The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.
Description
The Texas 4-H Explore series allows 4-H volunteers, educators, members, and youth who may be interested in learning more about 4-H to try some fun and hands-on learning experiences in a particular project or activity area. Each guide features information about important aspects of the 4-H program, and its goal of teaching young people life skills through hands-on experiences. Additionally, each guide contains at least six learning experiences, which can be used as a project guide, or as activities for six different 4-H meetings.

Purpose
Texas 4-H is designed to develop the youth of our state into productive adult citizens. The 4-H Program uses a non-formal educational process of engaging youth in a "learning by doing" process. This includes hands-on opportunities, participation in workshops and clinics conducted by volunteer leaders or professionals, as well as competitive experiences which allow 4-H members to demonstrate the knowledge they have gained. Through this entire process, the youth are learning key life skills such as working with others, teamwork, cooperation, and goal setting. Through all experiences, youth get to interact with adult volunteers and county Extension agents.

What is 4-H?
4-H members across the nation are responding to challenges every day in their communities and their world.

As the youth development program of the Cooperative Extension System of land-grant universities, 4-H is the nation’s largest youth development organization, empowering six million young people throughout the United States. Cooperative Extension of 1862 and 1890 land-grant universities provide leadership to engage young people in 4-H in all 3,007 counties of the United States. The impact of the Cooperative Extension partnership is profound, bringing together National Institute of Food and Agriculture of USDA, land grant universities and county government to resource learning opportunities for youth.

Through America’s 110 land-grant universities and its Cooperative Extension System, 4-H reaches every corner of our nation—from urban neighborhoods to suburban schoolyards to rural farming communities.

With a network of more than 6 million youth, 600,000 volunteers, 3,500 professionals, and more than 25 million alumni, 4-H helps shape youth to move our country and the world forward in ways that no other youth organization can.

Texas 4-H
Texas 4-H is like a club for kids and teens ages 5-18, and it’s BIG! It’s the largest youth development program in Texas with more than 550,000 youth involved each year. No matter where you live or what you like to do, Texas 4-H has something that lets you be a better you!

You may think 4-H is only for your friends with animals, but it’s so much more! You can do activities like shooting sports, food science, healthy living, robotics, fashion, and photography.

Look for 4-H clubs at your school, an after-school program, a community center, or even on a military base or through the reserves for military families.

Texas 4-H is part of the Texas A&M AgriLife Extension Service and the Texas A&M System. Founded in 1908, 4-H is the largest youth development program in Texas, reaching more than 550,000 youth each year.

The 4-H Motto and Pledge
"To Make the Best Better!"

I pledge: My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to larger service and My HEALTH to better living, For my Club, my Community, my Country, and my world.

Participating in 4-H
4-H is a great program because it provides options for young people to participate. From a 4-H club located in your community, a SPIN club that focuses on one particular project area, or participating in 4-H through your classroom at school, 4-H allows youth to learn in many different environments. If you are interested in joining 4-H, contact your County Extension Office and ask for a list of the 4-H clubs in your area. If you are a school teacher/educator and would like to use 4-H curriculum or these project guides in your classroom, contact your Extension Office as well for assistance.
4-H “Learning by Doing” Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.

**EXPLORE THE CONTENT**

Introduction of the topic, overview and exploration of content, and review of objectives

- **1. Experience**
  - the activity; perform, do it

- **2. Share**
  - the results, reactions and observations publicly

- **3. Process**
  - by discussing, looking at the experience; analyze, reflect

- **4. Generalize**
  - the connect the activity to real-world experience

- **5. Apply**
  - what was learned to a similar or different situation; practice

Youth do with limited “how to” instructions.

Youth describe results of the experience and their reaction.

Youth relate the experience to the learning objectives (life skills and/or subject matter).

Youth use the skills learned in other parts of their lives.

Youth connect the discussion to the larger world.

Youth use the skills learned in other parts of their lives.

Build on knowledge by learning more and advancing to the another topic/level.
Lesson 1
General Kitchen Safety ........................................... 2

Lesson 2
Heated Dangers ......................................................... 12

Lesson 3
In Case of a Fire ........................................................... 18

Lesson 4
Tools of the Trade ....................................................... 22

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Small Appliances ......................................................... 53

Lesson 6
Making the Cut ............................................................ 70

Developed by:
Holly Black, County Extension Agent - Anderson County
Courtney Davis, County Extension Director - Tarrant County
Dr. Julie Gardner, Extension Specialist – Texas 4-H Youth Development
4-H FOOD AND NUTRITION PROJECT Lessons

General Kitchen Safety

EXPLORE THE CONTENT:
The keys to preventing kitchen accidents are directly related to knowledge, behaviors, and practices regarding kitchen safe work habits.

What is involved in kitchen safety?
Kitchen safety involves having the knowledge and proper information on how to correctly use tools and appliances, how to reduce risks for potential accidents, methods to identify hazards and correct behavior when working in the kitchen.

General kitchen safety guidelines:
• Do not let hair, jewelry, or sleeves dangle near equipment or appliances. Doing so could cause them to catch fire or get tangled in appliances.
• Keep your mind on what you’re doing. In other words, pay attention to the task at hand.
• Prevent clutter – Clean up as you go and put things away. Only retrieve the necessary tools and equipment that you will be using for the task.
• Close drawers and doors.
• Use the right tool for the job.
• Store heavy or bulky items on low shelves to prevent back injuries or falls.

Always remember:
1. Kitchens should have a fire extinguisher coded for kitchen fires and a smoke alarm should be located in or near the kitchen. Have a fire exit plan posted and discussed with everyone using the kitchen.
2. Always walk in the kitchen...NEVER run.
3. Wear shoes that cover the whole foot (preferably closed toe shoes), not sandals. Avoid long sleeves or baggy clothes which can catch fire.
4. Tie back hair to keep it out of food and out of flames. If hair is short, wear a clean hat.
5. Keep floors clean and free of clutter. Wipe up spills, spatters and peelings to prevent falls.
6. Be aware of knife safety. Keep knifes sharp and use them properly and for the appropriate kitchen task. Never soak knives in the sink or dishpan because someone could accidentally cut themselves if they are unaware they are there. Do not try to catch a falling knife.
7. Be knowledgeable about appliances and electrical safety. Inspect all appliance and/or extension cords. Avoid damaged cords and use outlets properly.

TIME:
45 minutes

MATERIALS NEEDED:
• 4-H Kitchen Rules Handout
• Kitchen Picture
• Crayons/Markers
• Signs of Safety Handout and Key
• Blank Paper
• Pens/Pencils

OBJECTIVES:
The 4-H member will:
• Identify safe and unsafe tasks for different age groups working in the kitchen.
• Learn proper safety for various kitchen tools and equipment.
• Identify potentially dangerous situations/circumstances in the kitchen.
• Learn safe behavior in the kitchen.
8. Always read chemical labels and use properly. Never mix chemicals or use chemicals for purposes other than for what they are labeled.

9. In case of a fire- turn off heat, cover pan, or pour salt or baking soda on flames. Never use water on a grease fire.

10. Be sure to be mindful to the kitchen task you have to perform. No “rough housing” or “horseplay” while in the kitchen to prevent further accidents.

For more rules and reminders, see the 4-H Kitchen Rules Handout/Poster included in this Explore Guide. **Distribute this handout to participants**
**DO: Safe or Not Safe** (Grade level: 2nd-3rd)

- **Preparation:**
  Make copies of the ‘Kitchen Picture’ for each student. Provide red crayons or markers for students.

- **Procedure:**
  Have students use a red crayon or marker to draw an X on all of the things in the picture that are NOT safe.

**DO: Safety Story** (Grade level: 4th-5th)

- **Preparation:**
  Gather notebook paper and a pencil for each participant

- **Procedure:**
  Have students write a one page story about a character that runs into an unsafe situation while preparing food. Students can also draw a picture to support the story.

