

PKU for Children



Learning to Measure



INTRODUCTION

These lessons are the result of a nutrition education study done with a group of six school age children with PKU at the University of Washington PKU Clinic. The study resulted from the need to help school age children become more responsible for their PKU diet management. Parents and clinic staff supported this goal.

A nutrition education curriculum was developed. Seven, two hour sessions were held over a period of six months. The children's knowledge about nutrition and PKU, and their skills in measuring and food preparation were evaluated before and after the study. In addition, parents were asked to complete questionnaires on their perceptions about children's knowledge and skills.

At the end of the study, all of the children had increased in both the knowledge and skill categories. Some of the children were recording all of their food records for clinic visits and making formula, measuring foods, and preparing recipes at home on a frequent basis.

Parents were enthusiastic about the children's food related activities and new skills. They encouraged their children to continue these interests at home.

The lessons you are about to use are modifications from the original curriculum. The activity ideas and recipes have been used in nutrition education work at the University of Washington clinic.

We think you will find these lessons helpful whether you are a parent of a single PKU child or working with a group of PKU children. The ideas can be used not only with PKU children but, after appropriate changes in some recipes, with all children. You may wish to share the lessons with others who work with the children, whether relatives, teachers, neighbors, or leaders in community organizations.

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GENERAL GUIDE FOR THE PKU ACTIVITY LESSONS

If you are ready to use these lessons, you have an interest in helping children with PKU learn more about their own diet management. The information presented here is intended to help you use these lessons.

How Do I Start?

- First, always read each lesson completely before the planned activity time. Prepare any materials and gather foods according to the lesson guides.
- Each lesson has a basic activity plan, with additional activities under "Extras." These additional activities may be useful during baking times or for children who are very comfortable with the basic activities and want more.
- The lessons list materials needed and include a recipe "based" on the activities. Some lessons have paper and pencil activities called "fun sheets." Others use simple games which can be made at home.
- At the beginning of each lesson is a Learner's Note. This tells children what they have learned and what they will be learning. Use these words or any others you would like.
- The Leader's Note describes what the lesson will accomplish and gives specific hints.

Time

- All of the lessons are designed to be completed in one hour or less. However, this does not include baking time for some recipes. Check each lesson.
- If you work with a group of children, you may wish to modify the plans and/or split the sessions into two parts to allow all of the children to participate in all activities. It may be wise to prepare some sample tastes of long baking recipes ahead of time with promises of "their" product at the next meeting.

Things You Create

- Many games and materials are used in the lessons. KEEP all of these. They turn up again in later lessons. We encourage you to let children have the games and use them as part of their regular play. Most can be used with any group of children.

Recipes

- The recipes are all appropriate for PKU children. Some can be used for the entire family so children will be able to let everyone “taste” their cooking skills.
- We suggest you try every recipe ahead of the session. This helps you become aware of the skills and products.
- The recipes were selected to reflect concepts learned in some lessons or to expand children’s skills in other lessons. You may wish to substitute other recipes from your PKU cookbooks or clinic but check each lesson to see if the recipe includes the particular feature reviewed in that lesson. The PKU cookbooks also are useful for reviewing information about measuring special ingredients, cooking terms, and definitions.

Remember To Always

1. Wash hands before you start food preparation. Discuss other sanitation techniques as they arise.
2. Encourage children to help with clean up. Start with simple clearing tasks and work toward washing. Children love to help.
3. This isn’t an “always” but aprons may be useful.
4. Keep stove safety in mind. Use potholders and show children how to avoid being burned. Keep handles of pans on the stove top turned toward the back. Keep burnable objects away from the stove top. Remind children to turn off stove and other appliances after use. Cords from appliances should also be out of the way and disconnected after use.
5. Be aware of sharp knives, graters, and peelers. Take time to show children how to use these tools. Some lessons review the use ideas. School age children understand the word sharp and can use these tools well with supervision.
6. ALWAYS, ALWAYS give praise and lots of “warm fuzzies” to children for their work. If they are not quite correct in some measure or game, silently evaluate whether you should comment. They may just need more practice. In some cases, you might say “I would like to show you again” or re-explain the idea. Improvement comes from guidance and encouragement not from criticism.

Benefits Beyond PKU Diet Management

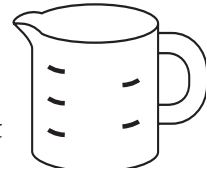
- Emotional and social development
- Language skills
- Science
- Art
- Motor skills and physical development
- Social studies
- Mathematics
- Courtesy

To Parents

- If you are parents of PKU children and working with these lessons, we hope you enjoy the chance to share some new experiences with your children and watch them gain new skills while having fun.
- If you are not parents but leaders, be sure to keep parents informed of each lesson's activities. Give them suggestions and recipes to try with their children at home.
- MOST OF ALL, HAVE FUN.

