EQUIPMENT/APPLIANCES		SUMMARY SHEET
	SUMMARY SHEET	
Name	Class	
Day One		
1.		
2.		
3.		
Day Two		
1.		
2.		
3.		
Day Three		
1.		
2.		
3.		
Day Four		
1.		
2.		
3.		
Day Five		
1.		
2.		
3.		

### TRIVIA QUESTIONS

- A dainty woman in the eleventh centruy claimed she was too weak to pick up her meat. What invention occurred because of this? THE FORK WAS INVENTED.
- 2. A spit is used in barbecueing. What is it?
  A ROTATING METAL ROD WHICH ATTACHES TO THE BARBECUE UNIT.
- 3. An escargot fork has two prongs and is used to eat what? SNAILS
- 4. What is both an exercise and a large cooking utensil? WOK
- 5. In a nice restaurant you might have peach flambe. What does flambe mean? FLAMING
- 6. Name a kind of stove that resembles a fireplace and was named after a famous signer of the Declaration of Independence.

  BEN FRANKLIN
- 7. What is a five letter word that is both a cooking and sewing term? BASTE
- 8. Tang is a delicious drink and is also part of what utensil?
  A KNIFE--THE TANG IS THE PROJECTING SHANK THAT CONNECTS THE KNIFE TO THE HANDLE.
- 9. Why might someone place cucumber skin along the baseboards in the kitchen? ANTS ARE ALLERGIC TO CUCUMBER. IT WILL KEEP THEM AWAY.
- 10. What is the proper category name for catsup, spices, mustard and relishes? CONDIMENTS
- 11. What is the French word for a pie pastry filled with a rich cream custard and other ingredients like ham or seafood?

  QUICHE
- 12. For what grain do you throw away the ouside, cook the inside, eat the outside, and throw away the inside?

  CORN ON THE COB
- 13. Where is the sugar bowl played? NEW ORLEANS
- 14. What is a honeymoon salad? LETTUCE ALONE
- 15. Sometimes appliances are labeled immersible. What does that mean? YOU CAN WASH THE ENTIRE APPLIANCE IN WATER.
- 16. When you see the words a la carte on a menu, what does it mean? FOOD ITEMS ARE PURCHASED SEPARATELY, NOT AS AN ENTIRE MEAL.
- 17. Cocoa or chocolate comes from something that also jumps. What is it?
  A BEAN
- 18. Where are you most likely to find chili beans? AT THE NORTH POLE
- 19. What two things cannot be eaten for lunch? BREAKFAST AND DINNER
- 20. What's North America's most popular snack food? POTATO CHIPS

### TIME SAVING KITCHEN EQUIPMENT

#### **EXPERIMENT DIRECTIONS:**

Supplies needed: A Paring knife, a slicing knife, a corer and slicer, a bread knife, four paper plates, and four apples.

Have four students come to the front of the room. Have them race to see which person can core and slice an apple into eight equal slices. The student using the apple corer should finish first. Pass out the apples to eat.

### DISCUSSION:

It is important to know which is the best tool for a particular job. Using a wooden spoon instead of a fork to stir pie crust, may cause the product to be different in texture and appearance and perhaps, not as appetizing. Baking cookies in a cake pan may cause the cookies to be shaped in funny ways and not brown evenly because the heat has to flow up over the edges of the pans.

Each piece of equipment has its own specific use. What makes a useful gadget depends entirely upon you--what and how you cook and your work habits. If used correctly, the product should turn out just right! Can you think of some other pieces of time saving equipment besides the apple corer? (A vegetable peeler, an ice cream scoop for cookies, a microwave, a corn cobber, a cherry pitter, etc.)

### **SUMMARY QUESTIONS:**

Name three pieces of kitchen equipment and an alternate that could be used to save time in preparing food.

A VARIETY OF ANSWERS COULD APPLY.

# MICROWAVE DEMONSTRATION

DIRECTIONS: Discuss the following information while you demonstrate the use of the microwave and conventional oven for the class by making a pineapple upside down cake.

Microwaves save up to 75% of the energy it would take to cook the same food in a conventional oven. It also saves heat when you do not want additional heat in the kitchen.

### BASICS OF THE MICROWAVE OVEN

In conventional cooking, the heat comes from the burner or oven. In microwave cooking, the heat originates within the food itself. The magnetron tube in the microwave converts electricity to microwaves. The microwaves then go into the oven and are distributed by a fan. The microwaves are absorbed by the food and move the moisture molecules around within the food to create heat. The container does not become hot until the food warms it. Microwaves are transferred by plastic, glass or paper into the food, but they are reflected by metals and bounced off back to the magnetron tube. Metals should not be used in the microwave oven because they lengthen the cooking time as well as shorten the life of the magnetron tube. In some ovens they may cause a fire. Covers are often used on containers used for cooking in the microwave oven to hold in heat and speed up the cooking time.

#### MICROWAVE COOKING TIME

Timing is very important in microwave cooking since a few extra seconds can mean the difference between success and failure. Start with the shortest recommended cooking time and then adjust the recipe as needed.