**DO: Signs of Safety** (Grade level: 6th-8th)

- **Preparation:**
  Make copies of the ‘Signs of Safety’ handout for students.

- **Procedure:**
  Divide student into groups (or do individually). Have students discuss the situations on the sheet and determine if they are safe or unsafe. If the practice is unsafe, have them to write two to three sentences explaining why it is unsafe. Ask each group to present one of the situations and their findings to the group. Discuss as a group.

**REFLECT:**

- What are some kitchen safe practices that you were lacking in?
- How can you help make your kitchen safer at home?

**APPLY:**

- Name four kitchen safe practices.
- How should people behave while in the kitchen?

**REFERENCES:**

- UTAH EDUCATION NETWORK - https://www.uen.org/lessonplan/view/4654
- Oklahoma State University 4-H Youth Development
Kitchen Safety

Directions: Draw an X on all of the things in the picture that are NOT safe.
Kitchen Safety

Directions: Draw an X on all of the things in the picture that are NOT safe.
### Signs of Safety

Directions: Identify the practices described below as safe or dangerous by circling the correct symbol on the left.

If the practice is safe, write “Safe” in the space provided.

If the practice is dangerous, explain why the practice is dangerous.

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<thead>
<tr>
<th>SAFE</th>
<th>DANGEROUS</th>
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Name: ___________________________ Date: __________

1. Kelli stored the cast iron fry pan on the top shelf to get it out of the way.
   - Safe

2. Amanda put her long hair into a ponytail before she went into the kitchen to cook supper.
   - Safe

3. Allie stapled the microwave cord in place to keep people from falling over it.
   - Safe

4. Anna chose to use knives that were not very sharp so that she would not cut herself.
   - Safe

5. When the butcher knife slipped out of Pam’s fingers, she tried her best to catch it.
   - Dangerous

6. Paul could not find the can opener, so he used a sharp knife to open the can of milk.
   - Dangerous

7. Kinsley used a damp paper towel to pick up bits of broken glass where the broom would not reach.
   - Dangerous

---

Activity taken from “Food for Today: Student Workbook”
8. David put the dirty steak knives into the dishwater to soak.

9. The oven was so dirty that Aubree decided to mix two strong cleansers in order to clean it.

10. Mark lifted the lid of the pan on the close side to see if the mixture had thickened.

11. Zach always turns pot handles toward the back or middle of the range.

12. Noah mounted the paper towel rack right over the range so that it would be convenient to wipe up spills.

13. Rachel had the fire extinguisher removed because she did not like the way it looked in the kitchen.

14. When Benjamin couldn’t find a potholder, he grabbed a dishcloth to take the casserole out of the oven.

15. Olivia stood to the side when she opened the oven door.
1. Kelli stored the cast iron fry pan on the top shelf to get it out of the way.
   **SAFE**
   Heavy objects should be stored on low shelves so that you can reach them safely.

2. Amanda put her long hair into a ponytail before she went into the kitchen to cook supper.
   **SAFE**

3. Allie stapled the microwave cord in place to keep people from falling over it.
   **DANGEROUS**
   Electrical cords should never be stapled or otherwise punctured to avoid dangerous electrical shocks.

4. Anna chose to use knives that were not very sharp so that she would not cut herself.
   **DANGEROUS**
   Dull knives are actually more dangerous than sharp ones because you have to use more effort to cut with them.

5. When the butcher knife slipped out of Pam’s fingers, she tried her best to catch it.
   **DANGEROUS**
   You should never try to catch a sharp object such as a knife as it falls; doing so can cause a severe cut.

6. Paul could not find the can opener, so he used a sharp knife to open the can of milk.
   **DANGEROUS**
   Always use the tool designed for the task at hand. If you use a knife to open a metal can there is a good chance it will slip & cut you badly.

7. Kinsley used a damp paper towel to pick up bits of broken glass where the broom would not reach.
   **SAFE**
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<tr>
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<td><strong>DANGEROUS</strong></td>
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</tbody>
</table>
| 8. David put the dirty steak knives into the dishwasher to soak.  
   *Never put sharp edges into dishwasher where they cannot easily be seen; they may cut you* |
|   |   |
| 9. The oven was so dirty that Aubree decided to mix two strong cleansers in order to clean it.  
   *Never mix cleaning chemicals together; some combinations of chemicals react and produce toxic fumes.* |
|   |   |
| 10. Mark lifted the lid of the pan on the close side to see if the mixture had thickened.  
   *Never open the lid of a hot pan toward you; doing so can result in serious steam burns.* |
|   |   |
| 11. Zach always turns pot handles toward the back or middle of the range.  
   *Safe* |
|   |   |
| 12. Noah mounted the paper towel rack right over the range so that it would be convenient to wipe up spills.  
   *The paper towels should be kept well away from the range to avoid the possibility of a fire.* |
|   |   |
| 13. Rachel had the fire extinguisher removed because she did not like the way it looked in the kitchen.  
   *A fire extinguisher is an important, basic piece of kitchen equipment.* |
|   |   |
| 14. When Benjamin couldn’t find a potholder, he grabbed a dishcloth to take the casserole out of the oven.  
   *Always use potholders to handle hot dishes.* |
|   |   |
| 15. Olivia stood to the side when she opened the oven door.  
   *Safe* |
4-H KITCHEN RULES

1. Always stay safe
2. Wash your hands
3. Follow directions
4. Clean your space
5. Keep a positive attitude
6. Try new foods
7. Have fun and learn!
EXPLORE THE CONTENT:
A large part of staying safe in the kitchen has to do with avoiding potential situations that could cause fires, burns and other injuries. Many kitchen appliances are used to heat and cook, thus misuse, could cause harm to someone not using them properly. The following are a few guidelines to avoid heated dangers in the kitchen.

1. Don’t leave cooking unattended. Stay in the kitchen when you have something cooking on the stovetop.
2. Unplug your appliances and turn off the stovetop or oven as soon as you are finished using them. Set the oven to automatic shutoff when cook time is complete.
3. Keep your appliances clean! Grease, if allowed to build up on any appliance, can catch fire. Clean as you go to reduce the risk of fire.
4. Keep flammable objects clear of the stove. This includes towels, recipe cards, cookbooks, dish cloths and long flowing sleeves. Wear tight fitting or short sleeves to cook in.
5. Don’t ever overload outlets with too many appliances. This can cause an electrical short which can lead to a fire.
6. Use oven mitts or hot pads when removing hot things from microwaves, ovens and/or stove tops.
7. Always turn your pot and pan handles inward. If they are turned outwards, over the side of the stovetop, they can be knocked down and cause serious injury or burns.
8. Never touch anything electrical with wet hands or wet rags. Never use electric appliances near or in a sink.

Microwave Cooking is fast but can cause serious burns. Check with a grown-up for specific directions and permission before using the microwave oven. Some general tips for safe microwaving include:

• Never turn on an empty oven. This can cause the oven to break or fire to occur.
• Read package directions carefully. Make sure you know how to set the microwave oven controls (for example, 10 seconds, rather than 10 minutes).
• Use only microwave-safe cookware. Never use metal in a microwave! Metal reflects the microwaves causing them to arc and spark which could cause fire or electrical short in your oven. Cookware should be made of hard paper, glass or ceramic. Styrofoam will melt so avoid this material in the microwave as well.
• Food coming out of the microwave can be very hot. Never taste or eat food right from the microwave. Allow the food to cool for several minutes before eating. This includes letting microwave popcorn set a few minutes before opening; then open the bag so the opening is pointing away from you. Steam from the bag can cause serious burns.
• Dishes get hot in the microwave also. Have potholders or oven mitts handy to remove hot dishes.