USING THE LIQUID MEASURING CUP

Learner's Note - Are you ready to use a liquid measuring cup? It looks like this. You will learn to read the amounts on the cup. Then you can make a beverage using the cup.



Leader's Note - We found liquid measuring cups to be favorites of the children. The amounts from $\frac{1}{4}$ to 1 cup were easy to find and read. At the end of this activity, learners will be able to read the amounts on a liquid measuring cup. They will read a recipe and use the liquid measuring cup to prepare a beverage.

Materials needed

- 1 cup clear glass or plastic liquid measuring cup with handle and spout. (If you have a larger cup use it. We did find the smaller size an easy one for the learners to handle).

- Six sheets of paper or cardboard with these numbers and words:

$\frac{1}{3}$ (one-third)

$\frac{2}{3}$ (two-thirds)

$\frac{1}{4}$ (one-fourth)

$\frac{3}{4}$ (three-fourths)

$\frac{1}{2}$ (one-half)

1 (one)

Example:

$\frac{1}{4}$ (one-fourth)

- Recipe Ingredients and Equipment - See recipe for Apple Cranberry Fizz

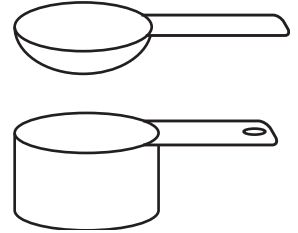
Activity Plan

1. Have learners look at the sheets of paper and read the names of the numbers aloud.
2. Using the liquid measuring cup, point to one of the six numbers above. Ask learners to pick up the sheet with that number and tell you the number's name. Repeat until all numbers have been identified.
3. Discuss the liquid measuring cup. Have learners point to the spout. Ask why it is there. Mention the rim above the one cup mark. This allows you to move the cup without spilling the liquid. Why is the cup clear? The cup is clear so you can see how much liquid you have and if it is too much or too little.

DRY MEASURING CUPS

Learner's Note - You can measure with a liquid measuring cup. Now you will learn to use a set of dry measuring cups and measuring spoons.

Leader's Note - You will review the numbers and names from Using the Liquid Measuring Cup as you explore the use of dry measuring cups and measuring spoons. Learners will need help with the recipe when using the stove top and oven. Children can bake very well if given instruction, encouragement, and time. You will need one hour for the activity and recipe preparation, plus one hour for baking. The baking time is a period for "Extras."



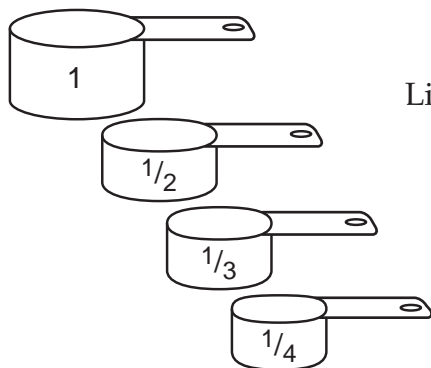
Materials Needed

- Six sheets of paper with words and numbers from Using the Liquid Measuring Cup.
- Six new sheets of paper with the following numbers and words if you did not do them in "Extras:"
 - $1\frac{1}{4}$ (one and one-fourth) $1\frac{2}{3}$ (one and two-thirds)
 - $1\frac{1}{3}$ (one and one-third) $1\frac{3}{4}$ (one and three-fourths)
 - $1\frac{1}{2}$ (one and one-half) 2 (two)
- One set dry measuring cups including:
 - $\frac{1}{4}$ cup, $\frac{1}{3}$ cup, $\frac{1}{2}$ cup, and 1 cup
- One set measuring spoons including:
 - $\frac{1}{4}$ teaspoon, $\frac{1}{2}$ teaspoon, 1 teaspoon, 1 tablespoon
- One straight edge to level measured dry ingredients
Suggestions: metal spatula, knife, six inch plastic ruler
- Liquid measuring cup
- Spoon
- Recipe ingredients and equipment - See recipe for Pumpkin Bread

Activity Plan

1. Review the numbers and names from the first session. Introduce the six new sheets. Have learners read the names aloud.
2. Discuss the measuring cups. Ask learners "How are the liquid and dry measuring cups different and how are they alike?" Ask one question at a time.

Activity Plan



Differences between liquid and dry measuring cups:

No rim or spout on dry

Dry cups not clear

Dry set has four different cups.