VOLUME--The more items you are cooking at one time, or the larger the item, the longer it will take to cook. Avoid overloading the oven.

DENSITY--The more compact the food, the longer it will take to cook. The microwaves only penetrate the outer areas of the dense foods, such as meats and the inner portions cook as the heat transfers to the center.

STANDING TIME--Allow food to stand at the end of cooking time to let the heat penetrate towards the center without additional cooking in the outer areas.

FAT AND SUGAR CONTENT--Foods with a high fat or sugar content attract the microwaves and cook rapidly. The sugary filling of a sweet roll will cook faster than the rest and the fat portion of a steak will heat before the meat.

STIRRING--The outside of the food heats faster than the inside, so stirring distributes the already warmed food to the cooler areas.

EQUIPMENT/APPLIANCES====================================	-MICROWAVE	DEMONSTRATION.	continued
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PIERCING--Piercing foods that have thick skins with a knife or fork, allows steam to escape and prevents bursting.

### SAFETY PRECAUTIONS

- Do not operate the oven if the door does not close firmly or is bent in any way.
- 2. Never use the microwave for non-food items such as drying clothes. They could catch on fire.
- 3. Do not process food in the microwave. Because of the uneven heating, you cannot be sure all of the food has reached the temperature necessary to kill harmful microorganisms.
- 4. Never heat sealed jars, cans or bottles. They may explode. Put the food into another container for heating.
- 5. Never turn the oven on when it is empty; it can ruin the magnetron.

### DEMONSTRATION

Use a yellow cake mix and divide it into two--using one layer in the microwave and one layer in the conventional oven.

1/2 cup melted butter

1 yellow cake mix

1 can chunk or ring pineapple

1 cup milk

1 cup light brown sugar

3 eggs

Prepare the cake mix as directed using milk instead of water. Melt half of the butter in each cake pan. Sprinkle the brown sugar on top of the melted butter. Arrange the pineapple pieces on the bottom of the pans. Pour half of the batter into each pan. Cook one pan in the microwave for about 5 minutes. Cook the other pan in the conventional oven for about 25 minutes. Have the students compare the results using the following chart.

	Conventional Oven	Microwave Oven
Baking time		
Appearance of crust		
Volume		
Texture		
Moistness		
Flavor		

# 

# MICROWAVE DEMONSTRATION COMPARISON CHART

me	Class	
	Conventional Oven	Microwave Oven
Baking time		
Appearance of crust		
Volume		
Texture		
Moistness		
Flavor		
ame	Class	
	Conventional Oven	Microwave Oven
Baking time		
Appearance of crust		
Volume		
Texture		
Moistness		
Flavor		

MOTIVATOR

# WHAT A CUT UP!

Knives have been used for thousands of years. The earliest knife was probably made of stone. The steel knife first appeared in the 1300's. People at that time would carry their knives in their belts. They used them for hunting or whittling wood as well as for cutting food.

Knives can be used for slicing, peeling, chopping and grating. There are probably more kinds of knives than any other kind of kitchen equipment. A few good knives are much better than a large set of poor knives. What determines this? The quality depends on the type of steel blade and the construction of the knife parts.

Knife blades must take and retain good cutting edges so that food will be cut and not mashed. A good blade will keep its sharp cutting edge for life. Different metals such as chromium or vanadium are sometimes added to the steel so they will not rust and will last longer. The very best knives are made of high carbon stainless steel. It has sufficient carbon content so that it can take a sharp edge and be kept sharp at home. If the knife blade bends yet snaps back into place, the balance and tempering are correct. This knife will cut well and last a very long time. It will not lose its sharp edge or darken in color.

Knife handles should be contoured to allow the user to hold the knife naturally. Quality knives generally have a hardwood or simulated wood handle. The finest handles have plastic driven into the real wood so they will be dishwasher safe. This type of handle is called pakkawood. Plain wood is not dishwasher safe and will warp. On a quality knife the tang (end of the blade that extends into the handle) will extend the full length and width of the handle. This provides strength and balance. The tang should be attached to the handle by at least two rivets (although three are much better) so that it does not become loose.

Care of Knives--Use knives only on a cutting board. Don't use a knife for cutting paper or string. Wash, rinse and dry knives after using. Do not soak them in dishwater. Store knives separately. A sharp knife is much more efficient and safe to use than a dull knife.

EQUIPMENT/APPLIANCES=======WHAT A CUT UP, continued

Knives now come in a variety of shapes and sizes to fit many different household needs. A list of common knives and their main purposes follows:

PARING KNIFE--Short blade, used for trimming, peeling, cutting, paring.

BREAD KNIFE--Long, narrow serrated (saw-tooth) blade, slices bread without crushing it.

FRENCH OR CHEF'S KNIFE--Blade is long and fairly wide at the handle. The handle is made so that it can be grasped without the knuckles touching the board in the chopping process. Used for mincing and cutting nuts, celery, onion, etc.

GRAPEFRUIT KNIFE--Short, serrated (saw-tooth) blade, used for freeing citrus fruit sections.

APPLE CORER--Short, curved blade, removes cores from fruits.