**What if you suffer a burn from hot liquid?**

Hot liquids, not fire, are the most common cause of burns to children. If you get burned working in the kitchen:

1. Go to the sink and hold the burned area under cool, running water.
2. If the burn begins to blister cover it loosely with a sterile gauze, or a clean cloth.
3. Tell a grown-up whenever you are burned. If the burn is severe and hurts badly, get help from an adult immediately or call 911 if no one is home.

**Toaster Safety** is also important.
• Keep the toaster away from curtains or towels or other things that could catch fire.
• Plug it directly into the electrical outlet. Unplug toasters and other kitchen appliances when not using them.
• If toast gets stuck, unplug the toaster. Do not use any object to remove the toast from the toaster.

Toasters may seem safe, but they can catch on fire, especially if not cleaned on a regular basis or if food is left in too long. If you see flames from any kitchen appliance, tell a grown-up immediately. If an adult is not home, call 911.

**Stovetop Safety** - Only use a stovetop and it’s burners if you have been trained by an adult. Keep things that will burn away from the stove. Towels, potholders, plastics and paper towels can catch fire quickly when near direct heat or open flames.
• Keep an eye on the stovetop when cooking food.
• Turn pan handles to the side so the can’t be knocked off the stovetop.
• Always turn off the stovetop and oven when you’re done cooking.
**DO: Baked Honey Bananas** (Grade Level: 2nd-5th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

**DO: Toasty Chicken Quesadillas** (Grade Level: 6th-8th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

**DO: Toaster Oven Frittata** (Grade Level: 9th-12th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

**REFLECT:**
- Name some heated dangers most commonly seen in the kitchen
- Name 3 tips to avoid becoming burned while working in the kitchen.
- Describe how to safely cook in the microwave.

**APPLY:**
- What are some changes that you can make at home to be safe around heat sources in the kitchen?
- Which items in your kitchen could be a potentially dangerous heat source?

**REFERENCES:**
- University of Nebraska Cooperative Extension, Lancaster County. Kitchen Safety for Children on Their Own. Retrieved from https://lancaster.unl.edu/factsheets/019.htm
**Baked Honey Bananas**

**Ingredients:**
- 1 ripe banana, peeled and sliced lengthwise
- 1 tsp lemon juice
- 2 tsp honey
- ¼ tsp cinnamon

**Directions:**
- Line toaster oven tray with nonstick aluminum foil. Preheat oven to 350.
- Lightly brush banana halves with lemon juice. Place cut sides up on toaster tray.
- Spoon honey over banana halves and sprinkle lightly with cinnamon.
- Bake for 10 minutes. Remove from oven; cut into 1 inch pieces.
- Makes 1 serving.
Toasty Chicken quesadillas

Ingredients:
- 4 whole wheat tortillas (8 inches)
- 1 pkg (6 oz) ready to use chicken fajita strips
- 1 can (10 oz) diced tomatoes and green chilies, well drained
- 1 cup shredded Mexican cheese blend
- Shredded lettuce, sliced ripe olives, and chopped tomatoes, optional

Directions:
- Coat one side of two tortillas with cooking spray; place coated side down on an ungreased baking sheet. Top each with chicken, tomatoes, and cheese. Cover with remaining tortillas; spritz tops with cooking spray.
- Bake in toaster oven preheated to 425 degrees for 5 to 7 minutes or until golden brown. Cut into wedges.
- Garnish with lettuce, olives, and tomatoes if desired.
- Makes 4 servings

Nutrition Facts
4 servings per container
Serving size 1 quesadilla (158g)

<table>
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<tbody>
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<td>Includes 0g Added Sugars</td>
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*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.
Toaster Oven
Frittatas

Ingredients:

- ½ cup Brussel sprouts, thinly sliced
- ½ cup broccoli florets, chopped
- 3 mushrooms, chopped
- 1 green onion, chopped
- 2 Tablespoons crumbled Feta cheese
- ½ cup roasted red pepper, chopped
- ¼ tsp dried oregano
- 4 large eggs
- 2 tablespoons Half & Half
- ¼ tsp salt
- 1/8 tsp black pepper

Directions:

- Preheat toaster oven to 400 degrees. Spray pan with cooking spray. Add Brussels sprouts, broccoli, mushrooms and green onion to the pan. Spray vegetables with cooking spray.
- Place the pan in the toaster oven and cook until just softened, about 12 to 15 minutes, stirring halfway through.
- While the vegetables cook, in a medium bowl, place eggs, half and half, and salt and pepper. Whisk until combined.
- Once the vegetables are done, carefully remove the pan and reduce the temperature to 375 degrees.
- Sprinkle vegetables with feta and roasted red pepper. Pour the eggs on top and return the pan to the toaster oven. Bake until the eggs are puffed, lightly browned around the edges and the middle is set, about 18 to 25 minutes.
- Makes 4 servings.
EXPLORE THE CONTENT:
Learning to Cook
When learning to cook, there are some important rules that should be followed. Following these, will reduce your chances of becoming injured in the kitchen.
- Only cook when an adult is there to supervise you and has given you permission.
- Never leave any foods that are cooking unattended in the kitchen.
- Pots of food cooking on the stove can easily be knocked over. Pot handles should always be aimed toward the back or middle of the stove to reduce the risk of being knocked over.
- Never wear long sleeves, or loose-fitting clothes while cooking. Your shirt could hook a pot handle and pull it over. Even worse, long sleeves could catch fire.
- Always turn off the stovetop, oven, or any other appliance when you’re finished cooking.

Grease Fires
Grease fires are one of the most common household fires. To avoid grease fires:
- Limit the amount of oil used when cooking,
- Use spray oils when possible,
- Always wipe up oil that has spilled on the stove top or grill.

If meat grease or oil spills over the edge of a pan, take a wet cloth and wipe it off immediately. If the grease gets to the grill or flame, it could travel up into the pan and cause a fire.

When dealing with a grease fire that is contained within a pan, cover your hand with an oven mitt, then simply cover the burning pan with a lid, and turn off the heat source. **Never put water on a grease fire!** Water thrown on a grease fire can spatter and spread the fire throughout the kitchen or onto you. Covering an outdoor grill with its lid will do the same thing, but also remember to close any other vents in order to extinguish the flames.

Never reach across an active fire before covering the flames as this could catch your clothing on fire or burn your arm. If the grease fire has spread beyond the pan and you do not have a dry chemical fire extinguisher, douse the flames by covering with a dampened towel or use baking soda. If the flames get beyond your control immediately leave the home and call 911 for emergency help.
DO: Kitchen Escape Plan (Grade level: 2nd-5th)
Preparation:
White board, dry erase marker, print out Kitchen Escape Plan sheet (Attached)

Procedure:
Explain purpose of knowing two ways out of every room. Explain that this pertains to both homes and public places they visit (EXIT signs)
Tell group you are going to practice drawing a home escape plan. (Explain that you are drawing the room from a “birds eye view”.)
Have kids point out the first way and 2nd way out of each room. Draw them on the escape plan.
Discuss having a family meeting place.
Explain that if you are in a multi-story building with no way out, they should open window and scream for help.
Encourage them to draw their own home escape plan on their handout.

DO: Red Card~Green Card (Grade level: 6th - 8th)
Preparation:
Make a red card and a green card for each student, alternative is to cut a green and red copy paper in half and distribute to students. Print out Red Card, Green Card Question Bank. (Attached)

Procedure:
Give each child a red (false) and green (true) card. Instruct them to hold up the red card if the answer is false and green card if it’s true.

DO: Hot Music Videos (Grade level: 9th - 12th)
Preparation:
Make space available for students to creatively and safely be able to shoot a music video.

Procedure:
Students will make a music video showing what they think are the most important safety tips to remember that help prevent fires in the kitchen.

REFLECT:
• Name two things you should do if something on the stove catches fire.
• Why would you need to know two ways to exit the kitchen before cooking?

APPLY:
• Discuss with your parents how you can make changes at home to prepare for a fire in the kitchen.

