



Thanksgiving Traditions Lesson Plan for Homeschool

Overview

Raddish is designed by a dedicated team of teachers and chefs who believe the kitchen classroom is the tastiest place to learn. We love watching learning come alive when kids mix math, stir science, and taste culture!

Paired with the materials found in your Thanksgiving Traditions box, this lesson plan divides your box into 3 60-90 minute lessons you can use and adapt to support your homeschool study, pre-k – middle school. Depending on your timeframe and child's age and engagement, these can be taught together or separated for a longer lesson. Please refer to the curriculum provided in your box: recipe guides, activity card, and introduction card. Happy cooking! Happy learning!

Lesson 1: Savory Stuffin' Muffins and Mix and Match Math

Activity Time: 60 minutes

Learning Outcomes

- Students will learn the term combination as it applies to math.
- Students will learn five different strategies to calculate combinations:
 - drawing, a chart, a list, a tree diagram, and a multiplication equation.
- Students will learn how to create their own combination story problems.
- Students will create and solve their own story problems.
- Younger students will show their work using drawings.
- Students will make Savory Stuffin' Muffins.

Materials

- Recipe guide, ingredients, and tools listed within.
- Paper, pencil, crayons, markers, and or construction paper and scissors for recording combinations.



Sources for lesson plan

- www.educators.brainpop.com
- www.mathisfun.com
- www.studyzone.org/testprep/math4/d/possiblecombination1.cfm
- www.khanacademy.org/math

1. Introduction- Ingredient Swap

- Read the **Ingredient Swap** section of the Savory Stuffin' Muffins recipe guide together.
- Have each student:
 - Choose their favorite combination of ingredients.
 - **Draw** and **label** or **list** the ingredients they chose.
 - Share their ideal Savory Stuffin' Muffins recipe with the rest of the group.
 - For **Younger Students**:
 - Simplify the possible amount of combinations by making the number of options smaller. For example, only include bread, meat and cheese categories and only two options for each.
- As a group:
 - **Calculate** how many different combinations the group came up with.
 - Count how many chose the same combination.
- Individually or in partners:
 - Ask: What ideas do you have about how to figure out all of the possible combinations you could make with these ingredients?
 - **Provide** students with pencil, paper, markers, and encourage all attempts.
 - **Observe** how each student approaches the problem. **Assess** their strategies and basic approaches to problem solving
 - Consider: Are they flexible thinkers? Able to see the problem from different angles? Do they exhibit organized data collection?
 - Gathering this information can help you to support their learning in many different situations.
- Ask students to **share**:
 - How many different combinations did you find? Explain your approach.
- Explain:
 - A **combination** is a possible way of putting things from a group together where the order they come in doesn't matter.
 - Ways to be systematic about recording possible combinations:
 - Drawing
 - Charts
 - Tree diagram
 - List



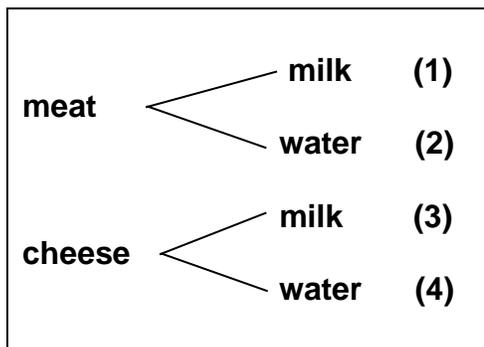
- Multiplication
 - If students used any of the above methods point out to them that they figured out one of the ways you are going to show them. If they figured it out using other methods make sure they know that they are not wrong, you are simply showing them some alternate strategies.

2. Find Possible Combinations Using Drawing, Charts, Tree Diagrams, Lists, and Multiplication

- **Drawings** - Students can draw each possible combination.
 - This is most appropriate for pre-writing, pre-reading students.
- **Chart** - A table that sets up the choices on the vertical and horizontal axis.

	Meat	Cheese
Milk	Milk, Meat	Milk, Cheese
Water	Water, Meat	Water, Cheese

- Younger students can draw their pictures in chart format instead of writing words.
- **Tree Diagram** - A diagram shaped like a tree to display all the possible outcomes along its branches.



