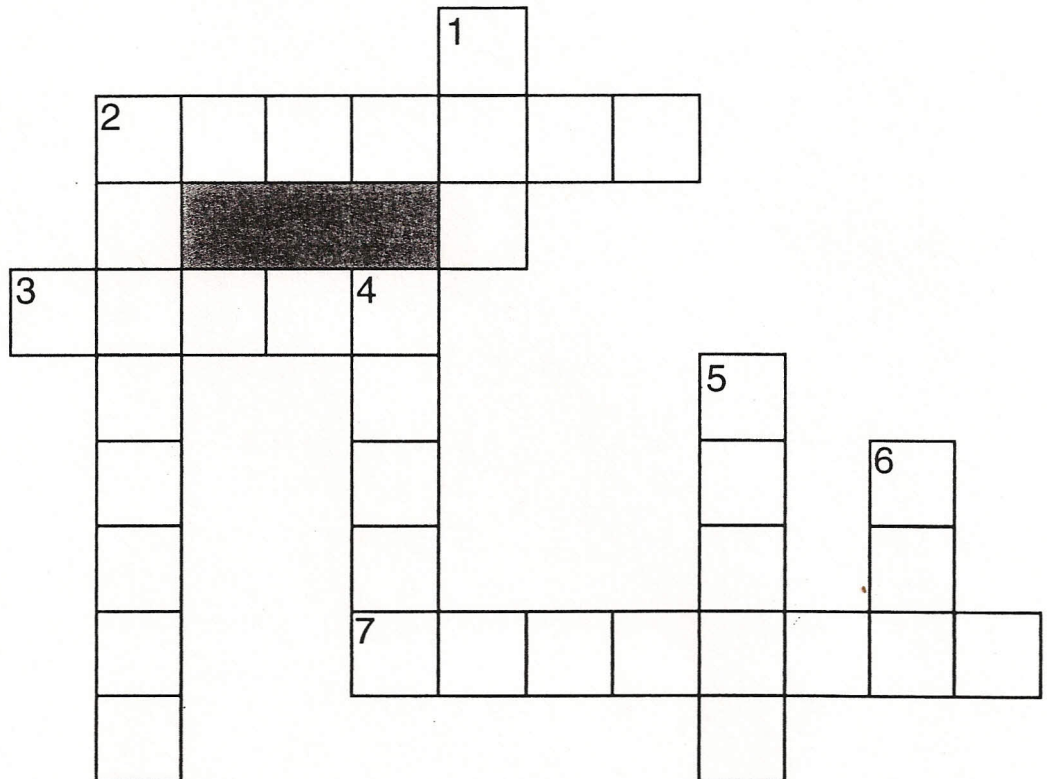


Name _____



Johnny Appleseed

Word Box
apple
pie
berries
roots
blossoms
seedling
pan
shoes



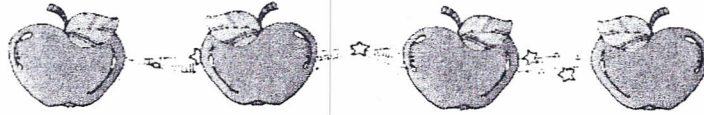
Across

2. John Chapman liked to eat _____.
3. He also liked to eat _____.
7. A young, small apple tree is called a _____.

Down

1. Elizabeth liked to eat apple _____.
2. John Chapman wanted to see apple _____ all across the land.
4. John Chapman did not like to wear _____.
5. John Chapman spent most of his time planting _____ seeds.
6. Sometimes John Chapman wore a _____ on his head.

Apple-Dapple Websites



1. All About Apples www.allaboutapples.com
2. National Apple Museum www.nationalapplemuseum.com
3. Apple Head Dolls www.motherearthnews.com/Homesteading-and-Self-Reliance/1980-07-01/Make-Applehead-Dolls.aspx
4. Apple Barn (Good Graphics) www.applebarncidermill.com
5. **Washington Apples www.bestapples.com
6. Wisconsin Apple Grower's Association www.waga.org
7. New York Apple Country www.nyapplecountry.com
8. Tom's of Maine/Apple a Day www.tomsofmaine.com/apple/about/default.asp
9. Article on Heirloom Apples www.smithsonianmagazine.com/issues/2002/november/apples.php
10. The Apple Journal www.applejournal.com
11.  www.dole5aday.com
12. Ohio Apples Website www.ohioapples.org
13. Breast Cancer Study www.applesprevent.com/breastcancer.htm
14. Vermont Apples www.vermontapples.org
15. Apple Products Research and Education Council www.appleproducts.org