You can measure all amounts in one liquid cup

Other differences you and learners notice

Likenesses between liquid and dry measuring cups:

All can measure 1 cup, $\frac{1}{4}$ cup, $\frac{1}{2}$ cup, and $\frac{1}{3}$ cup
(Liquid has $\frac{2}{3}$ and $\frac{3}{4}$, dry does not. Measuring these amounts in dry will be covered in a future lesson.)

All have handles

All are used to measure

Other likenesses you and learners notice

3. Ask learners to place the four dry cups on the sheets of paper showing their amounts.
4. Practice measuring a dry ingredient. We suggest wheat starch or sugar, two ingredients used in the lesson recipe. Leaders should show learners how to measure and then ask them to repeat the actions.

Steps:

Use $\frac{1}{2}$ dry measuring cup

Spoon wheat starch or sugar in cup. Do not pack.

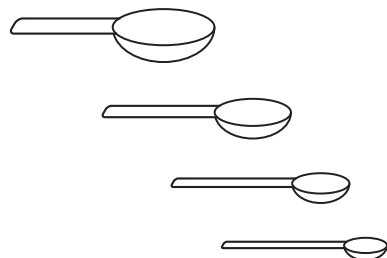
Scrape off excess with straight edge so ingredient is level with cup top.

Children may have to practice several times holding the cup and leveling. Be patient and remember to tell them how well they are doing.

5. Show the measuring spoons. Discuss how numbers are similar to those already learned but, instead of cups, you have tablespoons or teaspoons. Let learners examine the set of spoons. Ask them to read each number and word aloud. How many spoons are teaspoons? How many are tablespoons? Some spoons and recipes use abbreviations. This information is included in "Extras."

Practice measuring the same dry ingredient with the measuring spoons. Use the one tablespoon. Dip in the ingredient and level as before.

6. Prepare the recipe.



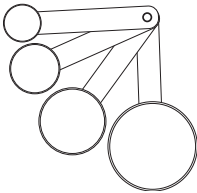
Measuring #2

Extras ! ! ! !

- This recipe calls for melted margarine. Show learners how easy it is to measure by reading the wrapper and using a knife to cut the desired amount.
- When measuring spices, remember some containers have level edges to draw the spoon against. Then you don't need an extra tool to level.
- Add the new numbers to the card game if you didn't do this "Extra" before. Play the game !
- Write on two sheets of paper:
 Tablespoon = Tbsp. = T.
 Teaspoon = tsp. = t.

Discuss these common abbreviations. Use some cook-books and recipes to show examples. Let learners use the measuring spoons to show you how to measure the examples from the recipes.

Measure



- Encourage learners to continue measuring other foods and to help prepare foods using the skills they have learned.

Measuring #2

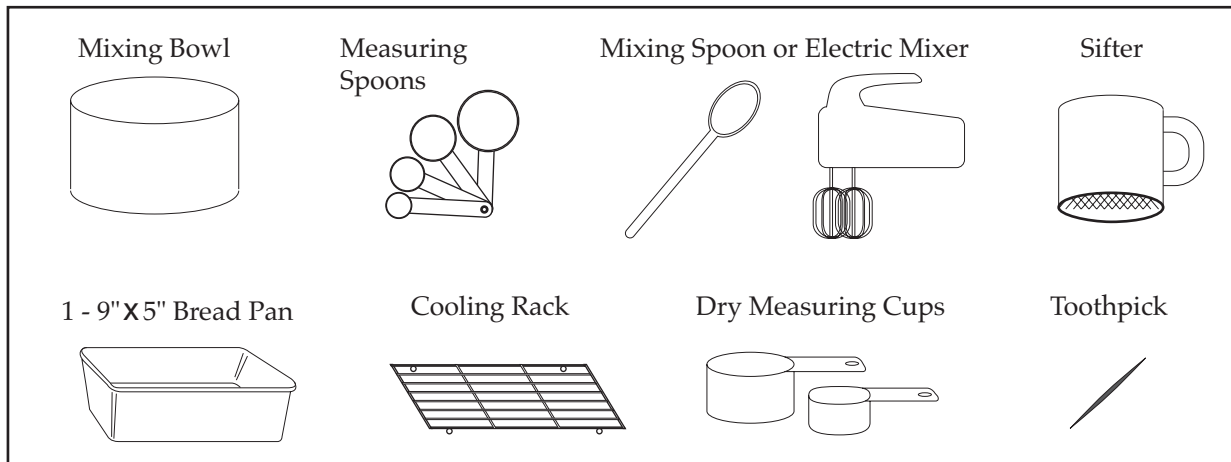
Pumpkin Bread

What You Need:

