

FOOD PREPARATION

After learning how to read **recipes** from **Ms. Lara**, **Bill's** thirteen-year old daughter, **Kay**, starts **cooking** for the family. At first, she makes simple **recipes**.

Now she wants to make more difficult **recipes**. She realizes she needs to learn more. She decides to take a Family and Consumer Science class at her high school to learn more about **cooking** and **nutrition**. The first unit is on **food preparation**. **Mrs. Gates**, her teacher, says **food preparation** means knowing how to use **kitchen** tools and getting **foods** ready to eat.

KITCHEN BASICS

Mrs. Gates says every **kitchen** should have basic items. These help a **cook** **prepare foods** efficiently. **Kitchen** basics include **utensils**, pots and pans, dishware, **cutlery**, **baking** equipment, and **electric appliances**. **Mrs. Gates**

tells the class that the specific basics in each **kitchen** depend on three things.

First, the family should think about how much time they have for **cooking**. For example, busy families may depend more on a **microwave** and **microwave** safe **cookware** than on **stovetop** and **stovetop** pots and pans. Second, the family should think about the size of the family and the kinds of **foods** they like. For example, if there are several family members who like **baked meats** and **turkey**, the **kitchen** needs to have a large **roasting** pan. Finally, the family should think about the types of **cooking** equipment and **appliances** available and the amount of counter and storage space in the **kitchen**. Limited space may reduce the size and number of **cooking** items a family owns.

UTENSILS

Mrs. Gates says **utensils** are a **cook's** tools. They help the **cook measure**, handle, and **prepare foods**.

First, according to **Mrs. Gates**, a **cook** needs **measuring** tools. **Kay** raises her hand and tells the class that her family just bought a set of **measuring spoons**, a set of **nested measuring cups**, and a glass 4-cup **measuring cup** with a spout. **Mrs. Gates** adds that **cooks** need to **measure ingredients**, **temperature** and **time**. These **measurements** require a **meat thermometer**, an **oven thermometer** and a **kitchen timer**.

Mrs. Gates says that some tools are used mainly with **vegetables** and **fruits**.

These tools include a brush for washing and cleaning and a **peeler** for removing **inedible skins**.

Mrs. Gates notes that **cutting boards** are basic **kitchen** utensils. **Mrs. Gates**

tells the class that it is best to have two **cutting boards**. One is used for **raw**

meats. The second **cutting board** can be used for **chopping fruits, vegetables, and other foods.** **Mrs. Gates** recommends hard plastic **cutting boards** instead of wooden ones. She says that, if wooden **cutting boards** are used with **raw meat**, they can become **contaminated** by **bacteria.** Plastic **cutting boards** are easier to keep clean.

In addition, a **cook** needs tools for **mixing, blending, and stirring foods.** **Mrs. Gates** says large metal or wooden **spoons** and rubber **spatulas** are used most often. A **cook** also needs a **wire whisk or rotary beater** for **whipping or beating eggs, cream, or liquid mixtures.**

Mrs. Gates tells the class that a **kitchen** should have tools for washing, **sifting, pouring, and straining foods.** These tools include a **colander, strainers** and

sifters. **Vegetables** and **fruits** can be put in a **colander** for washing.

Vegetables or **pasta** cooked in **water** can be **poured** into a **colander** to drain

the **water**. **Strainers** and **sifters** are used to **filter foods**. For instance, a

strainer helps separate liquids from solids. A **sifter** is used in **baking** to **sift** dry

ingredients such as **flour**.

