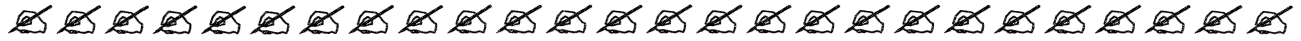


TOPIC #13: Food Measurements

Student Activity Guide



NAME _____ PERIOD _____ DATE _____ SCORE _____

MEASURING TECHNIQUES

Directions: Answer as many of the following questions as possible during the demonstration on measuring.

1. For the purpose of measuring, ingredients can be divided into two categories:
a. _____ b. _____
2. List three dry ingredients:
a. _____ b. _____ c. _____
3. What type of equipment should be used to measure dry ingredients more than 1/4 cup in volume? _____
4. What type of equipment should be used to measure dry ingredients less than 1/4 cup in volume? _____
5. A standard set of measuring cups includes: (circle the right answers)
1/8 C. 1/4 C. 1/3 C. 1/2 C. 2/3 C. 3/4 C. 1 C.
6. A standard set of measuring spoons includes: (circle the right answers)
1/8 t. 1/4 t. 1/3 t. 1/2 t. 2/3 t. 3/4 t. 1 t. 1/2 T. 1/3 T. 1 T.
7. Dry ingredients are measured in "graduated" measuring cups. What does the word "graduated" mean? _____
8. Circle the items needed to measure dry ingredients:
a. metal spatula b. dry measuring cups
c. mixing bowl d. large spoon
9. What dry ingredient should be sifted before you measure it? _____
10. Which dry measuring cups would you need to measure 3/4 cup of sugar?
a. _____ b. _____
11. List four foods which should be measured in a dry measuring cup and pressed gently to level off:
a. _____ c. _____
b. _____ d. _____



MEASURING TECHNIQUES - PAGE 2

12. What ingredient should be firmly packed into the cup when measuring?

13. List the steps for measuring flour and the equipment needed:

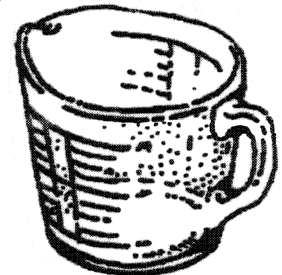
Step:	Equipment:
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____

14. List the steps for measuring a dry ingredient, like sugar, and the equipment used:

Step:	Equipment:
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____

15. Circle the features that a good liquid measuring cup should have:

- a. is able to hold hot liquid
- b. has extra space at the top of the cup
- c. has a pour spout and a handle
- d. has marking that are easy to read



16. List three liquid ingredients:

a. _____ b. _____ c. _____

17. Describe how to measure liquids:

a. _____

b. _____

c. _____



MEASURING TECHNIQUES - PAGE 3

18. List the four items you need to measure 1/2 teaspoon vanilla:

- a. _____ c. _____
 b. _____ d. _____

Why measure the vanilla over a paper towel or the sink instead of directly over your mixing bowl? _____

How can you loosen the lid on a vanilla bottle when it won't turn easily?

19. To make solid shortening easier to remove from the measuring utensil, what should you rinse it with first? _____

20. List the steps for measuring shortening and the equipment required:

- a. _____
 b. _____
 c. _____
 d. _____

22. There are _____ tablespoons in a cup.

23. There are also _____ ounces in a cup.

24. There are _____ ounces in a pound (lb.).

25. There are _____ ounces in a quart.

26. There are _____ cups in a quart.

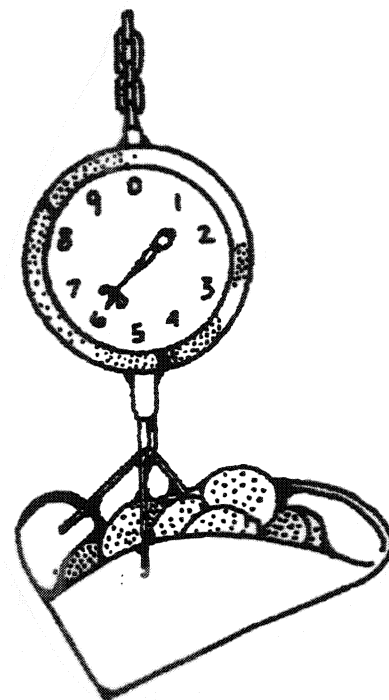
27. There are _____ quarts in a gallon.