RESOURCES:
**Kitchen Escape Plan**

Draw a floor plan or map of your home. Show all doors and windows.

- Mark two ways out of each room.
- Draw an “x” where you should install smoke alarms.
- Pick a family meeting place outside where everyone can meet.
- Remember, practice your plan at least twice a year!
Red Card~Green Card

Hold up the RED card is the answer is FALSE and the GREEN card if the answer is TRUE

**True or False:**

- Smoke alarms should be placed on every level of your home, outside each sleeping area and inside every bedroom.  
  TRUE It’s also helpful if the smoke alarms are interconnected, so when one goes off, they all go off.

- Smoke alarms should be tested once a year.  
  FALSE Smoke alarms should be tested at least one a month to make sure they are in good working order and batteries should be replaced at least once a year.

- The 4 things to tell a 911 operator are: What is your name, where your emergency is, what is the emergency and what is, and your phone number.  
  TRUE 911 Operators need a lot of detail so help can quickly arrive. If you don't know your address, memorize it!

- Every home should have a fire escape plan with at least 1 way out of every room.  
  FALSE Every home should have a fire escape plan, but it should have at least 2 ways out of every room.

- The best way to avoid a fire is to look for home hazards such as overloaded extension cords, careless smoking and candles too close to combustibles.  
  TRUE A home hazard checklist is a great way to make sure your home is safe.

- If you live on the 5th floor of an apartment building and can't get out, you should open a window and jump out.  
  FALSE It is best to open your window wide and yell for help. If necessary, throw bedding or other soft items out the window to help get the attention of emergency personnel.

- If you wake up to the sound of a smoke alarm, you should go tell your mom or dad.  
  FALSE If you hear the smoke alarm or see or smell smoke, you should immediately get out of the house and go to your family meeting spot.

- Space heaters should be placed at least 3 feet from anything that can burn.  
  TRUE Space heaters should be used with caution. Keep them at least 3 feet away from anything that can burn (including you!), never use an extension cord to power it, and always turn it off before you leave the room.

- Every house should have a fire extinguisher.  
  TRUE But it’s up to a grown up to use it. In the case of a fire, kids need to get out of the house and go to their family meeting spot. Kids should never try to put out a fire, even with a fire extinguisher.
EXPLORE THE CONTENT:
Successful cooking largely depends upon the selection of materials and proper cooking methods; however, the use and importance of utensils should not be overlooked.

What is a kitchen utensil?
A utensil is a simple and useful device that is used for doing tasks in a person’s home and especially in the kitchen. Each cooking utensil is made for a particular purpose, and using the wrong one may not bring about the intended result when cooking. The size of some utensils is often determined by the number of people for whom food is being cooked. The amount of food being prepared indicates whether a large or a small utensil should be selected. The materials used to make cooking utensils, as well as their shape and size, also have an effect on the success of cooking. When selecting utensils, it is important to think about the use of the utensil, and then select the utensil that is made of durable material, can be easily cleaned, and will not affect the food that is being cooked.

Kitchen Utensils, Cookware and Nutrition
Cooking utensils can also have an effect on one’s nutrition and health. Pots, pans, and other tools used in cooking often do more than just hold the food. The material that they are made from can leach into the food that is being cooked. Common materials used in cookware and utensils are:

- **Aluminum**: Aluminum cookware is very popular, with nonstick, scratch-resistant anodized aluminum cookware being a good choice since the hard surface is easy to clean, and being sealed, the aluminum cannot get into food.

- **Copper**: While popular due to their even heating, large amounts of copper from unlined cookware can cause nausea, vomiting, and diarrhea. Even if coated, these coatings can break down over time and allow copper to dissolve in food.

- **Iron**: This can be a good choice since cooking with cast iron pots and pans may actually increase the amount of iron in the diet.

- **Lead**: Lead is often found in ceramic cookware, including items bought in another country or considered to be a craft, antique, or collectable. Such items should not be used to hold food. Children should be protected from ceramic cookware containing lead.
• **Stainless Steel:** This is a good choice since stainless steel cookware is often low in cost and can be used at a high heat. Its sturdy cookware surface does not wear down easily.

• **Teflon:** While this is a popular choice for many looking for a non-stick cooking surface, cookware with a Teflon coating should be used only at low or medium heat and should never be left unattended at high heat. Doing so can cause the release of fumes that can irritate humans and household pets.

It is best to use cookware and bakeware that can be easily cleaned. Keep watch for cracks and rough edges, which can trap or hold food or bacteria.

It’s also important to avoid using metal or hard plastic utensils on cookware. These utensils can scratch surfaces and cause pots and pans to wear out faster. Instead, use wood, bamboo or silicone. Never use cookware if the coating has started to peel or wear away.

**Cutting boards** are another popular tool used when cooking. Cutting boards made from plastic, marble, glass or pyroceramic are easier to clean than wood. If you prefer wood, select a bamboo cutting board, which is harder and less porous than hardwoods and absorbs very little moisture and resists scarring from knives, making it more resistant to bacteria. It’s also important to avoid contaminating vegetables with meat bacteria. Try using one cutting board for fresh produce and bread, and use a separate one for raw meat, poultry, and seafood. This will prevent any bacteria on a cutting board from getting into raw foods. It’s also important to properly clean and sanitize cutting boards, and replace them when they are worn or have deep grooves.

**Different Types of Cooking Tools**
For the different types of cooking tools, refer to the following pages attached to this lesson plan.
DO: Utensil Flash Relay (Grade Level: 2nd - 5th)

Preparation:
Print and cut out ‘Tools of the Trade Cards’.

Instructions:
Separate the youth into two equal teams. Once the students are in their teams, pick two students, one from each team, to go up to the front of the room. You, as the instructor, will have a few pictures of the utensils that were reviewed in the educational lesson. Real utensils may also be used if available.

When the two students at the board are ready, flash them one of the pictures and the first one to raise their hand and answer correctly will earn a point for their team. You can also change it up and ask them to give you the definition of what the utensil does. Quiz bowl buzzer sets may be used for this activity as well.

Continue this process until all the students have had their turn or when you run out of pictures.

DO: Utensil ID (Grade Level: 6th-8th)

Preparation:
Gather up 10-15 utensils (listed in the handout).

Instructions:
Have the students number their papers from 1-15. Ask the students to view the utensils and label them with their name on their papers. Once they are done, go through them as a group and see if they identified them correctly and talk about how each utensil would be used.

DO: Kitchen Tool Survivor (Grade Level: 9th-12th)

Preparation:
Write the essay topic question on the board for the students to see.

Instructions:
Have students write a short essay regarding their answers to the following questions: “If you were lost by yourself in the forest for three weeks, what three pieces of kitchen equipment do you think would be the most important for survival? Why?”

REFLECT:
- What kitchen tools do you most often use when cooking?
- What are some kitchen tools you learned about that you have not used before?
- What cooking tools do you use most often?

APPLY:
- Name at least 3 cooking tools and how they are used.
- Why is it important to have specific tools and utensils for certain foods?
- Why is it important to know what your materials are in your cooking tools?
RESOURCES:


TOOLS OF THE TRADE: UTENSILS

[Images of various utensils: can opener, butter knife, chef's knife, and a Kenmore grater.]
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS

[Images of various utensils: a carving fork, a slotted spoon, a steak knife, and a ladle.]
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: UTENSILS
TOOLS OF THE TRADE: COOKWARE
TOOLS OF THE TRADE: COOKWARE
TOOLS OF THE TRADE: COOKWARE
TOOLS OF THE TRADE: COOKWARE
TOOLS OF THE TRADE: COOKWARE
ANSWERS: TOOLS OF THE TRADE-UTENSILS

**Apple Corer**
This tool has a circular cutting edge that is forced down into the apple, allowing the apple to remain whole so it can then be easily sliced into sections for eating it out of hand or baking it whole with the outer skin. A tool used to extract the core from the apple without cutting the apple into sections and then individually cutting out each part of the core.

