

February - Lesson Plan Grades K-I

MY PYRAMID



Objectives

Identify fruits and vegetables

Supplies Needed

February

Pick a **better** snack™ &
ACT bingo card

MyPyramid Poster

Copies of food pictures
included with this lesson

Note to teachers

In the fall lessons, Pick a **better** snack the Color Way was the key message. For the months of December through February the focus will be on Pick a **better** snack™ & **ACT** for the fruit, vegetable, and physical activity lessons. In addition there will be one lesson each month on MyPyramid for Kids. This lesson will allow children to explore the new colorful kid pyramid that was released in the fall of 2005.

USDA's Team Nutrition created classroom lessons to help children explore MyPyramid for Kids. They are available on the web at www.mypyramid.gov/kids. A classroom kit to accompany the lessons can be ordered. The MyPyramid lessons are to be used in the following order:

Level 1 Lessons (grades 1 and 2)

Introduction

Lesson 1 (use in December)

Lesson 2 (use in January)

Lesson 3 (use in February)

Level 2 Lessons (grades 3 and 4)

Introduction

Lesson 1 (use in December)

Lesson 2 (use in January)

Lesson 3 (use in February)

Level 3 Lessons (grades 5 and 6)

Introduction

Lesson 1 (use in December)

Lesson 2 (use in January)

Lesson 3 (use in February)

Each lesson provides curriculum connections and descriptions of student skills. There are lunchroom links, suggestions for home connections and ready-to-print activity sheets.

Teachers can tour the adult version of MyPyramid.
www.mypyramid.gov.

Background

For February, the fruit and vegetable categories of MyPyramid are highlighted.

The green stripe represents the vegetable group. There are five subgroups of vegetables (dark green, orange, dried beans and peas, starchy, and other.) To vary our veggies, we should eat more dark-green vegetables like broccoli, spinach, and other dark leafy greens. We also need to eat more orange vegetables like carrots and sweet potatoes.

Other foods included in the vegetable category include dry beans and peas, starchy vegetables like potatoes, and all “other” vegetables such as tomatoes, mushrooms, iceberg lettuce, bell peppers, etc. French fries, which make up one-fourth of all vegetables eaten by elementary school students, are not a healthy choice. They are high in fat and calories. A medium order of fries has 460 calories, more than one-fourth the total daily calorie intake appropriate for most 8- and 9-year olds. A medium baked potato, however, has only about 100 calories.

The red stripe symbolizes the fruit category. We should eat a variety of fruits. Fresh, canned, dried fruit, and fruit juice count toward the 1 ½ cups of fruit youth need in a day. Fruit juice should be used in limited quantities.

Eating fruits and vegetables can help students be healthy. Fruits and vegetables are excellent sources of many nutrients, including vitamins A and C, potassium, and dietary fiber. Most fruits and vegetables are naturally low in fat and calories and do not contain cholesterol. Vitamin A keeps eyes and skin healthy and helps to protect against infections. Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Fiber keeps food moving through the digestive tract.

The child climbing the steps on the side of pyramid encourages physical activity. Being active every day includes a variety of activities like running, walking the dog, playing, swimming or biking. Take one step at a time to be more active. For example, play outside just a few minutes longer after school. Children should be active for 60 minutes on most, preferably all, days of the week.

Web Site Resources

www.idph.state.ia.us/pickabettersnack
www.fruitsandveggiesmorematters.org
www.mypyramid.gov/kids/index.html
<http://teamnutrition.usda.gov/resources/mypyramidclassroom.html> Go to level 1, lesson 3

Do the Activity:
Kindergarten & 1st Grade

Place MyPyramid poster in front of the class. Use food models, or cut out individual food pictures. Ask students to identify the correct food group and color stripe for that food. Include several examples of fruits and vegetables to emphasize variety.

1st Grade

Challenge the students to name as many fruits and vegetables as they can in one minute. Write these on the board.

Talk It Over:
Kindergarten

Pick a **better** snack™ focuses on two food groups. What are they? (*fruits and vegetables*)

Hide the poster. Can the students remember the correct color stripe for fruits and vegetables? (*vegetables-green, fruits-red*)

1st Grade

Ask the students to look at the list of fruits and vegetables they just developed. Are there any fruits or vegetables they have never tried? Would they like to try them?

Apply:

Read the school lunch menu to the students. Ask the students to identify the fruits and vegetables.

Distribute February Pick a **better** snack™ & **ACT** bingo cards. Point out that the snacks on the February bingo cards are apples, bananas, potatoes, and mushrooms. Remind the students the bingo cards show dried and frozen fruit and canned vegetables.

Review with the students that when they eat one of these foods, or do one of the activities in the pictures, they can put an "X" through it.

On the back of the Pick a **better** snack™ & **ACT** bingo card for each month, there is information for parents and/or grandparents. Encourage students to take the bingo card home and ask their family members to pick out a snack idea to try at home. Remind the students that the back of the card has information about snacks for February.

Extended Activities



**Art, Music
& PE**

Place paper plates and crayons in a learning center. Encourage the students to draw a meal that includes foods from all of the food groups. Construction paper cut into the shape of a glass will need to be available so that the students can include a drink.



**Language Arts
& Reading**

Read Stone Soup by William Furstenberg or Marcia Brown. (Team Nutrition Food & Me p.17) Encourage the students to see the connection between eating foods from the different food groups and the ingredients in the soup.



Math

Have students cut out pictures of vegetables from old magazines or seed catalogues. Have the students sort the vegetables by color, shape, or other attributes. Have the students glue the pictures in each group together on a paper. Display the papers and invite the children to describe how they sorted their vegetables. (Team Nutrition Food & Me p.17)



**Science &
Health**

Place pictures of food and grocery bags in a learning center. Cut the bags to 4" high and label them with the food groups' names mounted on construction paper corresponding to the color of the group on MyPyramid. Model thinking about the food and deciding which food group bag it should be placed. *(If you want the activity to be self checking, a small colored dot could be placed on the back of the food picture to correspond to the color of the food group.)*

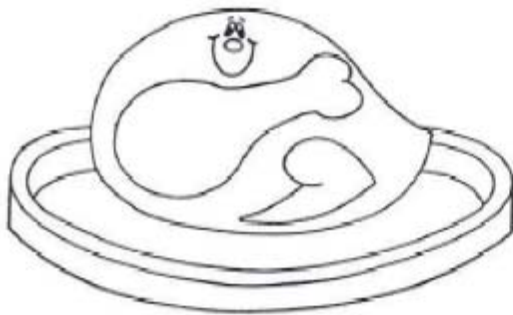


Social Studies

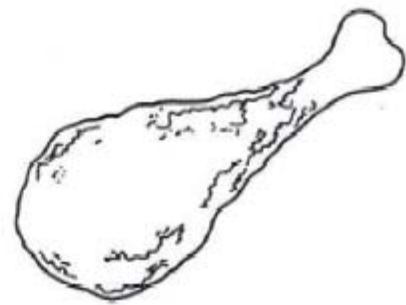
Encourage the students to take their Bingo cards with them grocery shopping to see if they can find bananas, potatoes, mushrooms, and apples.