1 cup granulated sugar
1/4 cup melted margarine
1 cup canned pumpkin
1 1/4 cups wheat starch

1 teaspoon baking soda
1/8 teaspoon salt
1/2 teaspoon cinnamon
1/4 teaspoon ground cloves

Equipment:



What You Do:

1. Preheat oven to 350 degrees.
2. Grease the bread pan well. Dust with wheat starch.
3. Cream sugar and melted margarine together in mixing bowl.
4. Add pumpkin. Mix well.
5. Sift together the wheat starch and other dry ingredients.
6. Add the dry ingredients to the bowl. **Stir only** enough to moisten flour.
7. Pour into prepared pan.
8. Bake for one hour or until toothpick inserted in center comes out clean.
9. Cool bread in pan on rack before removing and slicing.

You Get:

16 slices

Recipe Information:

	Phenylalanine (mg.)	Protein (gm.)	Calories
Per recipe	105	3.1	1735
Per serving	7	.2	108

Activity Plan

4. Practice measuring a liquid. Try $\frac{1}{3}$ cup water. Ask learners to read the sheet with this number and then measure $\frac{1}{3}$ cup water. The water should be even with the $\frac{1}{3}$ cup line. Show learners how to check the amount by measuring at eye level.
5. Prepare the beverage.
REMEMBER TO TELL LEARNERS WHAT GOOD JOBS THEY ARE DOING!

Extras!!!!

- Complete the fun sheet for this activity titled MEASURING.
- Card Game - Use cardboard cut to the size of playing cards. Prepare four of each number listed:

$$\frac{1}{4} \quad \frac{1}{3} \quad \frac{1}{2} \quad \frac{2}{3} \quad \frac{3}{4}$$

Play "Fish." Shuffle the cards. Give each player two cards. Place the others in a pile face down. The first player asks anyone for a number to match one in the player's hand. If another player has that number, he or she must give it up. If no one has that number, the first player draws one card from the center pile. The goal of the game is to get all four cards with the same number to make a set. Players with a full set lay it down so others can see. Play continues until all sets are formed. You can make up other rules for the game as you play.

- More sheets - Add the following sheets to your original six (See Materials Needed on the previous page):

$$1 \frac{1}{4} \text{ (one and one-fourth)} \quad 1 \frac{2}{3} \text{ (one and two-thirds)}$$

$$1 \frac{1}{3} \text{ (one and one-third)} \quad 1 \frac{3}{4} \text{ (one and three-fourths)}$$

$$1 \frac{1}{2} \text{ (one and one-half)} \quad 2 \text{ (two)}$$

You could also add these numbers to the card game. You can even go on to $2 \frac{1}{4}$, $3 \frac{1}{2}$ and more. Have fun!

Measure! Measure! Measure!

- Encourage learners to measure water for Lofenalac or Phenyl Free.
- Encourage learners to measure other foods they eat.

Measuring #1

Apple Cranberry Fizz Recipe

What You Need:

$\frac{1}{2}$ can (12 ounce size) frozen cranberry concentrate

$\frac{1}{2}$ can (12 ounce size) frozen apple concentrate

3 cups water, or for measuring practice, do all six of these. They will equal three cups:

$\frac{1}{2}$ cup water

$\frac{1}{3}$ cup water

$\frac{1}{4}$ cup water

$\frac{2}{3}$ cup water

$\frac{3}{4}$ cup water

$\frac{1}{2}$ cup water

$\frac{1}{4}$ cup lemon juice

$\frac{3}{4}$ cup chilled ginger ale

ice cubes

Equipment:



What You Do:

1. Open juice cans. Spoon out one-half of each frozen concentrate. Put into the pitcher. Cover leftover concentrate tightly and freeze for another day.
2. Measure water and lemon juice. Add to pitcher. Mix well.
3. You can cover the pitcher and chill in the refrigerator until serving time or go to step #4 now.
4. Add the ginger ale. Stir.
5. Put ice cubes in each cup. Serve $\frac{3}{4}$ cup to each person.