**Apple Slicer**
This professional-quality tool is pressed down over the apple to make eight uniform slices and remove the core.

**BBQ Tongs**
a utensil with long handles used to grip and turn food while cooking.

**BBQ Spatula**
A utensil with long handle and flat bottom used to turn food while cooking.

**Can Opener**
A hand held device used for cutting cans open.

**Butter Knife**
A blunt knife used for cutting or spreading butter or other similar spreads

**Chef’s Knife**
A large knife with a wide blade, generally considered all-purpose knives that are used for cutting and dicing.

**Chopper**
A utensil used to cut food into smaller pieces.

**Chopsticks**
A pair of slender sticks made especially of wood or ivory, held between the thumb and fingers and used as an eating utensil in Asian countries and in restaurants serving Asian food.

**Cookie Cutters**
A shaped template with a sharp edge used to cut cookies or biscuits from rolled dough.
<table>
<thead>
<tr>
<th><strong>Decorative Slicer, Ripple</strong></th>
<th>A utensil used to cut food that leaves a rippled edge.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decorative Slicer, Vee</strong></td>
<td>A utensil used to cut food that leaves a vee shape.</td>
</tr>
<tr>
<td><strong>Egg Separator</strong></td>
<td>A spoon shaped utensil, which has a hole in the bottom and is used to separate the white from the yolk of the egg.</td>
</tr>
<tr>
<td><strong>Egg Slicer</strong></td>
<td>A kitchen tool with a slatted, egg-shaped hollow on the bottom and a hinged top consisting of 10 fine steel wires. When the upper portion is brought down onto a hard-cooked egg sitting in the base, it cuts the egg into even slices.</td>
</tr>
<tr>
<td><strong>Egg Timer</strong></td>
<td>A small hourglass or clockwork timing device used to time the boiling of an egg, usually capable of timing intervals of three to five minutes.</td>
</tr>
<tr>
<td><strong>Flour Sifter</strong></td>
<td>A utensil used to incorporate air into flour and other dry ingredients.</td>
</tr>
<tr>
<td><strong>Garlic Press</strong></td>
<td>A press used for extracting juice from garlic.</td>
</tr>
<tr>
<td><strong>Grater</strong></td>
<td>A device with sharp edged holes against which something is rubbed to reduce it to shreds. Used to grate such things as cheese.</td>
</tr>
<tr>
<td><strong>Grill Brush</strong></td>
<td>A Brush with a long handle on the end that is used to clean a grill.</td>
</tr>
<tr>
<td><strong>Gripper</strong></td>
<td>Small rubbery circle used for opening jars.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ice Cream Scoop</td>
<td>A utensil used to remove ice cream from a carton or other container while forming the ice cream into a ball or oval shape. Ice-cream scoops come in several styles and sizes. Scoops come in many sizes, from tiny to large (about 1 to almost 3 inches in diameter.)</td>
</tr>
<tr>
<td>Kitchen Fork</td>
<td>A utensil used to lift or turn small food.</td>
</tr>
<tr>
<td>Liquid Measuring Cup</td>
<td>Cups that come in clear plastic or glass with a 1/4” headspace so liquid can be carried without spilling and a pouring spout.</td>
</tr>
<tr>
<td>Measuring Cups</td>
<td>Cups that are used to measure dry and solid ingredients. They usually come in a set of four nesting cups: 1/4 cup, 1/3 cup, 1/2 cup, and 1 cup.</td>
</tr>
<tr>
<td>Measuring Spoons</td>
<td>Spoons that are used to measure small amounts of dry or liquid ingredients.</td>
</tr>
<tr>
<td>Meat Tenderizer</td>
<td>Hammer or paddle type utensil that comes in metal or wood and in a plethora of sizes and shapes. They can be large or small, have horizontal or vertical handles and be round-, square-, or mallet-shaped. Some have smooth surfaces while others are ridged.</td>
</tr>
<tr>
<td>Melon Baller</td>
<td>A small bowl-shaped tool used to cut round- or oval-shaped pieces of melon. The best melon ballers are rigidly constructed with wood or metal handles and sharp-edged, stainless steel bowls, which come in several sizes, from about 1/4” to 1”</td>
</tr>
<tr>
<td>Mixing Bowl</td>
<td>A large bowl made of pottery, glass, metal, or plastic and are used to mix ingredients and come in a variety of sizes.</td>
</tr>
<tr>
<td>Nut Chopper</td>
<td>A device with blades that chops nuts into small.</td>
</tr>
<tr>
<td>Pairing Knife</td>
<td>A knife that is smaller and shorter with fairly narrow blades, generally used for delicate jobs.</td>
</tr>
<tr>
<td><strong>Tools of the Trade - Utensils</strong></td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Pasta Measurer</strong></td>
<td>A utensil used to measure pasta.</td>
</tr>
<tr>
<td><strong>Pasta Server</strong></td>
<td>A utensil used to serve pasta.</td>
</tr>
<tr>
<td><strong>Pastry Blender</strong></td>
<td>A mixing utensil used to cut flour and shortening when making pastry.</td>
</tr>
<tr>
<td><strong>Pastry Brush</strong></td>
<td>A small type brush used to spread butter or spices over food.</td>
</tr>
<tr>
<td><strong>Pie/Cake Server</strong></td>
<td>A utensil, which has a triangular, shaped bottom with handle and is used to serve cake or pie.</td>
</tr>
<tr>
<td><strong>Pizza Cutter</strong></td>
<td>A utensil consisting of a wheel with a sharpened blade used to cut pizza.</td>
</tr>
<tr>
<td><strong>Potato Masher</strong></td>
<td>A tool used to crush food, usually after cooking it, so that it forms a soft mass.</td>
</tr>
<tr>
<td><strong>Rolling Pin</strong></td>
<td>A cylinder that may or may not have small handles at either end used to roll dough for pie crusts, biscuits, or cookies.</td>
</tr>
<tr>
<td><strong>Rubber Spatula</strong></td>
<td>A flexible utensil used to remove food from spoons, side of bowls, and pans.</td>
</tr>
<tr>
<td><strong>Scraper</strong></td>
<td>A plastic utensil used to scrape food from bowls, etc.</td>
</tr>
<tr>
<td>Tool</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Serving Fork</td>
<td>A large type fork used to serve food.</td>
</tr>
<tr>
<td>Serving Spoon</td>
<td>A large type spoon used to serve food.</td>
</tr>
<tr>
<td>Slicing Knife</td>
<td>A knife with long narrow flexible blades that may or may not be serrated.</td>
</tr>
<tr>
<td>Soup Spoon</td>
<td>A spoon with a rounded bowl for eating soup.</td>
</tr>
<tr>
<td>Strainer</td>
<td>A bowl type item with holes in it that is used to separate liquids from solid food.</td>
</tr>
<tr>
<td>Tart Press</td>
<td>Any type of press used to shape or mold pastry.</td>
</tr>
<tr>
<td>Therometer, Candy</td>
<td>A candy thermometer, also known as a sugar thermometer, is a thermometer used to measure the temperature and therefore the stage of a cooking sugar solution.</td>
</tr>
<tr>
<td>Meat Therometer</td>
<td>A thermometer used to measure the internal temperature of meat, especially roasts and steaks, and other cooked foods. The degree of &quot;doneness&quot; of meat correlates closely with the internal temperature, so that a thermometer reading indicates when it is cooked as desired.</td>
</tr>
<tr>
<td>Tongs</td>
<td>An instrument with two movable arms that are joined at one end, used for picking up and holding things.</td>
</tr>
<tr>
<td>Turner</td>
<td>Is a kitchen utensil with a long handle and a broad flat edge, used for lifting and turning fried foods, biscuits or cookies.</td>
</tr>
</tbody>
</table>
ANSWERS: TOOLS OF THE TRADE-UTENSILS

Utility Knife
A knife that has a long and narrow blade that is generally used for cutting.