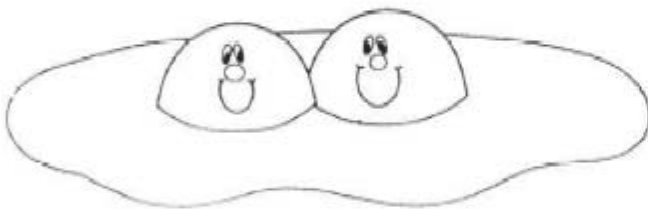
Cheese



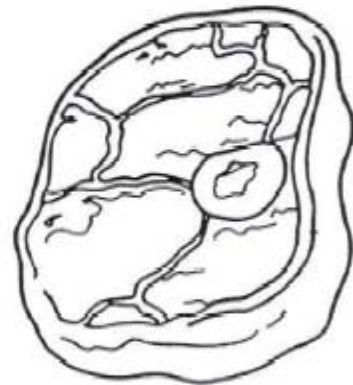
Turkey



Chicken



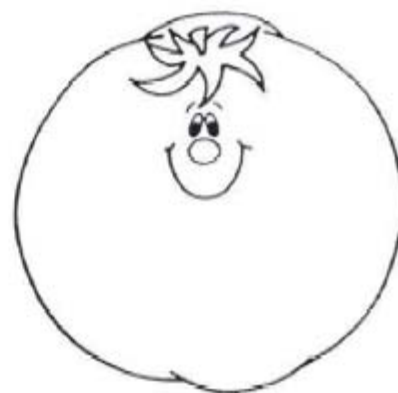
Eggs



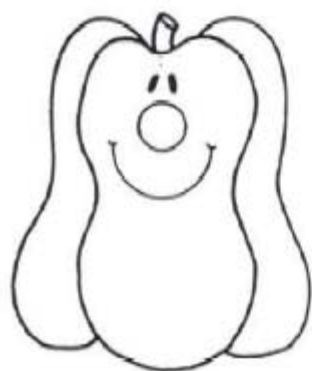
Steak



Corn



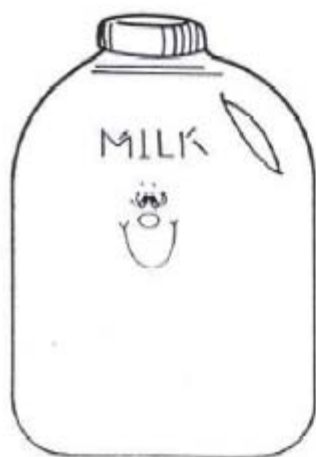
Tomato



Green Pepper



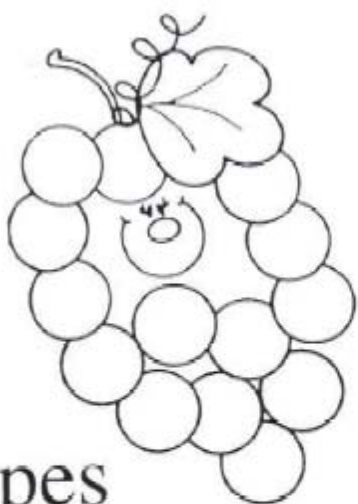
Broccoli



Milk



Ice Cream



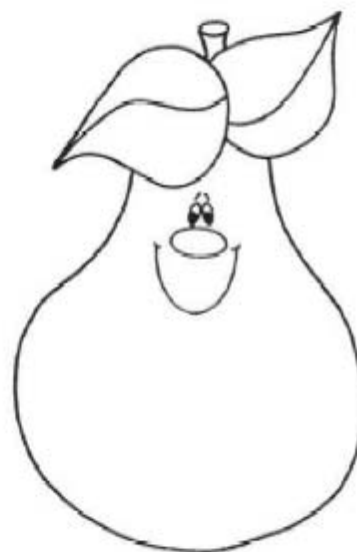
Grapes



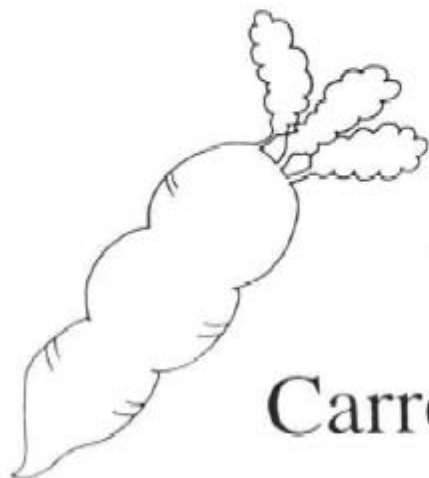
Strawberries



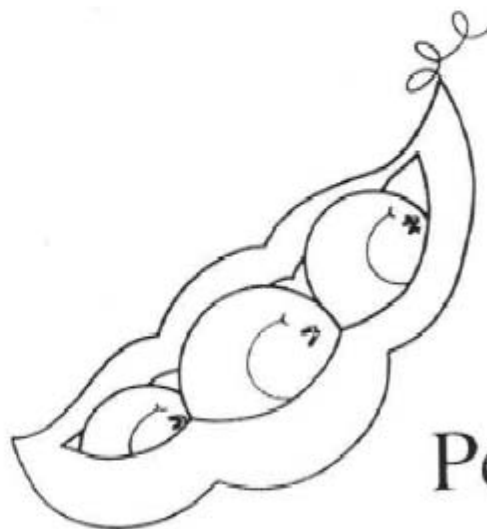
Pineapple



Pear



Carrot



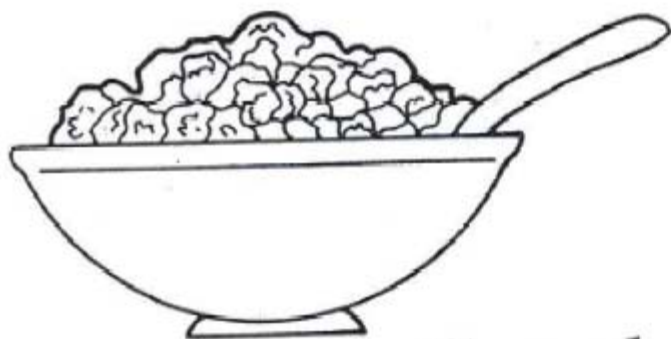
Peas



Pancakes



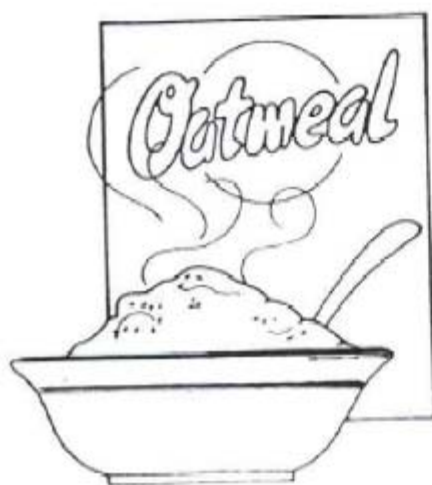
Crackers



Cereal



Bread



Banana



February - Lesson Plan Grades K-I

FOCUS ON FRUITS



Objectives

Identify apples and bananas by shape, color, and special characteristics.

Learn why apples and bananas are good snacks to eat.

Supplies Needed

February

Pick a **better snack™** & **ACT** bingo card

Apples (2-3 varieties)

Bananas

Knife

1st Grade: Banana Chronology worksheet

Taste Opportunities

Featured Fruits:

Apples

Bananas

Background

Apples and bananas are two of the most popular fruits eaten around the world.

Apples

Most apples are red, but they can also be speckled, red-yellow, yellow, or green. They are a round fruit with a skin that you can bite into and eat. The inside part of the apple is white and juicy. If you slice an apple from top to bottom, you will find a star shape formed by seeds. Apples come in more than 7500 varieties. The most popular variety in the United States is Red Delicious. Here are a list of others:

Red – Jonathon, McIntosh, and Delicious

Yellow – Golden Delicious

Green – Granny Smith

Speckled with Red and Yellow – Braeburn, Fuji

Apples are grown on apple trees in 36 states in the U.S., with Michigan and Washington growing the most. China produces the most apples in the world, but France and Canada also grow a lot.