STRAIGHT-EDGED SPATULA--Flat blade, levels ingredients being measured.

PEELER--Small, curved blades with opening in between, used for paring vegetables.

SLICING KNIFE--Long, narrow blade, end is shaped upwards, used for slicing meats, shredding cabbage or lettuce.

Now answer the questions on the worksheet.

EQUIPMENT/APPLIANCES========MOTIVATOR

# EQUIPMENT JEOPARDY

DIRECTIONS: Divide the class into two teams. Have a scorekeeper come to the board. You give the answer and let the participants think up the question. Take turns in order. Two points for each correct question.

- 1. A BOWL SHAPED OBJECT WITH LEGS USED FOR STRAINING VERY COARSE FOODS.
  (What is a colander?)
- 2. USED FOR LIFTING FOOD OUT OF LIQUIDS. (What is a slotted spoon?)
- 3. LARGER THAN THE EATING VERSION, IT PIERCES MEAT OR VEGETABLES.
  (What is a kitchen fork?)
- 4. NOT ELECTRIC, USED FOR BEATING AIR INTO EGG WHITES OR REMOVING LUMPS FROM GRAVIES.
  (What is a whisk or whip?)
- 5. ÙSED AS A PROTECTION FOR HANDS WHILE PICKING UP HOT OBJECTS.
  (What is a hot pad?)
- 6. USED FOR SERVING SOUPS AND STEWS. (What is a ladle?)
- 7. USED FOR LIFTING FOOD OUT OF HOT LIQUID OR TURNING MEATS. (What are tongs?)
- 8. PAN UPON A PÁN, USED FOR COOKING CUSTARDS AND SAUCES. (What is a double boiler?)
- 9. USED FOR BAKING JELLY ROLLS AND BAR COOKIES. (What is a jelly roll pan?)
- 10. USED FOR COOKING STEAMED PUDDINGS AND VEGETABLES. (What is a steamer?)
- 11. USED TO TRIM PASTRY OR CUT STRINGS OR MARSHMALLOWS. (What are kitchen shears?)
- 12. USED TO COOL CAKES. (What is a cooling rack?)
- 13. USED TO MEASURE OIL, MILK, WATER, JUICE. (What are liquid measuring cups?)
- 14. USED FOR MEASURING THE TEMPERATURE OF SUGAR SYRUP. (What is a candy thermometer?)
- 15. USED FOR SCRAPING OR PEÉLING VEGETABLES AND FRUITS (What is a vegetable peeler?)
- 16. USED TO MEASURE FLOUR, SUGAR, OATMEAL. (What are dry measuring cups?)
- 17. WITHOUT SIDES, IT IS USED TO FRY SANDWICHES OR PANCAKES. (What is a griddle?)
- 18. COOKS BY HIGH-FREQUENCY RADIOWAVES. (What is a microwave?)

### EQUIPMENT/APPLIANCES========EQUIPMENT JEOPARDY, continued

- 19. USED FOR CUTTING SHORTENING INTO DRY INGREDIENTS. (What is a pastry blender?)
- 20. USED FOR LEVELING INGREDIENTS BEING MEASURED. (What is a spatula?)
- 21. USED FOR GRATING CHEESE AND VEGETABLES TO VARYING DEGREES OF FINENESS.
  (What is a grater?)
- 22. SERRATED OR SAW-TOOTHED EDGE KNIFE. (What is used for slicing bread?)
- 23. USED FOR GREASING PANS OR BRUSHING DOUGH WITH MELTED BUTTER.
  (What is a pastry brush?)
- 24. REMOVES CORÉS FROM FRUIT (What is an apple corer?)

### HOLD UP THE FOLLOWING PIECES OF EQUIPMENT.

- 25. WHAT IS A PASTRY BLENDER?
- 26. WHAT IS A METAL SPATULA?
- 27. WHAT IS A WIRE WHISK?
- 28. WHAT IS A RUBBER SCRAPER?
- 29. WHAT IS A DRY MEASURING CUP?
- 30. WHAT IS A LIQUID MEASURING CUP?
- 31. WHAT IS A SIFTER?
- 32. WHAT IS A PASTRY BRUSH?
- 33. WHAT IS A COLANDER?
- 34. WHAT IS A FUNNEL?
- 35. WHAT IS A VEGETABLE PEELER?

### \*\*FINAL JEOPARDY QUESTION--WORTH 10 POINTS

THIS PAN IS USED FOR POT ROASTING AND WAS NAMED AFTER A EUROPEAN COUNTRY. (What is a Dutch Oven?)

# APPLIANCE GROUPS

DIRECTIONS: Divide the class into groups. Each group will study and learn about a different appliance. Each group will prepare a report and demonstrate to the class the proper use, safety and clean up procedures for their appliance to the class.

Give students the appliance manual and the appliance itself to help them prepare the reports.

One day is spent preparing the reports and one day is spent reporting to the class.

Each student must complete the following report on one appliance of his/her choice.