Vegetable Peeler
A utensil used to peel the skin from vegetables.

Wire Whisk
A utensil used to beat and blend ingredients or food, especially egg.

ANSWERS: TOOLS OF THE TRADE-COOKWARE

Baking Pan
A pan with sides that vary in deepness and are used to bake such things as cakes.

Baking Sheet
A flat, shiny metal tray used for cooking such things as biscuits and cookies.

Broiler Pan
A metal tray used to hold food while broiling under a grill.

Colander
A bowl-shaped kitchen utensil with perforations for draining off liquids and rinsing food.

Double Boiler
A pair of cooking pots, one fitting on top of and partly inside the other. Food cooks gently in the upper pot while water simmers in lower pot.

Dutch Oven
An iron container with lid used for cooking stews or casseroles.
**Mini Muffin Tin**  
A muffin tin with smaller holes used to make mini muffins.

**Muffin Tin**  
A tin consisting of holes in which batter is placed to make muffins.

**Pastry Press**  
Any type of press used to shape or mold cookies.

**Pie Plate**  
A plate used to serve pie.

**Pot Holder**  
A pad used to protect hands when working with hot pans.

**Roaster Pan**  
A pan with deep sides used to cook roast.

**Sauce Pan**  
A pan used to cook sauces on the stovetop with a long side handle and straight sides measured in quarts.

**Sauce Pot**  
A short and wide pot with two handles and close fitting lid.

**Steamer Basket**  
Metal basket that inserts into a pan. Used for steaming vegetables.
ANSWERS: TOOLS OF THE TRADE-COOKWARE

**Stock Pot**
A pot with two handles and are tall and narrow.

**Trivet**
An object placed between a serving dish or bowl and a dining table, usually to protect the table from heat damage. A metal stand with short feet, used under a hot dish on a table.

**Tube Pan**
A round pan with a hollow projection in the middle, used for baking or molding foods in the shape of a ring.

**Wire Cooling Rack**
A rack used to hold hot foods such as cakes, breads, and cookies for cooling.
TIME:
20-30 minutes

MATERIALS NEEDED:
• Small Appliance Match-up Cards
• Ingredients and supplies for recipes

OBJECTIVES:
The 4-H member will:
• Identify common kitchen appliances.
• Identify the purpose of various kitchen appliances
• Be able to demonstrate how to make a dish using only small kitchen appliances.

EXPLORE THE CONTENT:
What would life be without small kitchen appliances? These handy devices allow for fast and convenient cooking, enabling professional cooks and homeowners alike to create meals efficiently and spend more time with friends and family. There are several major small appliances that every kitchen needs, but it is equally important to know how to operate them, what kinds of foods to make in them, and more.

The pros and cons of small appliances:

PROS:
• Easy to use
• Time saving
• Make good gifts
• Necessary for preparing some specialty foods such as waffles
• Adds fun to the kitchen

CONS:
• Not used very often
• Hard to clean
• Take up a lot of storage space
• Not always the best product

Small appliances can found throughout American kitchens. While some appliances are trendy, others become a staple with cooks! Some of the more common small appliances include:

**Air fryer:** a kitchen appliance that cooks by circulating hot air around the food.

**Blender:** used to cut up food into smaller pieces and make soft foods into liquids.

**Bread maker / bread machine:** a machine that makes and bakes bread (including kneading the bread).

**Coffee grinder:** a machine that chops (grinds) coffee beans into fine particles to use in a coffee machine.

**Coffee maker / drip coffee machine:** a machine that brews coffee by passing hot water through coffee grinds in a filter.
**Deep fryer:** a machine that heats a large amount of oil and is used for cooking foods and vegetables.

**Electric bread slicer:** an electric tool for slicing breads easily.

**Electric burner:** plugs into the stove or cook top. It reaches different temperatures as selected when cooking.

**Electric can opener:** used to open canned foods. Types include countertop, cordless, or under-cabinet.

**Electric Griddle:** an appliance with a flat metal surface which is heated and used to cook foods such as pancakes, hamburgers, or other such foods.

**Electric pressure cooker:** consists of a pressure cooking container, electric heating element, and temperature/pressure sensors. When heat is applied to cooking container, pressure inside increases and cooks food.

**Electric skillet:** incorporates an electric heating element to heat pan so foods can be cooked off of a stovetop. Has heat-insulated legs for standing on a countertop.

**Food processor:** an electric kitchen appliance with a set of interchangeable blades revolving inside a container which is used to chop, shred, mix, grind, or puree foods.

**Hand-mixer:** a handheld kitchen device that uses a set of "beaters" to mix foods together

**Immersion blender:** a handheld electric appliance for blending or grinding food with a protected blade that can be submerged in the food being processed. — called also hand blender, stick blender.

**Juicer:** a machine that presses the liquid from fruits and vegetables.

**Microwave oven:** a that quickly heats and cooks food using electromagnetic radiation.

**Mini-food processor:** chops or purees small quantities from one to four cups.

**Pasta maker machine:** a device that shapes pasta dough into different types of pasta (e.g., spaghetti, linguini, lasagna)

**Sandwich maker:** makes hot sandwiches by pressing them between two heated plates.

**Slow cooker:** an appliance that cooks food with very low heat over a very long period of time (hours).

**Stand-mixer:** a mixer that stands on its own and has many different settings to mix, knead and blend foods.

**Steamer:** a machine that cooks food using the steam from boiling water.

**Toaster:** an electrical device for making toast with heat to brown and toast the bread.

**Waffle maker:** a machine that cooks hot waffles.
DO: Small Appliance Match-up (Grade Level: 6th-12th)

**Preparation:**
Print and cut out ‘Small Appliance Match-up Cards’.

**Instructions:**
Separate the youth into two equal groups. Distribute small appliance photos to one group and definitions to the other group. Give the group 1-3 minutes to find their match. Once they have found their match, partners should have a seat on the floor or in a chair to indicate they are finished. Small appliance match-up partners should share with the group their appliance, the appliance use, and if they have ever used this appliance.

DO: Cinnamon-Sugar Chips (Grade Level: 2nd-5th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

DO: Super Easy Black Bean Dip (Grade Level: 6th-8th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

DO: Philly Cheesesteak Sliders (Grade Level: 9th-12th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

REFLECT:
- What are some things to keep in mind when operating a microwave?
- If you were planning a meal and could only use small appliances, what would be on your menu?

APPLY:
- What is one thing that you learned today that you will use in the future?
- Name five safety precautions when working with small appliances?
SOURCES:


<table>
<thead>
<tr>
<th>SMALL APPLIANCE MATCH-UP CARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Hand Mixer" /></td>
</tr>
<tr>
<td><img src="image2" alt="Juicer" /></td>
</tr>
<tr>
<td><img src="image3" alt="Food Processor" /></td>
</tr>
<tr>
<td><img src="image4" alt="Hand Blender" /></td>
</tr>
</tbody>
</table>
SMALL APPLIANCE MATCH-UP CARDS
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<thead>
<tr>
<th>Small Appliance</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
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<td>a kitchen appliance that cooks by circulating hot air around the food.</td>
</tr>
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<td><strong>Blender</strong></td>
<td>used to cut up food into smaller pieces and make soft foods into liquids.</td>
</tr>
<tr>
<td><strong>Bread Maker/Bread Machine</strong></td>
<td>a machine that makes and bakes bread (including kneading the bread).</td>
</tr>
<tr>
<td><strong>Coffee Grinder</strong></td>
<td>a machine that chops (grinds) coffee beans into fine particles to use in a coffee machine.</td>
</tr>
<tr>
<td><strong>Coffee Maker/Drip Coffee Machine</strong></td>
<td>a machine that brews coffee by passing hot water through coffee grinds in a filter.</td>
</tr>
<tr>
<td><strong>Deep Fryer</strong></td>
<td>a machine that heats a large amount of oil and is used for cooking foods and vegetables.</td>
</tr>
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<td><strong>Electric Bread Slicer</strong></td>
<td>an electric tool for slicing breads easily.</td>
</tr>
<tr>
<td><strong>Electric Burner</strong></td>
<td>plugs into the stove or cook top. It reaches different temperatures as selected when cooking.</td>
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<td><strong>Electric Can Opener</strong></td>
<td>used to open canned foods. Types include countertop, cordless, or under-cabinet.</td>
</tr>
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<td><strong>Electric Griddle</strong></td>
<td>an appliance with a flat metal surface which is heated and used to cook foods such as pancakes, hamburgers, or other such foods.</td>
</tr>
<tr>
<td>Small Appliance</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Electric Pressure Cooker</strong></td>
<td>consists of a pressure cooking container, electric heating element, and temperature/pressure sensors. When heat is applied to cooking container, pressure inside increases and cooks food.</td>
</tr>
<tr>
<td><strong>Electric Skillet</strong></td>
<td>incorporates an electric heating element to heat pan so foods can be cooked off of a stovetop. Has heat-insulated legs for standing on a countertop.</td>
</tr>
<tr>
<td><strong>Food Processor</strong></td>
<td>an electric kitchen appliance with a set of interchangeable blades revolving inside a container which is used to chop, shred, mix, grind, or puree foods.</td>
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<td><strong>Hand-Mixer</strong></td>
<td>a handheld kitchen device that uses a set of &quot;beaters&quot; to mix foods together</td>
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<td>a handheld electric appliance for blending or grinding food with a protected blade that can be submerged in the food being processed. — called also hand blender, stick blender.</td>
</tr>
<tr>
<td><strong>Juicer</strong></td>
<td>a machine that presses the liquid from fruits and vegetables.</td>
</tr>
<tr>
<td><strong>Microwave Oven</strong></td>
<td>an that quickly heats and cooks food using electromagnetic radiation.</td>
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<td><strong>Mini Food Processor</strong></td>
<td>chops or purees small quantities from one to four cups.</td>
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<td><strong>Pasta Maker Machine</strong></td>
<td>a device that shapes pasta dough into different types of pasta (e.g., spaghetti, linguini, lasagna)</td>
</tr>
<tr>
<td><strong>Sandwich Maker</strong></td>
<td>makes hot sandwiches by pressing them between two heated plates.</td>
</tr>
<tr>
<td><strong>ANSWERS: SMALL APPLIANCE MATCH-UP CARDS</strong></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Slow Cooker</strong></td>
<td>an appliance that cooks food with very low heat over a very long period of time (hours).</td>
</tr>
<tr>
<td><strong>Stand-Mixer</strong></td>
<td>a mixer that stands on its own and has many different settings to mix, knead and blend foods.</td>
</tr>
<tr>
<td><strong>Steamer</strong></td>
<td>a machine that cooks food using the steam from boiling water.</td>
</tr>
<tr>
<td><strong>Toaster</strong></td>
<td>an electrical device for making toast with heat to brown and toast the bread.</td>
</tr>
<tr>
<td><strong>Waffle Maker</strong></td>
<td>a machine that cooks hot waffles.</td>
</tr>
</tbody>
</table>
Cinnamon-Sugar Chips

Ingredients:
- 5 Tablespoons unsalted butter, melted
- 1 Tablespoon sugar
- ¾ teaspoon ground cinnamon
- 12 whole wheat tortillas (8’ in diameter)

Directions:
- Preheat toaster oven to 375°
- Stir together butter, sugar, and cinnamon in a small bowl.
- Brush tortillas with butter mixture.
- Using a pizza cutter, cut each tortilla into 8 wedges.
- Put wedges in a single layer on a baking sheet.
- Bake until crispy (about 10 to 12 minutes).
- Use a hot pad when removing from the toaster oven.
- Make sure to let the chips cool on a wire rack before you eat them. Yum!
- Makes 12 servings (8 wedges per serving).

Nutrition Facts

<table>
<thead>
<tr>
<th>Serving size</th>
<th>(52g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>180</td>
</tr>
<tr>
<td>% Daily Value*</td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>8g</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>4g</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>15mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>320mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>23g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>0g</td>
</tr>
<tr>
<td>Total Sugars</td>
<td>1g</td>
</tr>
<tr>
<td>Includes 1g Added Sugars</td>
<td>2%</td>
</tr>
<tr>
<td>Protein</td>
<td>4g</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>0mcg</td>
</tr>
<tr>
<td>Calcium</td>
<td>3mg</td>
</tr>
<tr>
<td>Iron</td>
<td>0mg</td>
</tr>
<tr>
<td>Potassium</td>
<td>2mg</td>
</tr>
</tbody>
</table>

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.
Black Bean Dip

Ingredients:
2 – 15oz low-sodium canned black beans, drained & rinsed
¾ cup salsa
1 large garlic clove, minced
3 teaspoons fresh lime juice
1 teaspoon ground cumin
¼ cup cilantro, minced

Directions:
• In a food processor, puree the black beans, salsa, garlic, lime juice, and cumin until smooth.
• Add the cilantro and pulse a few times until just combined.
• Serve with sliced veggies or baked chips.
• Makes 16 servings.
**Philly Cheesesteak Sliders**

**Ingredients:**
- Non-stick cooking spray
- 1 white onion, thinly sliced
- 1 green bell pepper, thinly sliced
- 2 teaspoons garlic, minced
- ¼ teaspoon black pepper
- ½ pound deli roast beef, sliced thin
- Slider rolls, package of 12
- ½ pound provolone cheese, sliced

**Directions:**
- Spray griddle with non-stick cooking spray. Heat a griddle over medium-high heat.
- Add onions and bell peppers and cook, stirring occasionally, until they begin to soften and take on some color.
- Add garlic, and black pepper, and cook for about 30 seconds. Push the mixture off to the side of the griddle and add the meat to an empty space on the heat.
- In the last third of the griddle, split the rolls and place face-down to toast.
- Heat the deli meat thoroughly by placing on griddle and continuously turning it. Using a spatula, slightly chop the deli meat into smaller pieces.
- Mix the meat and vegetables together and top with cheese. Once melted, assemble the sandwiches.
- Makes 12 servings.
Making the Cut

EXPLORE THE CONTENT:

The Three Essential Kitchen Knives -
Chef’s knife
Paring knife
Serrated bread knife

Chef’s Knife
- Largest knife in the kitchen.
- Usually 8 – 10” long.
- Should feel comfortable and balanced in your hand.
- Select a chef’s knife with a full tang, meaning that the blade should go completely through the handle to promote long wear and stability.
- Use the chef’s knife to cut any food that would be chopped or minced or needing a cutting board including herbs, slicing watermelon, cutting all types of fruits and veggies and more!

Paring Knife
- Small blade – 2 ½ - 4” long
- Mainly used for peeling fruits and vegetables
- Also used to create garnishes

Serrated Bread Knife
- Must be very sharp to slice bread.
- Blade must be at least 7” long, but preferably 9” to adequately slice bread – the longer the blade, the cleaner the slice.
- Serrated knife allows bread to be sliced easily.
- Bread knives can also be effective for cutting tomatoes.

Storing Knives
Always store knives separately using a knife block, specially designed blocks for kitchen drawers, or a magnetic strip. Careful storage will help to keep the blade sharp.

Using the Knife to Chop
- Use your non-dominant hand (guiding hand) in a “claw” to stabilize the food to be cut.
- Using the “claw” will prevent your fingers from being cut.
- As you chop, use the dominant hand to rock the knife without lifting it.
- The guiding hand (using “the claw”) will move the food toward the knife as you chop.