Apple trees live year after year. In the spring, the apple tree blooms with white blossoms that are very fragrant. After the blossom dies, an apple grows in its place. Apples are members of the rose family.

Most apples are eaten raw, but they can be used in many recipes like apple pie and applesauce. Apples are very good for us to each because they contain fiber, which helps move food through our bodies.

Bananas

Bananas may have been the first fruit farmed by man. They probably originated in Malaysia, but came to the Caribbean by Spanish settlers in 1516, where most are grown today. The Africans are credited with giving the banana its permanent name.

Bananas are a long, curved-shaped, yellow fruit. Bananas are harvested when they are green. The peel is yellow when we buy it, but we don't eat the peel. We take off the peel and eat the creamy, soft, white fruit inside. Bananas are nutritious

to eat because they contain fiber, and small amounts of vitamins and potassium. One large banana (about 8 inches long) is equal to 1 cup of fruit.

Bananas do not grow on trees. They grow on very large plants with very big, green leaves. The plants do not have a trunk or branches. The plants can grow up to 20 feet tall.

The banana plant grows from bulb called a "rhizome." It contains many buds, similar to the eyes of a potato. A leafy stem grows from each bud. Each stem grows "hands" of tiny flowers. These flowers become individual bananas, called "fingers." Each row has about 15 to 30 fingers that make up a "hand." The stem develops 7 to 10 hands of bananas.

When the plant is 9 months old, the stem weighs up to 100 pounds (45 kilograms) or more and is ready to harvest. After harvesting, the mother plant is cut back to 2 to 5 feet (61 to 152 centimeters) high. Meanwhile, a daughter plant from the same rhizome has sprouted and grown to about one-third the size of the mother plant and the whole process starts again. It's possible for plants to grow from the same rhizome for over 100 years!

People in hot, tropical cultures use the large leaves to build roofs for houses and use them to make into mats and bags. Bananas grow in countries where it is very hot and humid and where it rains a lot like Brazil and Ecuador. Banana plants need tropical sun, rich soil, and a lot of water to grow effectively. Unless you live in Hawaii, you have to buy bananas from other countries and have them shipped.

Bananas are the most popular fruit in the United States. Americans eat an average of 28 pounds of bananas per person, per year. That equals 112 bananas per person per year.

You can ripen green bananas more quickly by placing them in a paper bag. Store ripe bananas in the refrigerator for up to two weeks. The skin will turn brown, but the fruit will stay white.

Bananas become sweeter as they ripen. Dip banana slices in lemon juice or orange juice to prevent browning.

Web Site Resources

www.idph.state.ia.us/pickabetersnack
www.fruitsandveggiesmorematters.org
www.mypyramid.com/kids/index.html

**Do the Activity:
Kindergarten**

Sing the songs: "Ten Little Monkeys" (to the tune: "Mama's Little Baby Loves Shortening, Shortening), Create new verses based on different ways to eat a banana.

10 little monkeys waiting for a snack,
One gets a banana out of mama's pack,
The monkey puts the peeling into a sack,
And says,"Bananas are an easy and great tasting snack."

10 little monkeys waiting for a shake,
One finished his drink and said, "Wow, that was great!"
Mom makes another while the monkeys wait,
....."bananas are great for making shakes".

First Grade

Discuss the stages of banana development from the bud on the plant to eating a ripe banana.

1. A banana plant starts from a bulb which contains many buds, similar to the eyes of a potato.
2. A leafy stem grows from each bud.
3. Each stem grows "hands" of tiny flowers.
4. Flowers become bananas, called "fingers."
5. Banana "hands" are cut from the plant and packed in boxes.
6. Boxes are shipped to the grocery store.
7. Bananas get ripe and ready for you to eat.

The sentences are listed in chronological order at the end of this lesson. Cut the sentences into strips. Have the students put them in chronological order.

**Talk It Over:
Kindergarten**

What did the song tell us about the bananas? (*quick, easy and tasty snack*)

How can you tell the difference between an apple and a banana?

Shape: an apple is round; a banana is long

Taste: an apple tastes sweet, tart, crunchy, sour, and Juicy. A banana tastes sweet, soft, and mushy.

Smell: each fruit has a distinct smell that we can identify even with our eyes closed.

1st Grade

Apples can be found in other forms than then fresh. What are some other forms? (*applesauce, dried apples*)

What other form can you find bananas? (*dried banana chips*)

Raise your hand if you like apples. Why do you like apples?

How many of you like bananas? Why do you like bananas?

Apply:

When might you eat an apple? (*for breakfast, lunch, snack, in a salad, anytime*) There are many ways to eat an apple. Raise your hand if you have eaten an apple in any of the following ways:

- A whole apple, peel and all (but not the core!)
- Applesauce
- Apple pie
- Baked apple
- Apple butter
- A caramel apple

There are many ways to eat a banana. Raise your hand if you have eaten a banana in any of the following ways:

- A whole banana (without the peel)
- Banana slices on cereal
- Banana and peanut butter on bread
- Banana bread or pancakes
- Banana chips (dried fruit)
- Banana dipped in chocolate
- Banana in a fruit salad or fruit slush

Can you think of other ways to eat apples or bananas?



Taste Opportunity

Have students wash their hands. Cut up apples for the students to sample. Try to offer 2-3 different varieties. (*Common varieties found in grocery stores in February include Granny Smith, Braeburn, Red and Golden Delicious, and Fuji.*) Place a whole apple and cut-up pieces of another apple of the same variety, on each plate.

Look at the whole apple. Note size, shape, color, and stem. Look at the cut apple. Note flesh color: Is it white, creamy, yellow? Is the peel thin, thick, smooth, or leathery? Smell each apple. Does it have a characteristic odor? Taste a slice of each variety. Is it sweet, tart, or sour? What about texture? Is it tender, crisp, juicy, mealy, or hard? Is the peel tender or tough? Which variety has the most flavor? Which has the strongest aroma? Note the color of the slices after exposure to air. Does the flesh of some varieties stay white longer? Which varieties would be best for salads and fruit cups? Which varieties would combine best to flavor pies and sauces?

Which variety do you prefer to eat fresh?

Peel and cut a banana for the students to sample. They can then put an "X" through the bingo square of the fruit that they sampled.

How would you get an apple ready to eat as a snack?

Apple – Wash. Eat. (How easy is that?)

How would you fix a banana for a snack?

Banana – Peel. Eat. (How easy is that?)

On the back of the Pick a **better** snack™ & **ACT** bingo card for each month, there is information for their parents and grandparents. Send the bingo card home and have students encourage their family to pick out a snack idea to try at home.

Extend the Activity



Art, Music & PE

Sing "Apples and Bananas" on the Baby Beluga tape by Raffi. (words to the song are attached).



Language Arts & Reading

Read Red Are the Apples by Marc Harshman, Bananas! by Jacqueline Farmer, Charlesbridge, 1999 or Apples by Ken Robbins, Atheneum Books for Young Readers, 2002.



Math

Read Ten Apples Up On Top by Dr. Seuss. Have the students create their own pictures with a particular number of apples on top of themselves writing the numeral, also. The students could draw the apples or they could glue on miniature cutouts of apples if they are available.