EQUIPMENT/APPLIANCES	INDIVIDUALIZED ACTIVITY
NAME	CLASS
TOOLS (	OF THE TRADE
correct name next to its use. Then	quipment described below by placing the unscramble the letters on the long line and word is in a divided section and follows in as a reference.
1	For baking cake rolls, bar cookies
2 3	Pot roasting Beating air into egg whites
4 5	Cooking custards, sauces, icings Frying and pan-broiling foods
6 7 8	Turning over meat while frying Protection for counter when cutting Serving soups
9 10 11 12 13	Lifting food, but leaving liquid behind Greasing pans, brushing on butter For steaming vegetables For steaming vegetables Cooking pancakes, sandwiches
14 15 16 17 18	Straining coarse foods Adding air to flour Cutting shortening into dry ingredients Cooling cakes and cookies Cooking foods on range top in liquid
The kitchen cook is always cool 19-20. WHO KNOWS JUST	·

### **EQUIPMENT/APPLIANCES**

\*\*\*KEY-TOOLS OF THE TRADE\*\*\*

# TOOLS OF THE TRADE--KEY

1.	JELLY RQLL PAN	For baking cake rolls, bar cookies
2.	DUTC H OVEN	Pot roasting
3.	WIRE WHISK	Beating air into egg whites
4.	DOUBLE BOILER	Cooking custards, sauces, icings
5.	SKILLEI	Frying and pan-broiling foods
6.	TONG <u>S</u>	Turning over meat while frying
7.	C <u>u</u> tting board	Protection for counter when cutting
8.	LADL <u>E</u>	Serving soups
9.	SLOTTED SPOON	Lifting food, but leaving liquid behind
	SLOTT <u>e</u> d spoon Pastry brus <u>h</u>	Lifting food, but leaving liquid behind Greasing pans, brushing on butter
10.	SLOTT <u>e</u> D SPOON PASTRY BRUS <u>H</u> GRA <u>T</u> ER	Lifting food, but leaving liquid behind Greasing pans, brushing on butter For steaming vegetables
10. 11.	PASTRY BRUS <u>H</u>	Greasing pans, brushing on butter
10. 11. 12.	PASTRY BRUS <u>H</u> GRA <u>T</u> ER	Greasing pans, brushing on butter For steaming vegetables
10. 11. 12. 13.	PASTRY BRUS <u>H</u> GRA <u>T</u> ER <u>S</u> TEAMER	Greasing pans, brushing on butter For steaming vegetables For steaming vegetables
10. 11. 12. 13.	PASTRY BRUS <u>H</u> GRA <u>T</u> ER <u>S</u> TEAMER GRIDDL <u>E</u>	Greasing pans, brushing on butter For steaming vegetables For steaming vegetables Cooking pancakes, sandwiches
10. 11. 12. 13.  14. 15.	PASTRY BRUS <u>H</u> GRA <u>T</u> ER <u>S</u> TEAMER GRIDDL <u>E</u> CQLANDER	Greasing pans, brushing on butter For steaming vegetables For steaming vegetables Cooking pancakes, sandwiches  Straining coarse foods
10. 11. 12. 13.  14. 15. 16.	PASTRY BRUSH GRATER STEAMER GRIDDLE  CQLANDER SIFTER	Greasing pans, brushing on butter For steaming vegetables For steaming vegetables Cooking pancakes, sandwiches  Straining coarse foods Adding air to flour
10. 11. 12. 13.  14. 15. 16.	PASTRY BRUSH GRATER STEAMER GRIDDLE  CQLANDER SIFTER PASTRY BLENDER COQLING RACK	Greasing pans, brushing on butter For steaming vegetables For steaming vegetables Cooking pancakes, sandwiches  Straining coarse foods Adding air to flour Cutting shortening into dry ingredients

The kitchen cook is always cool--

19-20. WHO KNOWS JUST HOW TO USE THESE TOOLS.

NAM	E CLASS
	WHAT A CUT UP!
DIRE	CTIONS: Answer the questions below.
1.	What is added to handles so they will be dishwasher safe?
2.	What kind of wood is known to be dishwasher safe?
3.	What kind of knife is used for chopping celery or onions?
4.	What metal are the very best knives made of?
5.	How should knives be stored?
6.	How many rivets should attach the handle in a quality knife?
7.	How can you tell if the balance and tempering are correct?
8.	Why does a bread knife have a serrated edge?
9.	Which knife is used for peeling and cutting vegetables?
10.	What determines the quality of a good knife?
. 11.	What is the advantage of using high carbon stainless steel?
12.	How long should the tang be in a quality knife?
AFTE FOLL	ER COMPLETING THE ABOVE QUESTIONS, TRY TO IDENTIFY THE LOWING KINDS OF KNIFES. PUT THE CORRECT LETTER IN THE BLANK.

	13.	Bread knife	17.	Spatula
	14.	French knife	18.	Peeler
	15.	Grapefruit knife	19.	Paring knife
-	16.	Apple corer	20.	Slicing knife

# WHAT A CUT UP--KEY

DIRECTIONS: Answer the questions below.