Kitchen basics also include tools for handling hot **food** as it **cooks** or is being

served. For example, **Mrs. Gates** recommends having a long-handled **fork** and

tongs. A **cook** uses these tools to handle and turn **cooking meat** or to pick up

large **vegetables** such as boiled **corn**. In addition, a **cook** needs several

spatulas, either metal or plastic, for **turning food**. **Cooks** use **spatulas** in

frying and flipping flat **foods** such as **eggs**, **pancakes**, and **burgers** that must

be **cooked** on both sides. **Mrs. Gates** says a **kitchen** also needs several large

slotted spoons. These spoons have holes in them. They are used to serve **foods** like **cooked peas** or **carrots** without including the liquid in which they are **cooked.** She says a **cook** needs several **ladles** and large **serving spoons** for **foods** with liquid such as **soups** or **chili.** **Serving spoons** also can be used to **baste meat** to keep it moist as it **bakes.**

Some tools have special uses. **Mrs. Gates** recommends having a manual or **hand can opener** instead of an **electric can opener.** A **hand can opener** can be used if the power goes out. **Mrs. Gates** says that a **kitchen** should have a **grater** that has several sizes of holes on it. A **grater** may be used to **shred** **cheese, cabbage, chocolate,** or other hard **ingredients.**

DISHWARE

Mrs. Gates shows the class the kinds of dishware needed in every **kitchen**.

Some are used for **food preparation**. These include **mixing bowls** and

ingredient dishes in at least three sizes. Such **bowls** can be made of glass,

stainless steel and plastic. Some dishware is used for **cooking**. For example,

every **cook** needs **baking** dishes in different sizes. These baking dishes often

are used as serving dishes. Some of the **baking** dishes should have **lids**. A

cook also needs at least one **microwave-safe casserole** dish with a **lid** and at

least one **salad bowl** for serving. Finally, **kitchen** basics also include several

plastic containers with **lids** in different sizes for storing **leftovers**.

POTS AND PANS

Stovetop cooking is the heart of the **kitchen**, according to **Mrs. Gates**. This type of **cooking** requires a variety of pots and pans in different sizes. These can be made of aluminum, cast iron, enamelware, Teflon, or stainless steel. For example, a **kitchen** needs a minimum of three **saucepans** (1 quart, 2 quart, and 3 quart) and an 8-quart **stockpot**. Each pan needs a matching tight-fitting **lid**.

These pans are used for everything from **gravy** or **potatoes** to **soups** or **stews**.

In addition, **Mrs. Gates** recommends that every **kitchen** have a specialized pot that is used with **water**--a **double boiler**. This is a kind of pot on top of a pot. It provides gentle even heat for **foods** like **chocolate** or **sauces** that **burn** easily.

The bottom pot is filled with **water** and placed over heat. The **food** to be **cooked**

is placed in the top pot. The hot **water** allows the **food** to get hot without **burning**.

In terms of pans, **Mrs. Gates** suggests that a **kitchen** needs to include a large **sauté** pan, several **frying pans** (at least one 8 inch and one 10 inch) and a cast iron **frying pan**. Finally, a **cook** needs some pans specifically for **oven** use.

These include a **Dutch oven**, a **roasting** pan and a **broiling** pan. A **kitchen** should also have **lids** to fit these pans.

CUTLERY

Food preparation often depends on a **cook's** selection and quality of **cutlery**--
knives. **Mrs. Gates** explains that a **knife** can be a **cook's** best friend during

food preparation or it can be the **cook's** worst enemy--depending on the **cook's** skill and understanding of **knife** safety.

Mrs. Gates shows the class different sizes of **knives**. The largest **knife** is a called a **chef's knife**. It has a wide **blade** that is 8" to 10" long. A **cook** also needs a medium-sized **utility knife** (sometimes called a **sandwich knife**). It should have a **blade** from 6 to 12 inches long and be at least 1-1/2 inches at the widest point. This **knife** is used to **chop, mince, and slice**. The side of the **blade** can be used to crush **garlic** or **peppercorns**. The smallest **knife** in a **cook's kitchen** is a **paring knife**. The **blade** is usually about 3- to 4-inches long and about 3/4 inch wide at the widest point. The **paring knife** is generally the most used **knife** in a **kitchen**. It is used to **peel** and **core fruits** and **vegetables** and for other small **kitchen cutting** tasks. Finally, a **kitchen** needs one or more

bread knives. These are different from other **knives** because they have **serrated blades.** **Mrs. Gates** notes that **cooks** must use a **sawing** rather than **cutting** motion when using a **serrated knife.** These **knives** also are good for **cutting tomatoes, peaches,** and other **foods** with soft, easily bruised **skins.**