Science & Health

Place black cutouts of fruits and vegetables introduced so far (grapes, jicama, apple, carrot, pumpkin, sweet potato, cranberries, pears, broccoli, kiwi, tangerine, grapefruit, mango, pepper, orange, cucumber, banana, potato, and mushroom) on an overhead projector to create a shadow on a screen or the wall. Ask the students to identify the fruits and vegetables one fruit or vegetable at a time.



Social Studies

Plan a field trip to a botanical center to see the banana plants grow. School greenhouse could try to grow a banana plant.

APPLES AND BANANAS - Baby Beluga tape by Raffi
(capo 1)

A

I like to eat, eat, eat,

E7

Apples and bananas;

E7

I like to eat, eat, eat,

A

Apples and bananas;

I like to ate, ate, ate,

Ape-puls and ba-nay-nays;

I like to ate, ate, ate,

Ape-puls and ba-nay-nays;

I like to eat, eat, eat,

Ee-puls and bee-nee-nees;

I like to eat, eat, eat,

Ee-puls and bee-nee-nees;

I like to ite, its, its,

I-puls and bi-ni-nis;

I like to its, ite, ite,

I-puls and hi-ni-ins;

I like to oat, oat, oat,

O-puls and bo-no-nos;

I like to oat, oat, oat,

O-puls and bo-no-nos;

I like to not, not, not,

Oo-puls and boo-noo-noos;

I like to not, not, not,

Oo-puls and boo-non-noos;

(REPEAT FIRST VERSE)

Banana Chronology

Mount the sentences on tag board, cut them apart and let the children put them in the correct order.

A banana plant starts from a bulb which contains many buds.

A leafy stem grows from each bud.

Each stem grows “hands” of tiny flowers.

Flowers become, called “fingers.”

Banana “hands” are cut from the plant and packed in boxes.

Boxes are shipped to the grocery store.

Bananas get ripe and ready for you to eat.

Peel. Eat. (how easy is that?)

February - Lesson Plan Grades K-I

VARY YOUR VEGGIES



Objectives

Learn why it's good to eat potatoes and mushrooms.

Learn what potatoes and mushrooms look like.

Learn how potatoes and mushrooms grow.

Supplies Needed

February

Pick a **better snack™** & **ACT** bingo card

"Spuddy Buddy Story"

Kindergarten - "What is Hiding?" worksheet

1st Grade - "Where Do I Grow" worksheet

Potatoes for tasting

Mushrooms for tasting

Knife

Taste Opportunities

Featured Vegetables:

Potatoes

Mushrooms

Background

Potatoes are the most widely consumed and economical vegetable. They are a leading source of vitamin C simply because of the quantities eaten. Many people think of potatoes as a fattening food but that fat comes from processing and the toppings added. About 65 percent of potatoes are sold in more convenient forms, like French fries, which increase the fat and sodium (salt) content.

Eat potatoes with their skin whenever possible. Potato skins contain fiber, iron, calcium, phosphorus, potassium, zinc, and B vitamins. It is best not to eat the potato skin if it has a greenish tinge. This is chlorophyll and is not harmful, but it is an indication of high amounts of a toxin called solanine. Store potatoes in a cool dark place. Do not put them in the refrigerator since this turns the starch to sugar giving the potato a sweet taste. Leaving the potatoes at room temperature for a few days can reverse this.

The states of Washington and Idaho grow many of the potatoes for the United States. Potatoes grow underground in the soil.

The Irish were introduced to the potato between 1586 and 1588. They were the first to recognize the food value of the potato. The climate and soil of Ireland were perfect growing conditions for the potato. Soon, potatoes became the main food crop of the country. In 1845 and 1846, the potato crop failed and many people in Ireland had no food. One of the consequences of the potato crop failure was the increased immigration of the Irish to the United States.

In 1621, Captain Nathaniel Butler brought potatoes to America. Every American eats about 126 pounds of potatoes every year.

Mushrooms are not thought of a good source of nutrients because they lack the bright color of so many vegetables. Cooked mushrooms are an excellent source of niacin and a good source of riboflavin, which are B vitamins.

Mushrooms are really not a vegetable, but a fungus. Fungus is a plant that does not have roots or leaves, does not flower

or bear seeds, doesn't make its own food, and doesn't need light to grow. Mushrooms grow best in dark, damp places. There are about 38,000 varieties of mushrooms, some are edible and some are very toxic.

In ancient times, mushrooms were thought to be magical. People were forbidden to eat them unless they were warriors or kings. When mushrooms grow in a circle, they are called fairy rings because people in the olden days thought they were made by fairies dancing in the night.

About half of the mushrooms harvested in the United States come from the Kennett Square area of Pennsylvania. Kennett Square has been named the "mushroom capital" of the world.

Mushrooms come in many shapes, sizes, and colors. The umbrella-shape at the top of the mushroom is called the cap and can be the most colorful part. The underneath side of the cap contains spores and gills. The stem of the mushroom is called the stalk. The base of the mushroom is called the hyphae.

Web Site Resources

www.idph.state.ia.us/pickabetersnack
www.fruitsandveggiesmorematters.org
www.mypyramid.gov/kids/index.html

Do the Activity: Kindergarten

Read the Spuddy Buddy story included with this lesson. Distribute "What is Hiding?" color sheet to each student.

First Grade

Read the Spuddy Buddy story included with this lesson. Distribute the "Where do I grow" worksheet to each student. (The students will begin at the potato at the top of the page and make it through the maze to the potatoes growing underground.)

Talk It Over:

Who can tell me what a potato looks like? (*oval shaped, brown, yellow, or red in color, often bumpy*)

What does a mushroom look like? (*white or brown in color, looks like a little umbrella*)

Where do potatoes grow? (*underground in the soil*)

Does anyone know where mushrooms grow? (*The stem and cap grow above ground, but they like dark, moist places*)

Apply:

What are some ways you have eaten potatoes either at school, at home or when you have eaten at a restaurant? *(baked, boiled, mashed, French fries, tater tots)*

What is the best way to eat potatoes? *(With their skins on and boiled or baked. Watch how much butter or sour cream you add.)*

What are some ways you have eaten mushrooms? *(On pizza, on salads, raw with dip, baked, sautéed, steamed, in casseroles, soups, etc.)*

Can you think of other ways you might eat more potatoes or mushrooms? *(add to soup, put in with a casserole, put mushrooms on a sandwich)*

Where do you find potatoes and mushrooms in the grocery store? *(in the produce department, also comes canned, potatoes can be dried and found in boxes)*



**Taste
Opportunity**

Have the students wash their hands. Wash the mushrooms and cut for the students to sample. *(Students may want vinaigrette or Italian dressing for dipping.)*

Peel and cut a potato for the students to sample.

They can then put an “X” through the bingo square of the vegetable that they sampled.

How would you get a potato ready to eat as a snack?
– Wash. Peel. Eat. (How easy is that?)

How would you get mushrooms ready for a snack?
– Wash. Eat. (How easy is that?)

On the back of the Pick a **better** snack™ & **ACT** bingo card for each month, there is information for their parents and grandparents. Encourage students to take the bingo card home and ask their family to pick out a snack idea to try at home.

Extend the Activity



**Art, Music
& PE**

Play **Hot Potato**. One version of this game is to have the students stand in a circle with one fist extended toward the inside of the circle. The person who is “It” uses one of his/her fists to lightly tap (as the numbers are said) on the fists of the others as this rhyme is chanted:

One potato, two potato, three potato, four,
Five potato, six potato, seven potato, more!

The student whose fist is tapped when “more” is said, sits down. The game continues until one person is left standing. He/she then becomes the new “It.”