- 1. What is added to handles so they will be dishwasher safe? PLASTIC
- 2. What kind of wood is known to be dishwasher safe? PAKKAWOOD
- 3. What kind of knife is used for chopping celery or onions? FRENCH OR CHEF'S KNIFE
- 4. What metal are the very best knives made of? HIGH CARBON STAINLESS STEEL
- 5. How should knives be stored? SEPARATELY
- 6. How many rivets should attach the handle in a quality knife?
  THREE
- 7. How can you tell if the balance and tempering are correct? WHEN THE BLADE BENDS YET SNAPS BACK INTO PLACE
- 8. Why does a bread knife have a serrated edge? SO IT WILL SLICE THE BREAD WITHOUT CRUSHING IT
- Which knife is used for peeling and cutting vegetables? PARING KNIFE
- 10. What determines the quality of a good knife?

  TYPE OF STEEL BLADE AND THE CONSTRUCTION OF THE KNIFE PARTS
- 11. What is the advantage of using high carbon stainless steel? IT WILL STAY SHARP
- 12. How long should the tang be in a quality knife?
  IT SHOULD EXTEND THE FULL LENGTH OF THE HANDLE

F	13.	Bread knife	C17.	Spatula
H	14.	French knife	D18.	Peeler
G	15.	Grapefruit knife	B19.	Paring knife
E	16.	Apple corer	A 20.	Slicing knife

EQUIPMENT/APPLIANCES	INDIVIDUALIZED ACTIVITY			
NAME	CLASS			
WHAT'S MY NAME?				
When you think of my	elow are some clues to the names of kitchen equipment. name, place it in the blank. Use your own paper to use your textbook for reference.			
1.	I make eggs foamy, but only use me for small amounts. I have revolving blades and a handle to turn.			
2	I am great when used to put melted butter on the top of a loaf of hot bread.			
3	marshmallows.			
4 5 6	I am used to cut shortening into dry ingredients.			
7	stirring foods on top of the range.  Use me to turn pancakes when surface bubbles			
8.	appear. Place bread or cookies on me to cool.			
9. 10.	Use me to carry foods from the supply table.  I am handy and fast for removing cucumber skins.			
11				
12				
13				
14				
15				
16				

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

I'm great for beating eggs and also removing

stand on my own because I have legs.
I'm the handiest for crushing graham crackers and spreading pie dough.
For melting chocolate or cooking custards, use me because I do not burn easily.

lumps while making gravy.
The recipe says drain fruit--use me. I can

# WHAT'S MY NAME--KEY

DIRECTIONS: Listed below are some clues to the names of kitchen equipment. When you think of my name, place it in the blank. Use your own paper to record your answers. Use your textbook for reference.

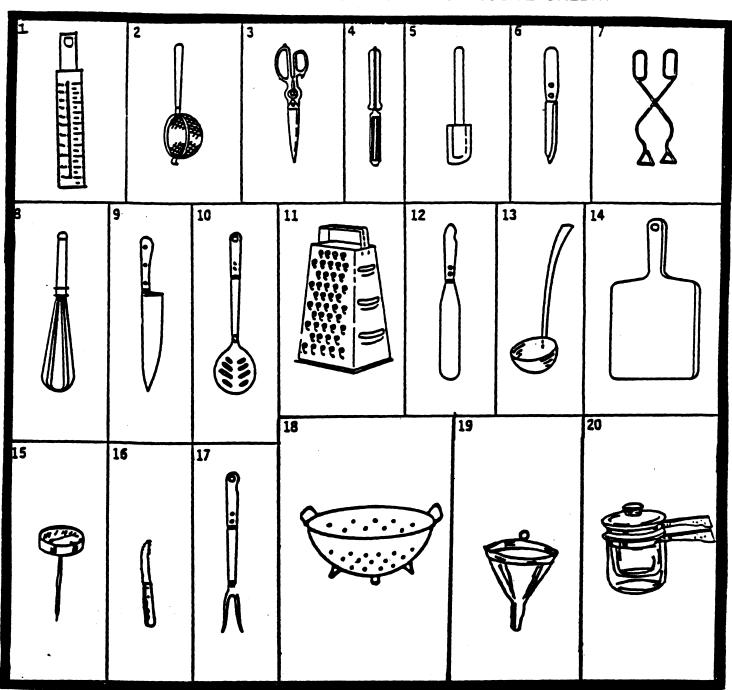
1.	EGG BEATER	I make eggs foamy, but only use me for small amounts. I have revolving blades and a handle to turn.
2.	PASTRY BRUSH	I am great when used to put melted butter on the top of a loaf of hot bread.
3.	KITCHEN SHEARS	Use me to open bottle lids or cut up marshmallows.
5.	APPLE CORER PASTRY BLENDER WOODEN SPOON	To make an apple without a core, I am great. I am used to cut shortening into dry ingredients. I don't conduct electricity so use me when stirring foods on top of the range.
7.	PANCAKE TURNER	Use me to turn pancakes when surface bubbles appear.
9.	COOLING RACK TRAY VEGETABLE PEELER	Place bread or cookies on me to cool.  Use me to carry foods from the supply table.  I am handy and fast for removing cucumber skins.
11.	<u>TONGS</u>	Use me to turn meat or remove fried foods from oil.
12.	ELECTRIC MIXER	Save your energy and time because I'm electric. Use me for creaming.
13.	<u>SPATULA</u>	I'm the best for leveling a cup of flour or frosting a cake, but don't use me to eat with.
14.	BREAD KNIFE	I am handy for slicing banana bread or fruit cake.
15.	FLOUR SIFTER	I make flour light and help you get the right amount.
16.	RUBBER SCRAPER	Some people call me a child cheater, because I get bowls so clean.
17.	WIRE WHISK	I'm great for beating eggs and also removing lumps while making gravy.
18.	COLANDER	The recipe says drain fruituse me. I can stand on my own because I have legs.
19.	ROLLING PIN	I'm the handiest for crushing graham crackers
20.	DOUBLE BOILER	and spreading pie dough. For melting chocolate or cooking custards, use me because I don't burn easily.