TIME: 20-30 minutes

MATERIALS NEEDED:
- Potato, Carrot, Onion, Collard greens, Garlic
- Play-doh™
- Knife Safety Handout
- Types of Knives Handout
- Types of Cuts Handout
- Chef’s knives, Paring knives, Serrated Bread knives
- Cutting boards

OBJECTIVES:
The 4-H member will:
- learn to properly hold a knife.
- learn to carry a knife safely.
- learn to identify several types of knife cuts.
- learn to make the correct knife cuts using Play-doh and vegetables.
Cutting Tips
• Always cut slowly and with care.
• Cut away from the body.
• Make sure to cut with dry hands to prevent slippage.
• Keep distractions out of the kitchen when you are chopping.
• Pay attention as you chop to prevent injury.
• Any time you are chopping fruits and vegetables, chop in half first to create a flat surface. This will give you better control so the food won’t roll under the knife.

Carrying Knives
• When carrying a knife, hold it by the handle with the point of the blade straight down at your side. Make sure the sharp edge is facing behind you.
• Don’t try to catch a falling knife. Step away and let it fall.
• When passing a knife to someone, lay the knife down on the work surface or pass it carefully holding the dull side of the blade with the handle facing toward the other person.

Cutting Board Safety & Sanitation
• Always use a clean and sanitized cutting board.
• Sanitize the meat cutting board with a solution of a tablespoon of chlorine bleach to one gallon of water.
• Replace the cutting board when it develops significant grooves. Disease causing bacteria can grow in the groove.
DO: **Play Dough™ Points** (Grade Level: 2nd-5th)

**Preparation:**
Distribute Knife Safety Handout to each participant. Each student will need a Knife Cuts handout, one color of play doh™ (one small container or half of a large container), a regular utensil knife, and a paper plate.

**Instructions:**
Using their play doh™, each student will create each of the 9 cuts (as requested by the teacher), placing their best example on the paper plate for the teachers inspection.

DO: **Chopped Broccoli Salad** (Grade Level: 6th-8th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

DO: **Shredded Brussels Sprouts Salad** (Grade Level: 9th-12th)

**Preparation:**
Gather Ingredients (See Attached Recipe)

**Instructions:**
(See Attached Recipe)

**REFLECT:**
- What are the three essential kitchen knives?
- What does using the “claw” mean when referring to chopping food?

**APPLY:**
- Explain how to safely carry a knife.
- Explain three safe cutting tips that you practice at home.

**REFERENCES:**
- https://www.uen.org/lessonplan/view/30977
Securely hold your knife
Anchor your board and knife
Fingers curled back
Eyes on the knife
Take your time
Yield to falling knives
# Know Your Knives

<table>
<thead>
<tr>
<th><strong>Chef</strong></th>
<th><strong>Utility</strong></th>
<th><strong>Paring</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Most used kitchen knife. Minces, slices and chops veggies and meats. Curved tip for mincing.</td>
<td>Mid-size knives used for variety of cutting. Not as large as a chef’s knife, but larger than a paring knife.</td>
<td>Used for intricate work and allows for a greater amount of control than a larger knife.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bread</strong></th>
<th><strong>Boning</strong></th>
<th><strong>Steak</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick bladed knife used for cutting loaves of bread. Has deep serrated edges to cut through crust.</td>
<td>Used for removing bones and skinning meat or poultry.</td>
<td>Best for slicing steaks from whole cuts of meats such as sirloin and rump.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cleaver</strong></th>
<th><strong>Santoku</strong></th>
<th><strong>Sharpeners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Designed with a thick, wide blade to force its way through meat or poultry bones.</td>
<td>Japanese form of a chef’s knife. Traditionally shorter &amp; has less of a rocker. Perfectly balanced.</td>
<td>Keep your knives sharp! A sharp blade takes less pressure &amp; is safer than a dull one.</td>
</tr>
</tbody>
</table>

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- Texas A&M AgriLife Extension
CULINARY
KNIFE CUTS
101

JULIENNE
BATTONET
CHIFFONADE

SLICE
CHOP
BRUNOISE

SMALL DICE
MEDIUM DICE
LARGE DICE
Chopped Broccoli Salad

Dressing Ingredients:
1 cup low-fat mayonnaise
¼ cup sugar
1 Tablespoon apple cider vinegar

Salad Ingredients:
2 Heads broccoli, chopped
¼ cup red onion, finely chopped
½ cup cooked bacon, chopped
½ cup dried cranberries

Directions:
• In a large bowl, whisk dressing ingredients together.
• Add salad ingredients and toss.
• Stir well and chill in the fridge before serving.
Shredded Brussels Sprouts Salad

Ingredients:
12 oz Brussels sprouts, thinly sliced
1/4 cup dried cranberries
1/4 cup chopped pecans
1 pear, chopped
2 green onions, thinly sliced

Dressing:
2 T extra virgin olive oil
2 T balsamic vinegar
1 Tablespoon maple syrup
1 tsp. Dijon mustard

Directions:
• Place Brussels sprouts, dried cranberries, pecans, green onions and chopped pears in a large bowl.
• Combine dressing ingredients in a jar and shake to combine. Pour over salad then toss to coat.
• Makes 6 servings.
1. Please read the statement in the left column of the table below. Bubble in the circles that describe your level of understanding **BEFORE** attending this program. In the section on the far right, bubble in the circles that describe your level of understanding **AFTER** attending this program. You will have two bubbles per row.

<table>
<thead>
<tr>
<th>LEVEL OF UNDERSTANDING: 1 = Poor, 2 = Average, 3 = Good, 4 = Excellent</th>
<th>BEFORE</th>
<th>AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>My understanding of proper safety for kitchen equipment.</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>My understanding of potential dangers in the kitchen.</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>My understanding of safe behavior in the kitchen.</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>My understanding of ways to safely extinguish fires.</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>My understanding of the different kitchen tools.</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>My understanding of the various types of knives.</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

2. For each statement below, fill in the bubble that best describes you.

**INTENTIONS TO ADOPT:**

<table>
<thead>
<tr>
<th>As a result of participating in the Food &amp; Nutrition Project lessons and activities...</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>I plan to practice safe behavior in the kitchen.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I plan to identify kitchen dangers and correct these.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I plan to develop a kitchen escape plan.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I plan to use common kitchen appliances safely.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I plan to use a knife correctly.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

3. For each statement below, fill in the bubble that best describes your level of agreement with the following statements.

**BEHAVIOR CHANGES:**

<table>
<thead>
<tr>
<th>As a result of participating in the Food &amp; Nutrition Project lessons and activities...</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more comfortable working in a team.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I am more willing to listen to others.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I am more comfortable speaking with others.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I am more confident in my abilities as a leader.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
3. What is the most significant thing you learned in the Safety in the Kitchen project?

Please tell us about yourself.

<table>
<thead>
<tr>
<th>Gender:</th>
<th>O Female</th>
<th>O Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider myself to be:</td>
<td>O African American</td>
<td>O White</td>
</tr>
<tr>
<td></td>
<td>O Asian American</td>
<td>O Other</td>
</tr>
<tr>
<td></td>
<td>O Native American</td>
<td></td>
</tr>
<tr>
<td>I consider myself to be:</td>
<td>O Hispanic</td>
<td>O Non-Hispanic</td>
</tr>
<tr>
<td>Grade:</td>
<td>O 3rd</td>
<td>O 5th</td>
</tr>
<tr>
<td></td>
<td>O 4th</td>
<td>O 6th</td>
</tr>
<tr>
<td>Most of the time, you live . . .</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>O Farm or ranch</td>
<td>O Suburb of city between 50,000</td>
</tr>
<tr>
<td></td>
<td>O Town less than 10,000</td>
<td>O Central city/urban center with more than 50,000</td>
</tr>
<tr>
<td></td>
<td>O City between 10,000 - 50,000</td>
<td></td>
</tr>
</tbody>
</table>

Please provide any additional comments below.

Thank you!
EXPLORr
FOOD AND NUTRITION PROJECT
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