Or make potato prints as directed in the back of One Potato by Diana Pomeroy, Harcourt Brace & company, 1996. Using potato print illustrations, this counting book features delicious looking fruits, vegetables and seeds to count up to 100.

Place sentence strips of the chant in a pocket chart on a stand. With a pointer, model pointing to words and saying the chant. Place in a learning center. Write as:

One Potato
One potato,
Two potato,
Three potato,
Four.
Five potato,
Six potato,
Seven potato,
More!



**Language Arts
& Reading**

Or read One Potato by Diana Pomeroy.



Math

Using the materials suggested for Language arts/Reading, add construction paper potatoes for the students to place the correct number of potatoes for each line. On the back of the number words, you might write the numbers and/or draw potatoes so that the activity is self checking.



**Science &
Health**

Place a variety of mushrooms in a learning center for the students to explore with their five senses (except hearing and taste).

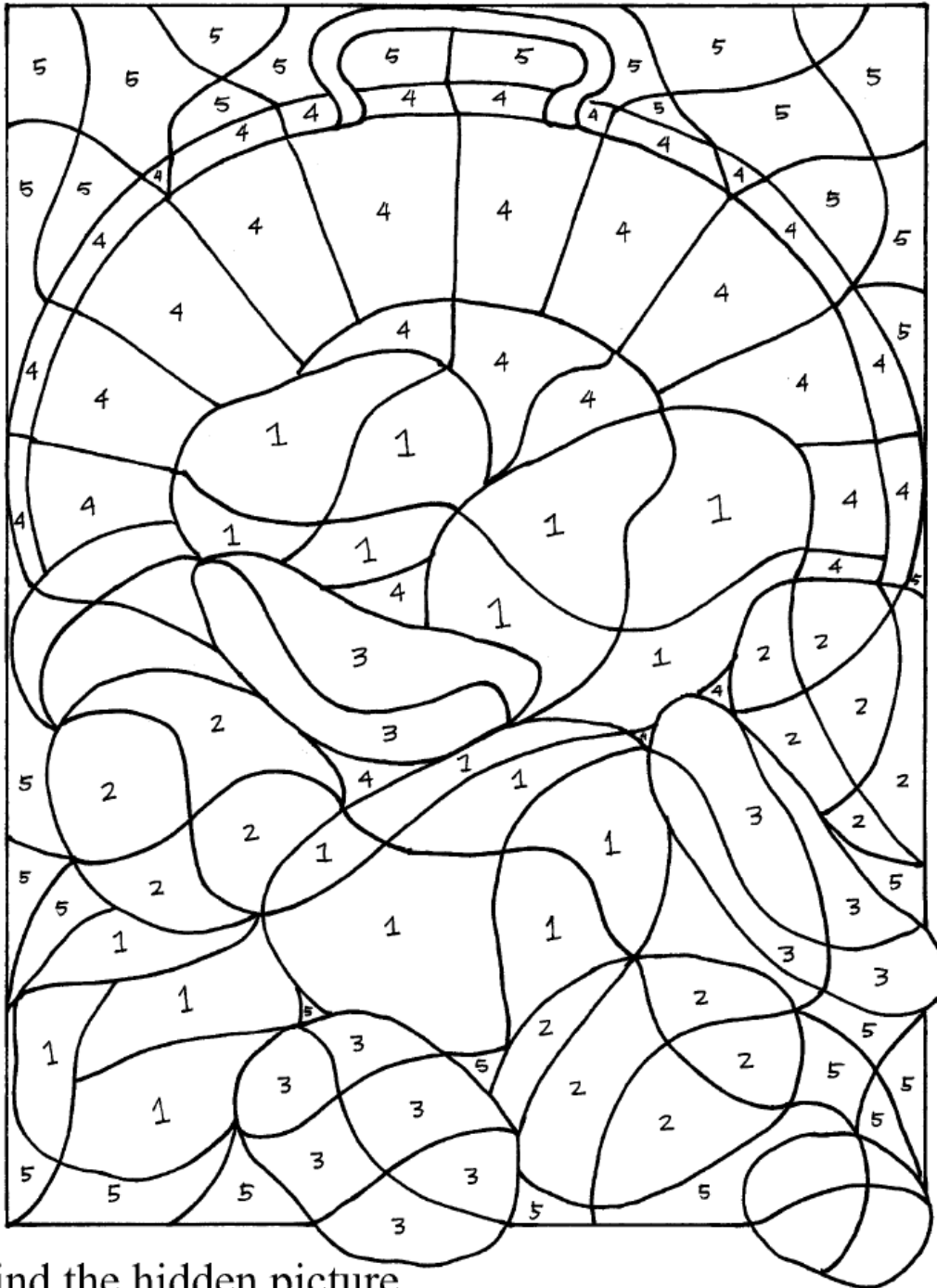


Social Studies

Place a book or a poster that shows how mushrooms are grown in a learning center. Or, you could share information and pictures found at <http://www.americanmushroom.org>. The Growing Mushrooms link is recommended.

VARY YOUR VEGGIES

What is Hiding?