EQUIPMENT/APPLIANCES	INDIVIDUALIZED ACTIVITY
NAME	CLASS

# HAND ME THE WHATCHAMACALLIT!

DIRECTIONS: On a separate sheet of paper number from 1 to 20. List the names of the equipment shown below. Then, next to the name, write a use for that piece of equipment. Use your textbook as a guide.

YOU MUST SPELL THE WORDS CORRECTLY TO RECEIVE CREDIT.



### **EQUIPMENT/APPLIANCES**

\*\*\*KEY--HAND ME THE WHATCHAMACALLIT\*\*\*

# HAND ME THE WHATCHAMACALLIT--KEY

1/2 point for naming each piece of equipment and spelling it correctly.1/2 point for naming a correct use for each piece of equipment.20 points possible

NAME	OF EQUIPMENT	USE
1.	THERMOMETER	MEASURING SUGAR SYRUP
		(CANDY), MEAT OR DEEP FAT
_		FRYING TEMPERATURES
2.	STRAINER	STRAINING JUICE OR LIQUIDS
_		FROM FOODS
3.	KITCHEN SCISSORS	CUTTING PAPERS, WRAPPERS,
		STRINGS, MARSHMALLOWS OR
		PASTRY
4.	VEGETABLE OR POTATO	
_	PEELER	FRUITS OR VEGETABLES
5.		
	SPATULA	FOOD BOWLS AND PANS
6.	PARING KNIFE	CUTTING SKINS FROM
		VEGETABLES OR FRUITS
7.	TONGS	LIFTING FOODS OUT OF LIQUIDS
	•	OR TURNING MEATS WITHOUT
		PIERCING THEM
8.	WHIP OR WHISK	BEATING AIR INTO EGG WHITES
		OR REMOVING LUMPS FROM
		FOODS
9.	FRENCH OR CHEF'S KNIFE	MINCING, CUTTING AND SLICING
		FOODS
	SLOTTED SPOON	TO LIFT FOOD OUT OF LIQUID
11.	GRATER	GRATING FOODS TO VARYING
	SPATULA	DEGREES OF FINENESS
12.	SPATULA	LEVELING INGREDIENTS BEING
		MEASURED OR FROSTING CAKES
	LAULE	SERVING SOUPS AND STEVVS
14.	RING MOLD	FORMING PUDDINGS, FANCY
		DESSERTS AND SALADS
15.	MEAT THERMOMETER	DETERMINING DONENESS OF
		MEATS AND ROASTS
16.	GRAPEFRUIT KNIFE	DIVIDING CITRUS FRUITS INTO
		SECTIONS
	KITCHEN FORK	LIFTING, TURNING LARGE FOODS
18.	COLANDER	STRAINING COARSE FOODS OR
		PUREEING FOODS
19.	FUNNEL	FILLING BOTTLE OR JARS WITH
		LIQUID
20.	DOUBLE BOILER	COOKING CUSTARDS, SAUCES,
		ICINGS

EQUIP	PMENT/APPLIANCES INDIVIDUALIZED ACTIVITY
NAM	E CLASS
	AMAZING APPLIANCES
class	ver the following questions on each of the appliances demonstrated in
1.	
2.	Two safety tips
	a b
3.	How do you clean this appliance?
4.	Answer the group's questions here.
	a
	b
	C
1.	Name of appliance
2.	Two safety tips
	a
3.	b How do you clean this appliance?
0.	riew do you cloan this appliance.
4.	Answer the group's questions here.
	ab.
	C
4	Nome of analisms
1. 2.	Name of appliance Two safety tips
۷.	• •
	a b
3.	How do you clean this appliance?
4.	Answer the group's questions here.
	a
	b
	C.

EQUIPMENT/APPLIANCES^^^^^^^^^^^^^^^^^^^	^^^^^^^STUDENT GUIDE
NAME	CLASS

### MICROWAVE MAGIC

Read the following information and complete the worksheet on the following page.