You Get:

Seven $\frac{3}{4}$ cup servings

Recipe Information:

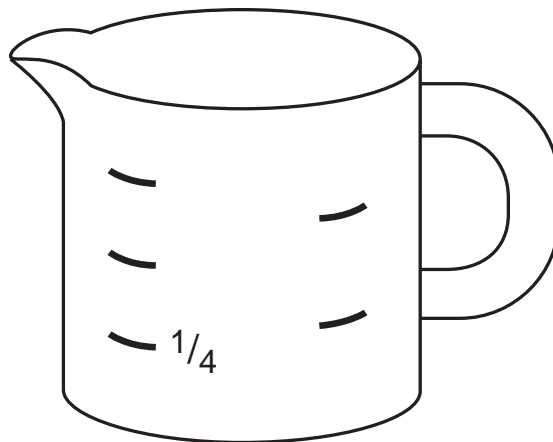
	Phenylalanine (mg.)	Calories
Per recipe	64	910
Per serving	9	130

Fun Sheet - Measuring

Can you circle the number the words say?

One Third	$\frac{1}{8}$	$\frac{2}{4}$	$\frac{1}{3}$	$\frac{2}{3}$
One Half	$\frac{1}{2}$	$\frac{2}{2}$	$\frac{3}{4}$	$\frac{1}{3}$
Two Thirds	$\frac{1}{6}$	$\frac{2}{3}$	$\frac{1}{4}$	1
One Fourth	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{4}$
One	$\frac{1}{2}$	1	$\frac{1}{4}$	$\frac{1}{3}$
Three Fourths	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{2}{4}$

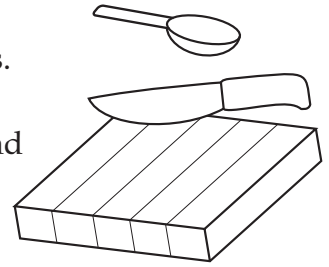
Here is a liquid measuring cup.
Can you write the numbers on
the six lines? You can use a liquid
measuring cup to help if you
want. One line is done for you.



MEASURING AND CHOPPING

Learner's Note - You have learned to measure ingredients and some of the foods you eat. Now you will practice measuring and chopping foods. You will play a new game and make Vegetable Patties.

Leader's Note - This session offers practice measuring with one tablespoon and the opportunity for learners to learn the correct and safe way to chop foods. You will need to precook two ingredients for the recipe. At this session, you will use a new game called Put It Together and your original sheets of paper with numbers and words. The game will be useful in future activities.



Materials Needed

- Put It Together Game. See the sheet describing how to make this game. Make the game before the session.
- Twelve sheets of paper with words and numbers from Using the Liquid Measuring Cup and Dry Measuring Cups.
- Chopping board or surface suitable for chopping.
- Knife - a paring or utility size is suitable for small hands.
- Recipe ingredients and equipment - See Vegetable Patties.

Activity Plan

1. Introduce the Put It Together Game. Use the sheets of paper with words and numbers. Show them to learners one at a time. Ask learners to pick the game pieces representing the amounts and place on the board. Let learners user any combination to get the amount. You will use the game during the next lesson.
2. Discuss and practice chopping. Ask learners why it is a good idea to use a chopping board. If they are not sure, talk about the need to protect surfaces from cuts with a knife.

Talk about chopping knives. Discuss why they are sharper than table knives. Show how to hold a knife and carry it. Demonstrate for learners how to chop an ingredient from the lesson recipe. Let learners practice. Talk about washing knives. Do not put them in the sink; hold and wash them.

Activity Plan

Note: When beginning to chop most children cut large pieces often in uneven sizes. As they have more experiences, children can slice or chop finer pieces of equal sizes. You can always have the children cut the larger pieces into smaller sizes if needed.

3. Prepare the recipe.

REMEMBER TO TELL LEARNERS HOW WELL THEY ARE DOING AND TELL YOURSELF WHAT GOOD LEADERS YOU ARE. YOU HAVE COMPLETED THREE LESSONS !

Extras ! ! ! !

- If leaders have let learners work with the oven, here are some suggestions to introduce learners to the stove top and oven. You can introduce these steps one or two at a time to encourage learners to use this appliance. Remind learners that it is hot and they need to be careful at all times. Keep potholders handy.
 1. Turn on and off a burner or oven dial.
 2. Open the oven door.
 3. Stir a food on the stove top.
 4. Using pot holders, pull out the oven rack.
 5. Using pot holders, lift the food product out of the oven. Children may need to have the product moved to one side so they can reach it from the side of the oven door instead of the front.
 6. Have them do ALL of the appropriate steps for one recipe.
- Ask learners if they have any questions about or suggestions for the lessons. They may have some good ideas.