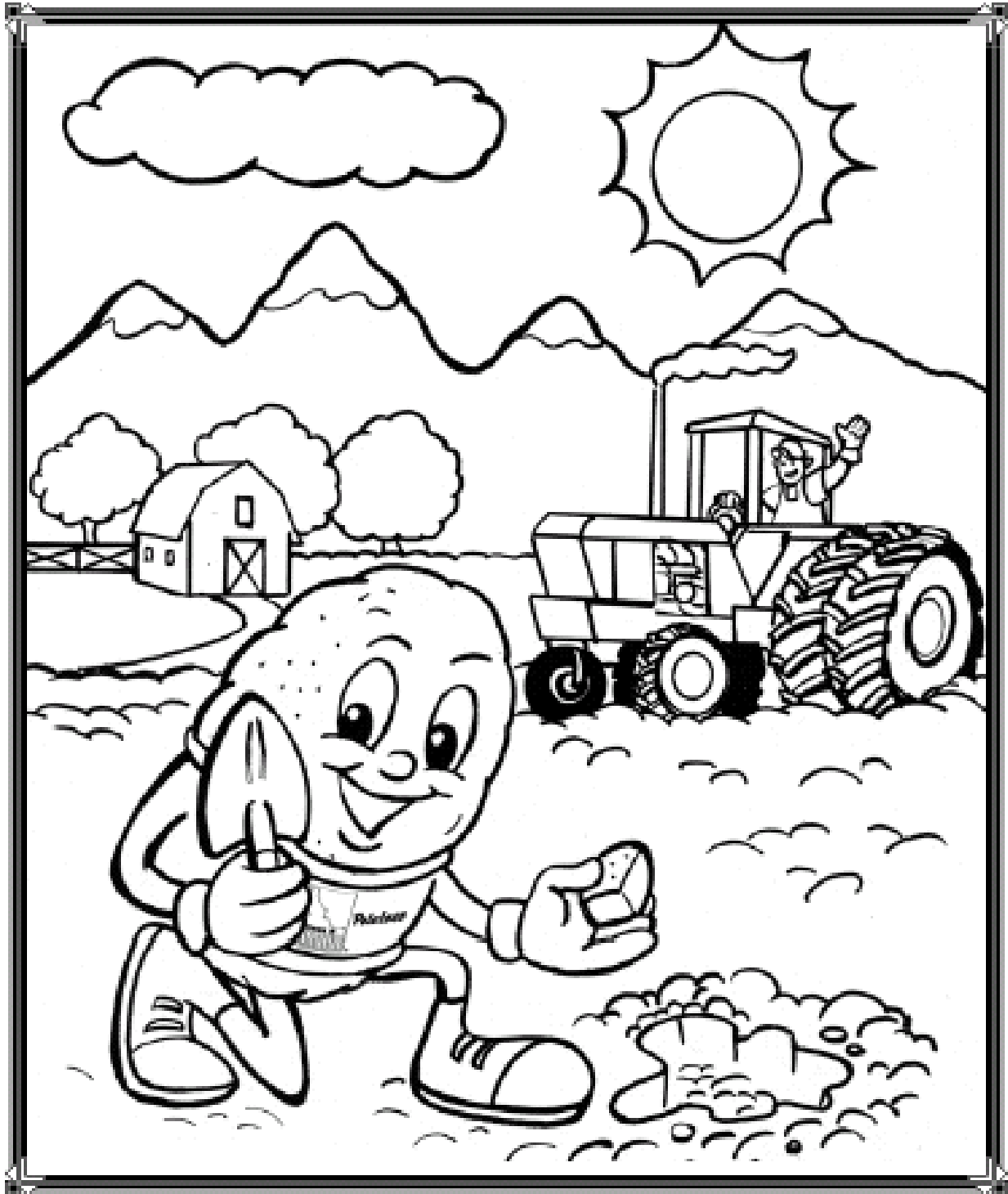


Find the hidden picture.

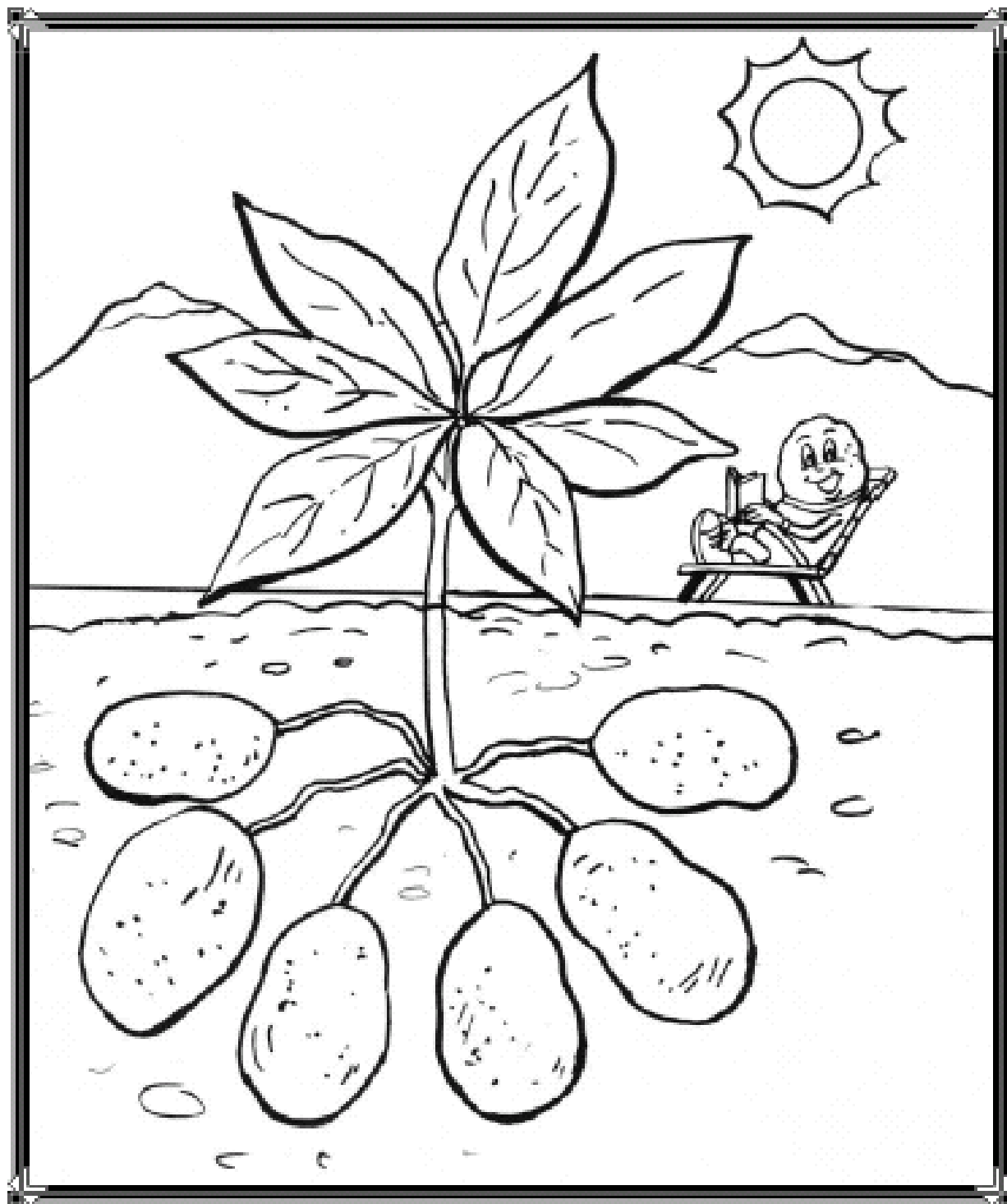
Color in the numbers: 1 = brown, 2 = light red, 3 = yellow,
4 = your choice and 5 = your choice!

Or go wild and use your imagination! (ps. green and red make brown)

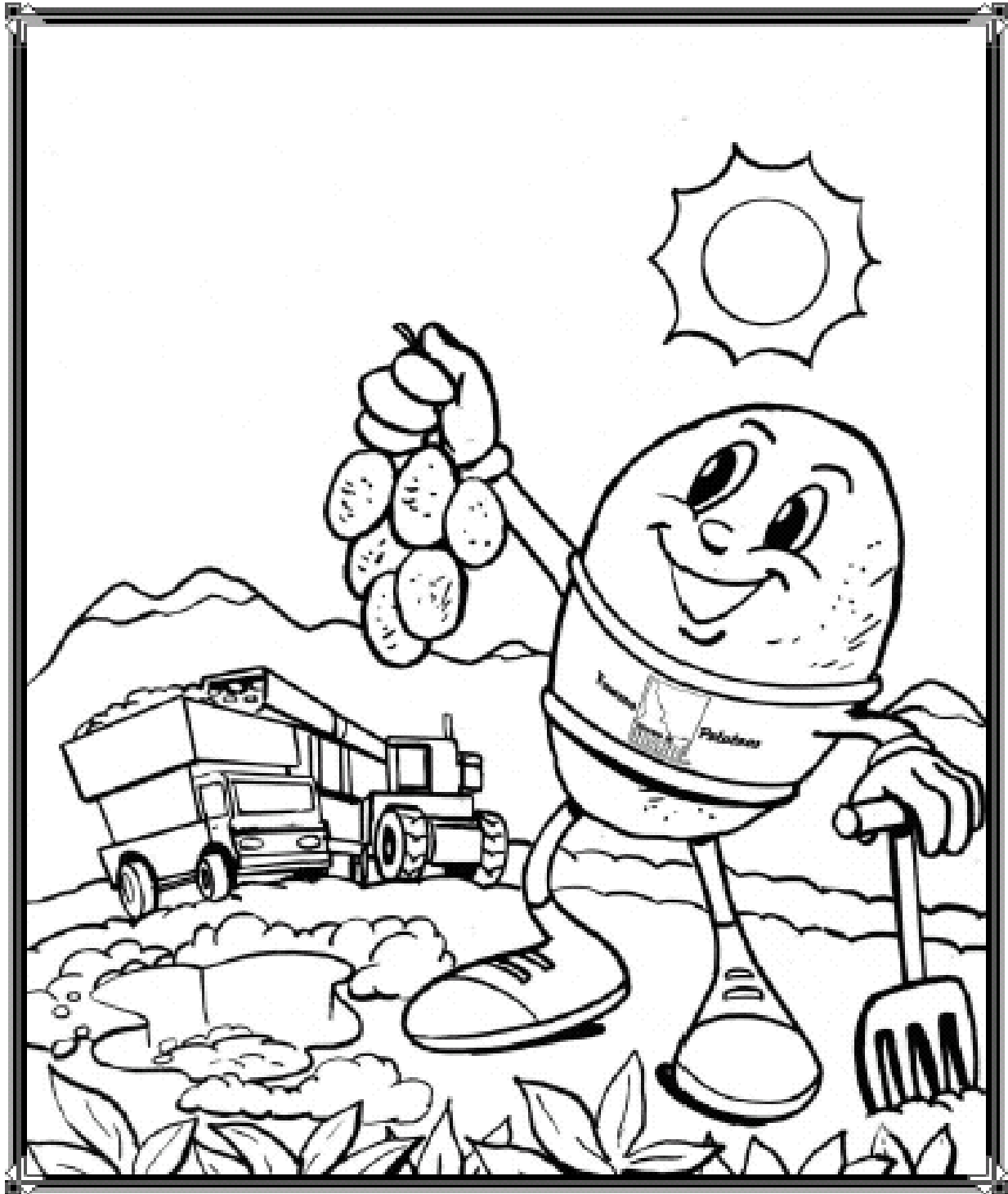
Spuddy Buddy plants a seed potato.