28. There are _____ cups in a gallon.

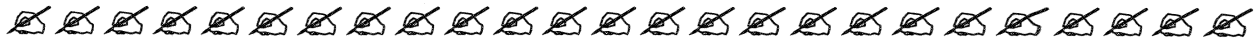
29. There are _____ teaspoons in a tablespoon.

30. There are _____ cups in a pint.

31. There are _____ pints in a quart.



This student activity guide could be included in your "Independent Ideas" Handbook.



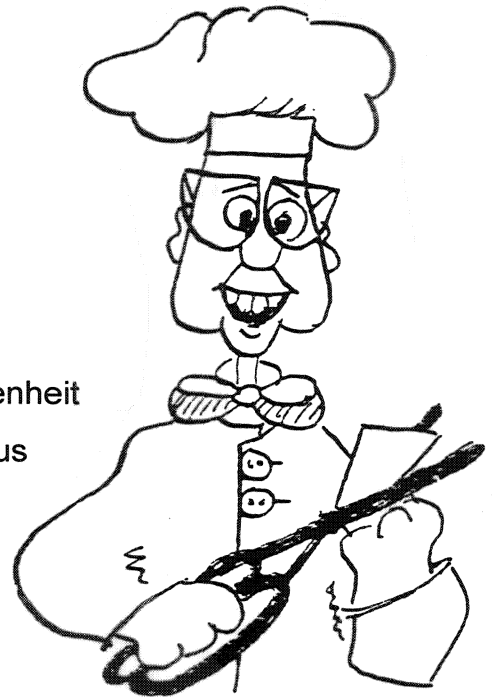
NAME _____ PERIOD _____ DATE _____ SCORE _____

MEASUREMENT ABBREVIATIONS AND EQUIVALENTS

MEASUREMENT ABBREVIATIONS

Listed below on the left are the abbreviations of some measurements commonly used in food preparation. On the right are the measurements the abbreviations stand for. Do you know which abbreviation goes to which measurement? If not, guess! Be sure to cross off the abbreviations as you use them so you don't use them twice.

lb.	_____	teaspoon
doz.	_____	tablespoon
qt.	_____	cup
oz.	_____	pint
tsp. or t.	_____	quart
Tbsp. or T.	_____	gallon
°F.	_____	ounce
hr.	_____	pound
c.	_____	degrees Fahrenheit
gal.	_____	degrees Celsius
°C.	_____	seconds
pt.	_____	minutes
min.	_____	hours
sec.	_____	dozen
tr.	_____	trace



Now go to the next page (or turn this page over) and complete the section on Measurement Equivalents.



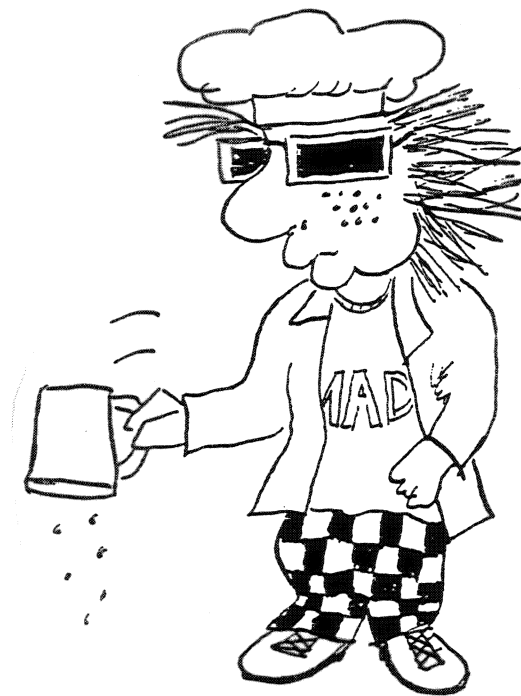


MEASUREMENT ABBREVIATIONS AND EQUIVALENTS

MEASUREMENT EQUIVALENTS

Go to the measurement table with various kinds of measuring equipment, water, and margarine. Beginning with the smallest piece of equipment and using the water, see how many of the measurement equivalents you can determine. Remember, the term "equivalent" means "equal to."