Measure and Chop

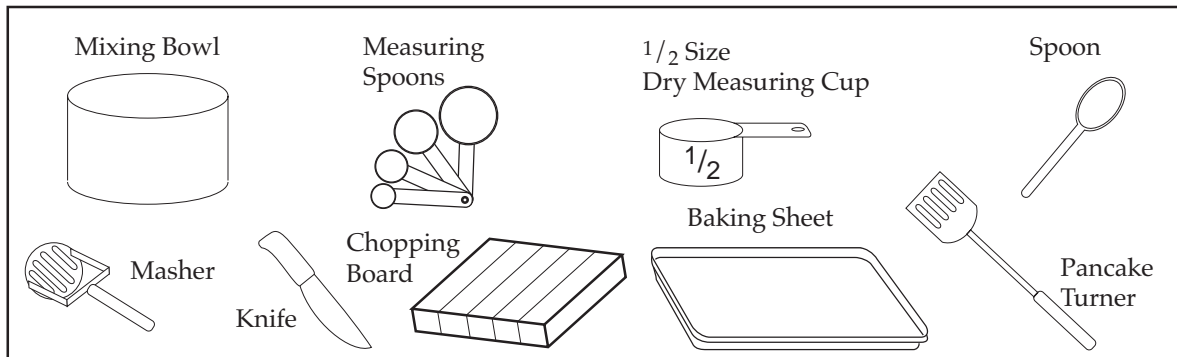
- Continue to encourage learners to use these skills so they will be comfortable with them.

Vegetable Patties

What You Need:

- 2 tablespoons softened margarine (Remember, use the wrapper as the measuring guide)
- 1 tablespoon finely minced green onion
- 2 tablespoons finely chopped celery
- $\frac{1}{2}$ cup mashed, cooked carrot (about 1 large carrot)
- $\frac{1}{2}$ cup mashed, cooked potato (about 1 potato)
- salt and pepper to taste
- 2–3 tablespoons of water to moisten, if needed

Equipment:



What You Do:

1. Preheat oven to 375 degrees.
2. Grease baking sheet with extra margarine.
3. Mash carrots and potatoes. Chop celery and onions. You may want to ask for help to finely chop the pieces.
4. Mix the first six ingredients in the mixing bowl. If the mixture is too dry, add some of the water.
5. Divide the mixture in half. Make six patties from each half forming them in your hands. Make the patties by tossing the mixture from hand to hand. The patty will flatten in your hands.
6. Place on greased baking sheet. Bake for 25–30 minutes.
7. Use pancake turner to remove patties from the sheet.

You Get:

Twelve two-inch patties

Recipe Information:

	Phenylalanine (mg.)	Protein (gm.)	Calories
Per recipe	170	3.9	336
Per serving	14	.6	28

Put It Together Game

This game will be used to help children learn how different parts can be put together to make a whole or, in measuring, a complete cup. Ask children to help you prepare the game. They may be able to help with measuring, drawing lines, cutting, or labeling pieces. This could be a lesson several days before Measuring and Chopping.

Materials Needed

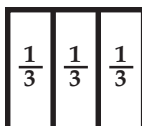
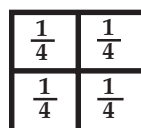
- Cardboard - Use cardboard from boxes at home or purchase pieces from a stationery or art supply store. A light-weight type able to be cut with scissors is the best. Different colors brighten the game. Cardboard makes the game durable. However, heavy paper bags or construction paper can also be used.
- Scissors
- Broad felt tip marker or crayon
- Ruler

What To Do

1. Cut one piece 14 inches by 24 inches. This is the largest piece. Set aside.
2. Cut seven 9 inch by 9 inch squares. (You can just cut two of these and make the smaller pieces out of scraps using a 9 inch square as a reference for the smaller sizes. Example: half of a square would be $4\frac{1}{2}$ inches by 9 inches.)
3. Leave two squares whole.

Cut one square into quarters.

Write $\frac{1}{4}$ on each piece.

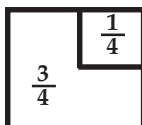
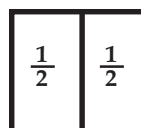


Cut one square in thirds.

Write $\frac{1}{3}$ on each piece.

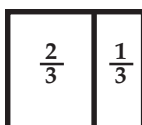
Cut one square in half.

Write $\frac{1}{2}$ on each piece.



Cut one square into a $\frac{3}{4}$ piece and a $\frac{1}{4}$ piece.

Write $\frac{3}{4}$ on the larger and $\frac{1}{4}$ on the smaller piece.

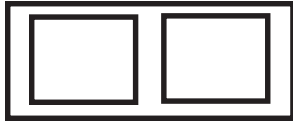


Cut one square into a $\frac{2}{3}$ and a $\frac{1}{3}$ piece.

Write $\frac{2}{3}$ on the larger and $\frac{1}{3}$ on the smaller piece.