Mrs. Gates says **dull knives** are dangerous **knives.** They can slip off **food** and cut fingers. Therefore, **cutlery** should be stored in a special **knife block** rather than tossed in a drawer. When **knives** become **dull,** they can be sharpened with a special tool called a **steel.**

Knife safety also includes correct usage. **Mrs. Gates** emphasizes that the **cook** should use **knives** slowly and carefully when **chopping.** The **cook** should always **cut** away from the body. The **cook** also needs to be sure that hands are

dry when using a **knife**. The **cutting** surface should be nonslip. If fingers are curled under on the hand holding the **food**, fingers are less likely to be **cut** by accident.

BAKING EQUIPMENT

Mrs. Gates tells the class that **cooking** in the **oven** is called **baking** or **roasting**.

A **kitchen** needs a variety of specialized tools for **preparing baked** items and different types of pans for different kinds of **baked** goods. Pans can be glass or metal.

For example, if a **cook** is going to make rolled **cookies** or **pies**, the **cook** needs a **rolling pin** to **prepare** the **dough** or **crust**. Then, a **cook** needs **baking** or **cookie sheets** (some flat and others with rims) for **baking cookies** and **biscuits**

as well as glass or metal **pie** plates for **baking pies**. **Cooks** may find it useful to have a cooling rack for **cakes**, **cookies**, and **pies**. This rack lets air circulate around the **food**. The **food** cools more quickly.

Cooks need different kinds of pans for different uses. **Muffin tins** and **loaf**

pans are used for **baking quick breads**. Larger rectangular shaped 9” by 14”

pans are used for making **brownies** and larger single-layer or sheet **cakes**.

Smaller **baking** pans (9” by 9” square or 8-9” round) have many

uses—**cornbread**, layers for **cakes**, and **cobbler**.

SMALL ELECTRIC APPLIANCES

Mrs. Gates says that today's **cooks** may use **electric appliances** as well as hand tools. Small **electric appliances** often do what hand tools do, but in faster, more efficient ways.

Mrs. Gates shows the class how some small **appliances** can help **prepare** foods more easily. She asks one group of students to **stir** a **batter** by hand with a spoon or a **rotary beater**. A second group uses a **hand mixer** to **prepare** the **batter**. A third group **prepares** the **batter** using a **standing mixer**. The students using the mixers **prepare** the **batter** much more quickly and with less effort. **Mrs. Gates** tells the groups that they also can save time and work by using a **blender** to **mix** liquids and **beverages** and a **food processor** to **slice** or **chop ingredients**. Beware not to overmix some **batters** such as **muffins**. Overmixing can cause the **muffin** to become tough. Also avoid overprocessing **foods** such as **chopped onions**.

PREPARING MEATS

According to **Mrs. Gates**, **cooking meats** often requires special **preparation**.

The **cut** of the **meat** often determines how the **meat** should be **prepared**. Some

cuts should be **cooked** slowly. Other **cuts** should be **cooked** quickly. Some

cuts need moist heat. Others need dry heat.

For instance, **Mrs. Gates** says that less tender **cuts** include chuck **roasts**,

shoulder **steak**, round **steak**, and flank **steak**. She says these **cuts** are best

cooked with moist heat at low **temperatures** for long periods of time. **Stews** are

good examples of this type of **preparation**. They can be **cooked** in a **slow**

cooker. They also can be **cooked** on the **stovetop** in a pot with a **lid** on or in

the **oven** in a pot such as a **Dutch oven** with the **lid** on. **Mrs. Gates** says that

tender **cuts** like ribeye or sirloin **steaks** can be cooked with dry heat such as

grilling or broiling. Mrs. Gates gives the class the following chart for **cooking meats.**

TERM	MEANING	TYPE OF HEAT	TIME
Braise	Brown slowly on all sides. Add liquid, then cover and simmer over low heat until tender	Moist	Slow
Broil	Cook under a broiler or between 2 heated surfaces	Dry	Fast
Grill	Cook over hot coals or on a barbeque grill	Dry	Fast
Pan Broil	Cook uncovered in an ungreased or lightly greased skillet	Dry	Fast
Pan Fry/Saute	Cook in small amount of hot oil in a skillet	Moist	Fast
Roast	Cook in a shallow open pan in the oven	Dry	Slow
Stew	Cook in liquid	Moist	Slow
Stir Fry	Small pieces of meat cooked quickly with vegetables	Moist	Fast

Mrs. Gates says that no matter how a **meat** is **cooked, rubs** and **marinades**

add flavor or tenderize **meat**. **Rubs** are made from dry spices and seasoning.