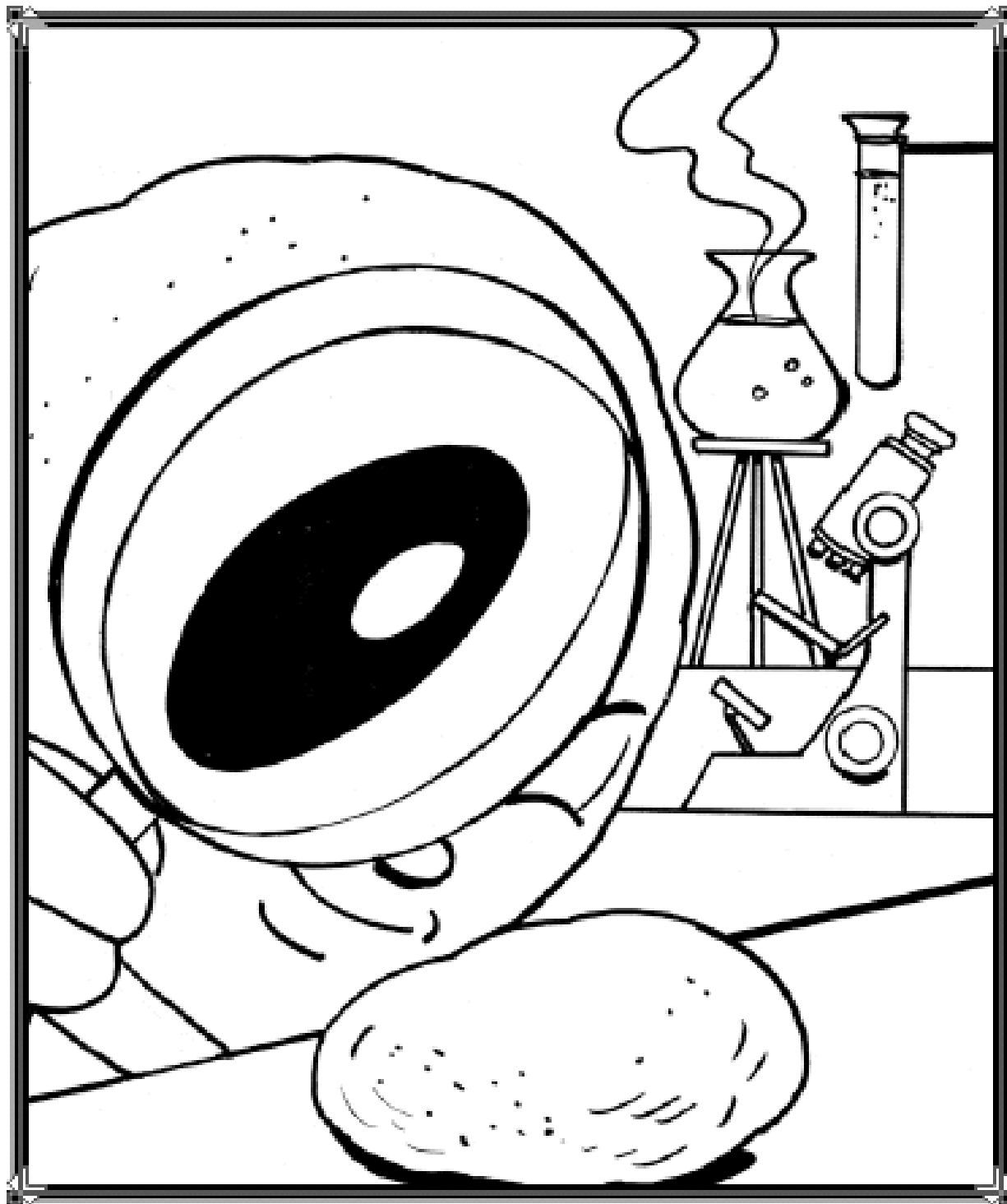
The potato plants grow big and strong in Idaho's rich soil.



Spuddy Buddy harvests the crop.



Spuddy Buddy carefully inspects
all the potatoes...