Measuring #3

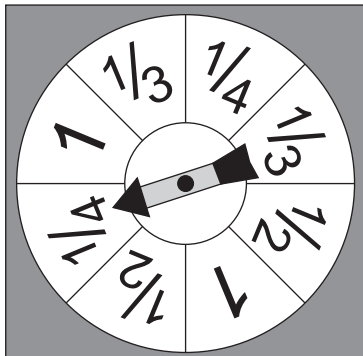
What To Do



How To Use

4. On the largest piece draw two 9 inch squares. Use one of the whole squares and trace around it. This large piece is the game board. The other parts are playing pieces.

1. Use the sheets of paper with words and numbers from Using the Liquid Measuring Cup and Dry Measuring Cups. Show these sheets to children one at a time. Ask them to pick up the appropriate piece or pieces to make the amount and place them in the squares on the game board. The amount will determine if they use one or more squares on the game board. Let children use any combinations to get the correct amount.
2. Repeat above. With a set of dry measuring cups and/or the liquid measuring cup ask children to show you how they would measure the amount shown on the board game. It may help to remove the playing pieces as children "measure" that amount.
3. Use the game as a puzzle. Experiment with the way different pieces fit together to form whole squares (or cups) and parts of squares.
4. Make more game boards and numbered playing pieces.



Make a game spinner. Use cardboard. Cut out an arrow. Fasten the arrow on spinner with a pronged paper fastener. Use numbers or words in the spinner circle.

Give all players a game board. Put all of the playing pieces in the center. Take turns spinning. Try to get both squares on the game board filled (or a total of two cups). The players can select any combination of pieces from the center to complete the squares.

To make $\frac{3}{4}$ for example:

Use three $\frac{1}{4}$ pieces or

Use one $\frac{1}{2}$ and one $\frac{1}{4}$ piece or

Use one $\frac{3}{4}$ piece

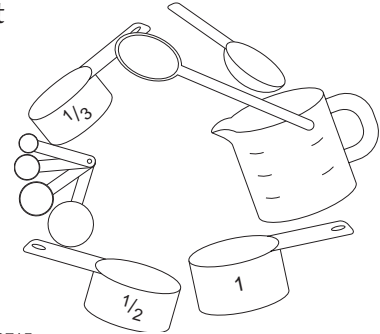
As children play the game or work on fraction concepts in school they will be able to understand how smaller parts can go together to make larger parts.

5. You and the children think of other ways to play the game!

MEASURING ROUNDUP

Learner's Note - You have learned how to measure, mix, chop and use the oven. In the last measure lesson you will practice some of those skills making Applesauce Snack Cake. You will play the Put It Together game in a new way.

Leader's Note - This is the final lesson focusing on measuring. Learners will use the learned skills as they continue to help measure and prepare foods at home. The Put It Together game will be used to help learners understand how to measure the amounts $\frac{2}{3}$ and $\frac{3}{4}$ using dry cups. It may help to borrow two extra sets of dry measuring cups but you can manage the activity with one set. The recipe uses one of the new measures, plus others requiring measuring spoons and the liquid measuring cup. Learners can also practice some skills using the oven.



Materials Needed

- Put It Together Game
- 1–3 sets of dry measuring cups
- Recipe ingredients and equipment - See recipe for Applesauce Snack Cake
- Pencil and fun sheet titled Help Tom Measure

Activity Plan

1. See Put It Together sheet. Do #2 under How To Use. Emphasize $\frac{2}{3}$, $\frac{3}{4}$, $1\frac{2}{3}$, and $1\frac{3}{4}$. Use only the 1, $\frac{1}{4}$, and $\frac{1}{3}$ game pieces. Remove the $\frac{3}{4}$ and $\frac{2}{3}$ game pieces from this activity. You want learners to understand the concept of repeating the use of the dry cups for these amounts. If you have several sets of dry measuring cups the learner can place the cups on top of each game piece to “see” the concept. If you only have one set, the concept can still be seen by removing the game pieces as you “measure” the amounts.
2. Prepare the recipe.
3. Have learners complete the fun sheet.

Measuring #4

Extras!!!!

- Repeat #1 under the Activity Plan with the measure $\frac{3}{4}$. Use the $\frac{1}{2}$ and $\frac{1}{4}$ game pieces. First, let learners put three $\frac{1}{4}$ pieces on the game board. Then tell them they can use one $\frac{1}{4}$ piece and a shortcut for the other pieces. Show how the two $\frac{1}{4}$ pieces make $\frac{1}{2}$. This may be a more difficult idea for young children to understand. If so, try this another day.
- See the Put It Together sheet for more ways to play the game. Try them !
- Encourage learners to use at home all of the new skills they have learned.