They're called **rubs** because the spices are rubbed on the surface of the **meat**.

Marinades are made from liquids such as juice, wine, **water** or oil with spices

added. **Meats** are soaked in the **marinade** to tenderize and add flavor.

Mrs. Gates says some small **appliances** are used to **cook** and heat **foods**, but

in different ways. For example, **slow cookers** let **foods** such as **soups**, **stews**,

and some **meats** cook slowly over several hours. Using a **slow cooker** allows a

busy **cook** to start a meal early in the day, leave for work or school, and return to

a completed meal. **Microwave ovens**, on the other hand, shorten the time

required to **cook** or heat **foods**. **Microwave cooking** differs so much from

cooking on a **stovetop** or in the **oven** that **Mrs. Gates** gives the class a list of

tips for using a **microwave oven** safely.

TABLE 1 Tips for Safe Cooking with a Microwave Oven

1. Use the right cookware. Use only glass, ceramic, and plastic containers labeled for **microwave oven** use. Don't use plastic storage containers such as margarine tubs, take-out containers, whipped topping bowls, and other one-time use containers. They can warp or melt and even leak harmful chemicals into **cooking food**. **Microwave** plastic wraps, wax paper, cooking bags, parchment paper, and white **microwave**-safe paper towels should be fine to use. Do not use thin plastic storage bags, brown paper or plastic grocery bags, newspapers, or aluminum foil.

2. Cover it up. Use a **lid** or a **microwave**-safe plastic wrap to hold in moisture and provide safe, even heating. Leave a small portion uncovered. This space allows some **steam** to escape which prevents **burns** when the cover is removed.

3. Let it stand. **Foods** should sit as directed by the **recipe** after removal from the microwave. This time is called **standing time**, but it really gives **food** extra time to **cook**. In addition, some **microwave ovens** have hot spots. If **food** is taken directly from the **microwave oven** and eaten, a few areas could be **superheated** and **burn** the tongue or mouth.

4. Don't overheat liquids. Don't heat **water** or other liquids more than the time recommended by the manufacturer or any **recipe**. **Superheating** can

occur when plain **water** is heated in a clean cup for a long time. The **water** may look OK, but it can erupt when moved and scald or **burn** you.

5. Avoid cold spots. Some **microwaves** don't heat evenly. As a result, **food** doesn't get hot enough to kill **bacteria** when **cooking** or **reheating foods**. Be sure to **stir** or turn **food** and watch **standing times**.

6. Heat it up. Don't **cook** large pieces of **meat** on high power. **Meat** should be cooked on medium power for longer periods to let heat reach the center without overcooking the outside. Don't partially **cook food** and store it for later use. Use a **meat thermometer** to make sure **food** is cooked to a safe **temperature** (165 °F). Heat ready-to-eat **foods** such as **hot dogs** and fully **cooked ham** according to directions.

7. Do it right. Don't use a **microwave** if the door is damaged or doesn't close tightly. Don't use the **microwave** when it is empty. Starting an empty **microwave** can cause sparks and a fire.

READY. . . SET. . . COOK!

Mrs. Gates gives the class an assignment. She tells each person to choose a **recipe**. They should check their **kitchens** to see if they have what they need. Once everything is ready, they should **prepare** the **recipes** and bring them to class for everyone to share. The assignment gives **Kay** a chance to practice **preparing** and **cooking** a new **recipe**. Now **Kay** thinks she is ready to **prepare** some more difficult **recipes** for the family. This will be a big help when her family has a new baby. She is ready to **cook** good **food**!