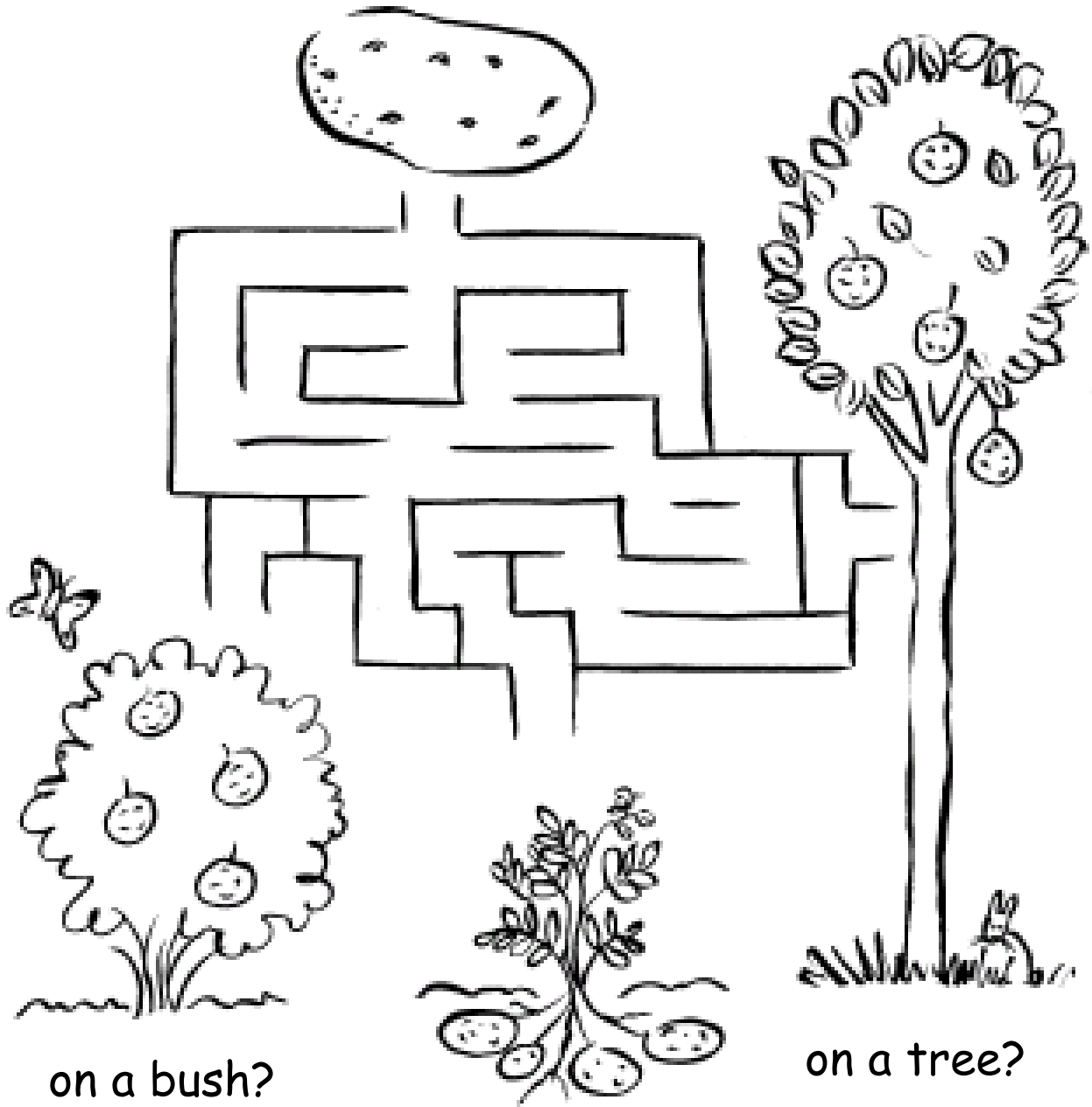
VARY YOUR VEGGIES

Some of the potatoes are frozen. Some go into boxes. And some are left just the way they are.



VARY YOUR VEGGIES

Where do I grow?



Find your way through the maze and discover where a potato grows!

Source: Washington State Potatoes, www.potatoes.com

PHYSICAL ACTIVITY



Objectives

Encourage youth to be physically active every day

Learn the size and location of the heart, that the heart is a muscle and that we need a heart to live.

Understand that being physically active is fun, helps you feel good and is good for your heart.

Supplies Needed

February
Pick a **better snack**[™] & **ACT**
bingo card

Bicycle pump (optional)

Background

Being physically active and maintaining a healthy weight are both needed for good health, but they benefit health in different ways. Physical activity makes muscles stronger, especially the heart. The normal heart is a strong, hard-working pump made of muscle tissue. It's about the size of a person's fist. The heart has four chambers. The upper two chambers are the right atrium and left atrium, and the lower two are the right ventricle and left ventricle. Blood is pumped through the chambers, aided by four heart valves. The valves open and close to let the blood flow in only one direction.

Dark bluish blood, low in oxygen, flows back to the heart after circulating through the body, it returns to the heart through veins. From there the blood goes to the lungs where it gets fresh oxygen. After the blood is refreshed with oxygen, it's bright red. Then it returns to the heart where the red oxygen-rich blood is pumped out to the body.

Physical activity helps keep the heart strong just like other muscles. Physical activity helps the heart pump blood more efficiently, so the stronger the heart is, the more blood it can pump each time it beats, so it has to pump fewer times each day. Physical activity also helps keep the arteries free of cholesterol. The clearer the arteries, the better the heart pumps the blood.

Regular aerobic physical activity increases your fitness level and capacity for exercise. It also plays a role in both primary and secondary prevention of cardiovascular disease. Physical inactivity is a major risk factor for heart disease and stroke and is linked to cardiovascular mortality.

By including physical activity every day, it is possible to improve health and well-being and have fun too! Physical activity is more than moving your body. It is recommended for children to accumulate 60 minutes of moderate physical activity most days of the week, preferably daily. No matter what activity is chosen, it can be done all at once, or spread over two or three times during the day.

Web Site Resources

www.idph.state.ia.us/pickabettersnack
www.mypyramid.gov/kids/index.html
www.americanheart.org

Do the Activity:

Ask the children if they know what the heart is, and where it is located. Explain that the heart is the muscle that pumps blood throughout the body. The heart is located in the middle of the chest, just behind the sternum (breastbone), under their ribs. (Have children try to feel their ribs to get a better understanding of where they are.) Ask the children to guess the size of the heart. The heart is about the size of a fist. Ask children to place their hands over their hearts. Then have children make a fist with one hand and look at the size of their fists. Explain that their hearts are a little larger than their fists and that their hearts are located inside their chests.

Ask children to “show their muscles.” Discuss what it feels like when a muscle is working. Ask children to make a fist with one hand. Then have them bend that arm at the elbow and feel the muscle in their upper arm. Explain that the heart is a muscle, too. Ask children to tell you what they know about muscles. Have children hold their arm out straight from their shoulder and then bend their lower arm toward their shoulder several times. Ask them to feel the muscle in their front upper arm (*biceps*) as they bend their arm. Ask the students if they feel the muscle move each time you bend your arm? (Yes) What do you think would happen to the muscle if you did a lot of this bending every day? (*The muscle would get stronger.*) Point out that like the biceps, the heart is a muscle and exercise will make it stronger, too.

Explain that the heart muscle is a pump. If possible, show children how a bicycle pump works. Let them feel the air rushing out as you push the handle. Some pumps pump air. Some pump water. What does the heart pump? Explain that it pumps blood through the body. Have children squeeze their fists to simulate the pumping action of the heart. Point out that the heart pumps blood all the time. Have children squeeze their fists again and again. Ask them how their hands feel after they have squeezed them many times. Tell them that they cannot start or stop their hearts the way they can start or stop squeezing their fists.

Talk It Over:

Explain that physical activities in which people move around a lot are good activities for the heart because they make the

heart work harder for a while. Ask children to describe activities in which children's hearts are working very hard and the ones in which their hearts are not working as hard. Ask children to tell about activities that they do every day. *When does your heart work very hard? When does your heart work not as hard?*

Apply:

Have the students do various activities to see if they can feel their heart rate increasing. Reinforce that any time they are doing something active it causes their heart to beat faster, therefore strengthening the heart. Some examples:

- Running
- Walking
- Skipping
- Dancing
- Jumping
- Dribbling a ball
- Shoot hoops
- Head to recess early and play outdoors

Are there some things you could do with your family to encourage everyone to be more active? *go on family walks, play outside together, go roller skating or bowling together*

What are the activities on the January bingo card?

- Play
- Shoot hoops
- March
- Climb
- Run
- Sled
- Kick
- Walk
- Dance
- Bowl
- Build

Discuss the activities with the students. Are there any activities that may be more challenging than others? What are some simple solutions for this? **Remind students to be creative with the bingo card.** For example, "kick" could be a form of martial arts, Tae kwon do, karate, or judo. Even if there is no formal access to martial arts, show the students some kickboxing moves (kicks, punches, jabs) and – pretend!

Source: American Heart Association December 27, 2005
<http://www.americanheart.org/presenter.jhtml?identifier=3003073>