### HOW MICROWAVES COOK FOOD

Microwave cooking relies on short, high frequency electromagnetic waves to penetrate the food and cook it. They penetrate only about 3/4 to 1-1/2 inches into the food. As microwaves pass through food, they cause all the water, fat and sugar molecules in the food to vibrate. This vibration of molecules is heat. These molecules vibrate at about 2-1/2 billion times per second. The friction from the molecules moving against each other causes heat which cooks the food. The microwaves, therefore, cause the food to cook itself.

The U.S. Department of Health and Human Services has determined that microwave ovens are completely safe when used following the manufacturer's instructions.

The following general guidelines should always be followed:

- 1. Never operate a microwave with the door open.
- 2. Never place an object between the front of the oven and the door; never operate if the door is bent, warped or the seal is broken in any way.
- 3. Make sure the door and seal are always kept very clean. Wipe all surfaces with soapy water; then rinse with a damp cloth to remove all grease and dirt.

### MICROWAVE UTENSILS

Containers which allow the microwaves to pass through them should be used.

Heat-resistant glass, ceramics, paper and microwave-safe plastics are acceptable.

Metal should never be used because it reflects the microwaves and will cause the food to heat unevenly and may even damage the oven.

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Round containers are better than square or rectangular ones because the corners tend to absorb the microwaves, causing the food in the corners to burn. Items other than bowls may be used, such as wax paper, paper towels and plastic wrap. All of these materials help to retain heat and some moisture. Towels made of recycled paper could start on fire. Foil should only be used if the manufacturer of your oven advises you to do so. Avoid using metal ties to hold plastic bags shut. They could cause a fire in the microwave. Styrofoam plates may be used, but if there is much fat in the food being heated the styrofoam may become distorted.

Food cooked in a microwave oven continues to cook even after the oven is shut off. Items need to rest before testing for doneness. Most recipes give a standing time so you will know how long to wait.

### ADVANTAGES OF THE MICROWAVE OVEN

Microwaves cook small portions of food about 75% faster than in a conventional oven. This means you save not only time, but energy. The oven gives off no heat, and does not need to be preheated before use. It provides about the quickest way of cooking most foods.

It is ideal for defrosting foods and reheating leftovers. Foods seem to keep their just-cooked flavor. Because very little water needs to be added to most foods and they cook very quickly, nutrients are conserved.

Often foods can be heated and served in the same containers. This saves on clean-up time and effort. Microwave ovens are quite easy to clean, because the food does not bake onto the oven walls.

The microwave can be a useful time saver for melting chocolate, marshmallow, butter or precooking fruit for desserts or meats for the barbecue.

#### DISADVANTAGES OF THE MICROWAVE

Many foods do not brown the way they do in a regular convection oven. This is especially true of baked goods and meats. The microwave uses a moist heat type of cooking and foods do not dry out as much; this means they are not as dry or crunchy as foods cooked in other types of ovens.

Because the microwave cooks so quickly, even a few extra seconds cooking time can mean a big difference in the way foods turn out. Foods that are high in fat or sugar cook faster than foods that are mostly liquid. For more even cooking, rotate the dish throughout the cooking period. Some microwave ovens come with a turntable for this purpose. This helps to cook the food more evenly.

It is important to pierce foods such as potatoes so the steam does not build up on the inside and burst the skin open.

Most microwaves are smaller than regular convection ovens and not as many different items can be cooked at one time.

EQUIPMENT/APPLIAN(	CES				INI	DIVIDUALIZED ACTI	IVIT			
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### CLUES:

13.

- 1. Foods need this to continue cooking after the microwave is turned off.
- 2. Foods high in sugar cook faster than those high in this.
- 3. Great for melting this food.
- 4. Make sure this is always closed.
- 5. These taste like they were freshly made.
- 6. This is partially eliminated because food can be cooked and served in the same container.
- 7. A type of cookware often used in microwaves.
- 8. Microwaves cause molecules to do this.
- 9. Never use this inside the oven.
- 10. These are better than square or rectangular containers.
- 11. Even a few extra seconds can cause foods to do this.
- 12. It is safer and much faster to do this in the microwave.
- 13. Foods cook more evenly on this.
- 14-20. Name seven materials that can safely be used in the microwave.

# MICROWAVE MAGIC--KEY

ONE POINT FOR EACH CORRECT ANSWER. 20 POINTS TOTAL POSSIBLE.

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### CLUES:

- 1. Foods need this to continue cooking after the microwave is turned off. TIME
- 2. Foods high in sugar cook faster than those high in this. LIQUID
- 3. Great for melting this food.

CHOCOLATE

- 4. Make sure this is always closed. DOOR
- 5. These taste like they were freshly made. LEFTOVERS
- This is partially eliminated because food can be cooked and served in the same container.
   WORK
- 7. A type of cookware often used in microwaves. PLASTIC
- 8. Microwaves cause molecules to do this. VIBRATE
- 9. Never use this inside the oven. METAL
- 10. These are better than square or rectangular containers. ROUND
- 11. Even a few extra seconds can cause foods to do this. OVERCOOK
- 12. It is safer and much faster to do this in the microwave. DEFROST
- 13. Foods cook more evenly on this. TURNTABLE
- 14-20. GLASS, CERAMICS, PAPER, PLASTICS, PAPER TOWEL, WAX PAPER, PLASTIC WRAP

REVIEW REVIEW

### EQUIPMENT BINGO

DIRECTIONS: You may pass this list out to students or copy it on the board or bulletin board.