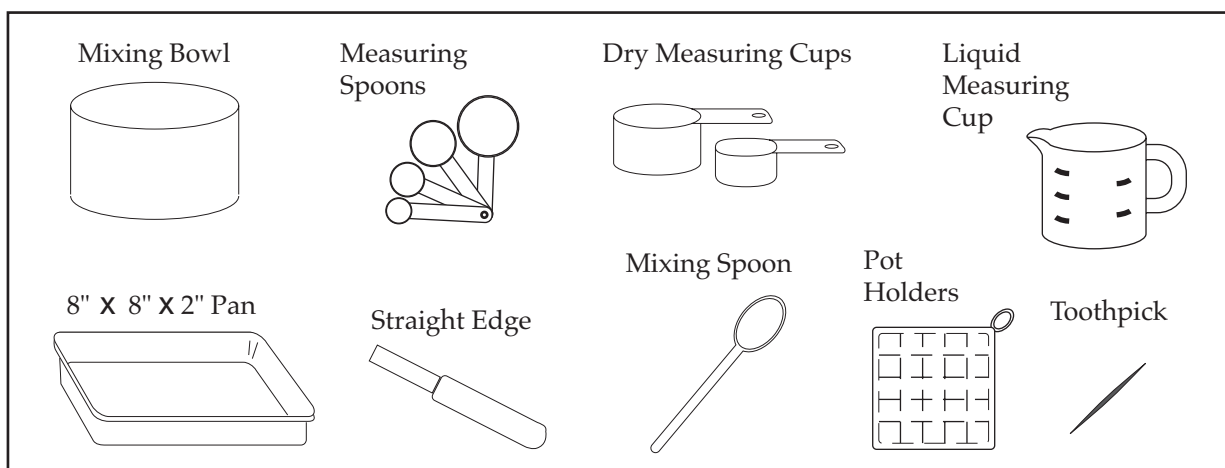
Applesauce Snack Cake

What You Need:

- 1 ²/₃ cups wheat starch
- 1 teaspoon baking soda
- 1¹/₂ teaspoon allspice
- ¹/₃ cup vegetable oil
- ¹/₂ cup applesauce

- 1 cup brown sugar
- ¹/₂ teaspoon salt
- ¹/₂ cup water
- 1 teaspoon vinegar

Equipment:



What You Do:

1. Preheat oven to 350 degrees.
2. Measure the first five ingredients and put into the bowl. Mix gently.
3. Measure the next four ingredients and put into the bowl.
4. Stir the mixture in the bowl very well.
5. Pour the mixture into the pan.
6. Bake for 35–40 minutes.
7. Test with the toothpick to see if the cake is done. If not, bake a few more minutes.
8. Use the potholders. Remove the cake from the oven. Let cool.

You Get:

Sixteen pieces, two inches by two inches





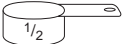





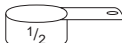

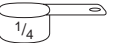


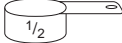







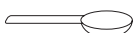












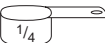
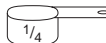

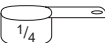
Recipe Information:

	Phenylalanine (mg.)	Protein (gm.)	Calories
Per piece	3.5	.05	170

Measuring #4

Help Tim Measure

Tim is helping prepare a meal. He needs to measure the foods listed below. Circle all of the measuring cups or spoons he should use to measure the foods. Remember to help Tim use liquid or dry measuring cups.

1/2 Teaspoon Cinnamon	 1/2 teaspoon	 1 tablespoon	 1/4 teaspoon	 1 teaspoon
2/3 Cup Wheat Starch	 1/2 cup	 1/3 cup	 2/3 cup	 1/3 cup
1 1/2 Cup Noodles	 1 1/2 cup	 1 cup	 1/2 cup	 1/4 cup
3/4 Cup Orange Juice	 1/4 cup	 1/4 cup	 3/4 cup	 1/2 cup
2 Cups Water	 2 cups	 1 cup	 1 cup	 2 cups
3 Tablespoons Chopped Onion	 1 tablespoon	 1 tablespoon	 1 tablespoon	 1 teaspoon
1 1/3 Cup Cereal	 1 1/3 cup	 1 cup	 1 1/3 cup	 1/3 cup
1/4 Cup Oil	 1/4 teaspoon	 1/4 cup	 1/4 cup	 1/2 cup
2 1/2 Cups Sliced Apples	 1 cup	 1 cup	 1/2 cup	 1 1/2 cups
3/4 Cup Sliced Carrots	 1/4 cup	 1/4 cup	 3/4 cup	 1/4 cup