1. How many teaspoons are in a tablespoon? _____
2. How many tablespoons are in a $\frac{1}{4}$ cup? _____
3. How many tablespoons are in a $\frac{1}{2}$ cup? _____
4. How many tablespoons are in a cup? _____
5. How many $\frac{1}{4}$ cups are in a cup? _____
6. How many $\frac{1}{3}$ cups are in a cup? _____
7. How many $\frac{1}{2}$ cups are in a cup? _____
8. How many $\frac{1}{4}$ cups are in $\frac{3}{4}$ cup? _____
9. How many $\frac{1}{3}$ cups are in $\frac{2}{3}$ cup? _____
10. How many cups are in a pint? _____
11. How many pints are in a quart? _____
12. How many cups are in a quart? _____
13. How many quarts are in a gallon? _____
14. How many pints are in a gallon? _____
15. How many cups are in a gallon? _____
13. How many seconds are in a minute? _____
17. How many minutes are in an hour? _____
18. How many minutes are in a $\frac{1}{2}$ hour? _____
19. How many ounces are in a pound? _____
20. How many items are in a dozen? _____
21. How many tablespoons are in a stick of margarine? _____
22. One stick of margarine is equal to _____ cup.



This student activity guide could be included in the "Independent Ideas" Handbook.



LAB PLANNING SHEET: "EASY OATMEAL BARS"

Date of Lab _____ Unit _____ Period _____ Score _____

Student Names: _____

Ingredients:

- 1/3 c. margarine
- 1/3 c. brown sugar
- 1/2 c. orange juice
- 3 c. quick oats
- 1 c. shredded coconut

Options: Nuts or raisins may be used for the coconut; wheat germ can be used for part of the quick oats.

Melt margarine and brown sugar in mixing bowl in a microwave oven, using a low setting for about three minutes. Stir mixture thoroughly and return to microwave for another two minutes on a LOW setting or until the sugar is dissolved. Add the orange juice to this mixture and stir together. Return this mixture to the microwave oven and heat for one more minute on LOW. Remove mixture from microwave, add the quick oats and coconut and mix thoroughly. Return mixture to the microwave and cook for one more minute on a MEDIUM setting. Spread the mixture in a 9-inch square pan that has been greased or coated with a nonstick vegetable spray. (Parchment paper can also be used for easy release.) Press the mixture in firmly and refrigerate until set. Cut into squares and serve.

Makes nine 3-inch square pieces or sixteen 2-inch square pieces.

Before you begin, turn this paper over and complete the lab planning sheet. Assign at least one preparation duty and one cleanup duty to each member of your group. Put the name of the student who is responsible for each task on the line in front of that task. Write your names on the top of this paper!

When you have completed your lab work as outlined on the back of this paper, fill in this section for evaluation.

GRADING: (10=Excellent, 1=Needs Improvement)

	Student Rating	Teacher Rating
Lab area is clean	_____	_____
Directions were followed	_____	_____
Lab was completed on time	_____	_____
Overall rating of product	_____	_____
Group members worked well together	_____	_____
TOTAL	_____	_____



LAB PLANNING SHEET: "EASY OATMEAL BARS" - PAGE 2

- _____ 1. Get the supplies from the supply table.
- _____ 2. Get a glass mixing bowl and large spoon for mixing.
- _____ 3. Measure the margarine and brown sugar into the mixing bowl. Microwave on LOW for three minutes. Remove mixture and stir thoroughly. Microwave for another two minutes or until the sugar is dissolved.
- _____ 4. Measure the orange juice and add to mixture; stir together. Microwave for one more minute on LOW.
- _____ 5. Measure the quick oats and coconut and add to mixture; stir until thoroughly mixed. Microwave mixture again for one minute on MEDIUM setting.
- _____ 6. Coat a 9-inch-square pan with nonstick vegetable spray and spread mixture in pan, pressing firmly. Refrigerate until set.
- _____ 7. Fill one sink with hot soapy water and the other sink with hot rinse water. Set the dish drain next to the edge of the rinse sink.
- _____ 8. Wash the dishes in hot, soapy water. Rinse them in the hot water and place in dish drainer.

EVERYBODY!

Have one person get your "Easy Oatmeal Bars" from the refrigerator. Sit together at your table and enjoy your food! Be sure to let the teacher see your food product.