From the list below, choose five different kinds of cooking equipment to go under each of the headings on your Equipment Bingo Card. There will be several pieces of equipment that you will not use.

1. Hold up the pieces of equipment the first few times you play this game.

Call out the definitions of the equipment--NOT THEIR NAMES. You can play regular Bingo, L shaped, T shaped, frame around the outside, etc. Give lab points for a prize. Several students may win each game.

Example: The cake pan would go under the baking column, which would go under the mixing column.

### KEY TO EQUIPMENT BINGO

BAKING CUTTING Cake pan Cutting board Cookie sheet Kitchen scissors Bread pan Paring knife Pizza pan Grater Muffin tin Apple corer Pie pan Bread knife Cooling rack Slicing knife Biscuit cutter

**MEASURING** 

COOKING Double boiler Saucepan Pancake turner Tongs Wooden spoon Griddle Skillet

MIXING Rubber scraper Mixing bowls

Spatula Dry measuring cups Whisk Liquid measuring cups Electric mixer Teaspoon

Potato masher Tablespoon Egg beater Sifter Pastry blender Wax paper

Colander Candy thermometer

DO NOT CALL OUT THE NAMES OF THE EQUIPMENT. CALL OUT THE DEFINITIONS. Cut these definitions apart, mix them up and select one at a time.

- REVIEW RE
- APPLE CORER--This removes the cores from fruit.
- BISCUIT CUTTER--Use this to cut foods into a round shape.
- BREAD KNIFE--This is sharp and serrated, so it will not tear what you are cutting.
- BREAD PAN--This deep, narrow pan is sometimes used to bake fruitcakes. It should have a dull or anodized finish to brown the product. Another name for this is a loaf pan.
- CAKE PAN--This may be round, square, rectangular. It usually has straight, deep sides.
- CANDY THERMOMETER--Use this to measure the temperature of hot syrup.
- COLANDER--Use this to strain very coarse foods.
- COOLING RACKS--The are usually made of wire and are used to cool baked goods.
- COOKIE SHEET--A flat pan with no sides. It's better if it has a shiny finish so the product will not burn.
- CUTTING BOARD--Use this to protect the counter when chopping or slicing or for cooling hot dishes.
- DOUBLE BOILER--A pan upon a pan. One is filled with water to prevent the other's contents from scorching.
- DRY MEASURING CUPS--This set usually has a cup for each measurement. Use it for flour, sugar and cornmeal.
- EGG BEATER--This has a handle you turn to whip icings, eggs and whipping cream.
- ELECTRIC MIXER--It uses kilowatts to mix cakes and cookie batters.
- GRATER--This is used for shredding cheese or vegetables.
- GRIDDLE--Use this to fry pancakes or sandwiches. It is usually a flat, square pan with no sides.
- KITCHEN SCISSORS--This is used to open packages, trim pastry, cut dried fruit or marshmallows.

- REVIEW RE
- LIQUID MEASURING CUPS--These are usually made of glass or plastic; they have handles and lips for easy pouring. Always measure at eye level. Use them for measuring for milk, water and syrup.
- MIXING BOWLS--These hold ingredients while stirring and combining foods.
- MUFFIN TIN--This is used for baking cupcakes, cloverleaf rolls and muffins. If you do not need each area, add a little water before baking so the pan will not burn.
- PANCAKE TURNER--It is a flat, wide slotted tool on a handle. Flip foods such as eggs or grilled cheese sandwiches with this.
- PARING KNIFE--A small cutting tool used to remove the skins from vegetables and fruits.
- PASTRY BLENDER--This cuts shortening into dry ingredients. In a pinch, two knives will work instead.
- PIE PAN--A round pan with slanted sides.
- PIZZA PAN--A round pan with no sides used to make an Italian dish.
- POTATO MASHER--This is used for mashing bananas, strawberries or potatoes.
- RUBBER SCRAPER--This is a flexible piece of rubber or plastic on a handle. It gets out the last bit of mayonnaise or cake batter.
- SAUCEPAN--This is used for cooking foods in liquid.
- SIFTER--Use this to add air and remove lumps before measuring flour or other dry ingredients.
- SKILLET--A pan with a long handle used to pan-broil, fry or sauté.
- SLICING KNIFE--This cuts food into thin, broad pieces.
- SPATULA--This has a long, flexible blade and is used to level dry ingredients or frost a cake.
- TABLESPOON--A measuring tool that is abbreviated with a capital T or TBSP.
- TEASPOON--Three of these equals a tablespoon.

- REVIEW RE
- TONGS--This tool opens and closes to pick up foods without piercing them.
- WAX PAPER--When sifting and measuring, use this underneath for easy handling and clean up.
- WHISK--This is a whip made of wires, used to make sauces and stir foods so they do not get lumpy.
- WOODEN SPOON--This tool is made of something that will not conduct electricity. It has a long handle.

List three questions here that you will ask the class about your appliance.