- _____ 9. Dry the dishes and put them away in their correct places.
- _____ 10. Wipe the microwave, table, and counter tops.
- _____ 11. Empty your dishwater and rinsewater. Dry dish drainer and put away.
- _____ 12. Dry the sinks and polish the faucets with the dish towel. Put the dirty linens in the laundry area.
- _____ 13. Sweep the floor or vacuum the carpet.

EVERYBODY! 14. Put your aprons away!

GOOD JOB!



LAB PLANNING SHEET: "OATMEAL MUNCHIES"

Date of Lab _____ Unit _____ Period _____ Score _____

Student Names: _____

Ingredients:

- | | | |
|---------------------------|--------------|-----------------------|
| 2 Tbsp. margarine | 2 Tbsp. milk | 2 Tbsp. peanut butter |
| 1/4 c. plus 2 Tbsp. sugar | 2 tsp. cocoa | 1/4 tsp. vanilla |
| 2 Tbsp. brown sugar | Dash salt | 3/4 c. quick oats |
| | | 2 Tbsp. flour |

1. Line the jelly roll pan or cookie sheet with waxed paper.
2. In a small sauce pan combine margarine, sugar, brown sugar, milk, cocoa, and salt.
3. Place sauce pan on burner with medium high heat. Stir with a wooden spoon.
4. Bring mixture to a boil and let it boil for one minute.
(Begin timing when the first bubble rises from the bottom of the pan.)
5. Remove pan from heat and place on heat-resistant surface.
6. Add peanut butter, vanilla, quick oats, and flour. Stir until well mixed.
(Mixture should be moist and shiny. If mixture is dry and crumbly, add more milk, 1 t. at a time until mixture is moist and shiny.)
7. Using two small eating spoons, scoop a small portion of mixture into one spoon; with the back of the second spoon, push the mixture onto your jelly roll pan or cookie sheet lined with waxed paper.
8. Allow mixture to cool in refrigerator before eating. (They set up as they cool.)

Makes about 12 cookies.

Before you begin, turn this paper over and complete the lab planning sheet. Assign at least one preparation duty and one cleanup duty to each member of your group. Put the name of the student who is responsible for each task on the line in front of that task. Write your names on the top of this paper.

When you have completed your lab work as outlined, fill in this section for evaluation.

GRADING: (10=Excellent, 1=Needs Improvement)	Student Rating	Teacher Rating
Lab area is clean	_____	_____
Directions were followed	_____	_____
Lab was completed on time	_____	_____
Overall rating of product	_____	_____
Group members worked well together	_____	_____
TOTAL	_____	_____



LAB PLANNING SHEET: "OATMEAL MUNCHIES" - PAGE 2

- _____ 1. Get the supplies from the supply table.
- _____ 2. Get a saucepan and wooden spoon for stirring.
Put waxed paper on cookie sheet.
- _____ 3. Mix the margarine, sugar, brown sugar, milk, cocoa, and salt together in a saucepan and bring to a boil over MEDIUM heat. Stir calmly and regularly. Boil for one minute and remove saucepan from heat.
- _____ 4. Add peanut butter, vanilla, quick oats, and flour to mixture. Stir until well mixed.
- _____ 5. Using two teaspoons, drop small portions of mixture on cookie sheet lined with waxed paper. Put "Munchies" in refrigerator to cool while cleaning.
- _____ 6. Fill one sink with hot soapy water and the other sink with hot rinse water.
- _____ 7. Set the dish drain next to the edge of the rinse sink.
- EVERYBODY! Have one person get your "Munchies" from the refrigerator and sit at your table to eat. Be sure to let the teacher see your finished product.
- _____ 8. Wash the dishes in hot, soapy water. Rinse them in the hot water and place in dish drainer.
- _____ 9. Dry the dishes and put them away in their correct places. Dry dish drainer and put away.
- _____ 10. Wipe the range, table, and counter tops. Dry the sinks and polish the faucets with the dish towel.
- _____ 11. Throw away waxed paper and put your cookie sheet away.
- _____ 12. Put the dirty towels and dish cloths in the laundry area.
- _____ 13. Sweep the floor or vacuum the carpet.
- EVERYBODY! 14. Put aprons away!

GOOD JOB!!