- Younger students can use pictures within the diagram instead of words.
- **List** - Use words to record all possible combinations.



- (1) meat- milk
- (2) meat-water
- (3) cheese- milk
- (4) cheese- water

- Younger students can use pictures within the diagram instead of words.
- **Multiplication** - Multiplying the number of choices from each group with the other groups.

2 kinds of sandwich (meat/cheese) x 2 kinds of drink(milk/water) = 4 choices

3. Create Combination Story Problems

- **Ask:** What other situations do you think it would be helpful to know all of the possible combinations?
 - For example: packing for a trip (what kind of tops, bottoms and shoes), ice cream party (what kind of container, flavor and toppings), etc.
- How to create a story problem:
 - **What is the situation?**
 - Example: Ice Cream Party for Halloween
 - **What are the categories?**
 - Example: Container and flavor
 - **How many of each?**
 - Example: Two containers—cup or cone, two flavors—vanilla or chocolate
 - **What is the story?**
 - Example: Christina is inviting all her friends over for an ice cream party. She is going to serve either chocolate or vanilla ice cream in either a cone or a cup to her friends.
 - **What is the math/combination problem?**
 - Example: How many different combinations of ice cream treats can be served at the party?

4. Solving Combination Story Problems

- Model solving the Ice Cream Party Combination Story
 - Have students work together as a group to solve for all the possible combinations using all the methods above.
 - Ask students to show their work and support where necessary.



- Have students use their ideas to create their own story problems.
 - **Younger students** are probably most comfortable working with two categories with two or three options in each.
- Have students swap their story problems with one another and challenge them to solve them using as many different strategies as possible.

Extension Ideas

- **For older students:**
 - Explore the difference between all the possible combinations (where the order of items doesn't matter) vs. all the possible permutations where the order does matter.
 - See Khan Academy for a great video:
https://www.khanacademy.org/math/precalculus/prob_comb/combinations/v/introduction-to-combinations
- Take orders from family members using the Ingredient Swap section of the recipe guide.
 - Ask: How many combinations were chosen? How many possible combinations are left unchosen? Was there a favorite ingredient?
- Draw out your story problem as a piece of art.
 - Be sure to include all categories and options.

5. Kitchen Prep

- Read the Savory Stuffin' Muffins recipe card together. Make sure to read the **Featured Culinary Skill - Chopping Onions**
- Identify and gather ingredients.
- Gather tools.
- Discuss kitchen safety. Specifically, oven safety (Visit Raddishkids.com/pages/safety)

6. Prepare Savory Stuffin' Muffins

- a. Ask children to read or describe each step.
- b. Together, follow the steps in the recipe.
- c. Give each child a turn to dice, cut, mince, and whisk.
- d. While the Savory Stuffin' Muffins are baking, have students post their combination story problems to share with their friends and family.
- e. When the Stuffin' Muffins are ready, taste and share!



**Lesson 2: Apple Pie à la Mode -
Apple Pie History and Pie Crust Test Kitchen**
Activity Time: 90 minutes

Learning Outcomes

- Students will learn the history of apple pie and how it has changed over time.
- Students will learn the science and vocabulary behind making *tender* and *flaky* pastry and teach others the terms as well.
- Students will learn the term variable.
- Students will make two different pie crusts with one variable different between them.
- Students will draw conclusions as to how the variable in the pie crust changed the final product.
- Students will use a combination of drawing, dictating, and writing to share the findings of their Pie Crust Test.
- Students will make Apple Pie à la Mode to share with their friends and family.

Materials

- Recipe guide, ingredients, and tools listed within.

Resources

- <https://whatscookingamerica.net/History/PieHistory/ApplePie.htm>
- <http://sweets.serious-eats.com/2011/07/the-food-lab-the-science-of-pie-how-to-make-pie-crust-easy-recipe.html>
- Video - Make the best pie ever using science (2:48)
<https://www.youtube.com/watch?v=1RdSSJThXvU>
- Pie Crust Recipe Options:
 - <https://smittenkitchen.com/2008/11/pie-crust-102-all-butter-really-flaky-pie-dough/>
 - <http://www.foodnetwork.com/recipes/alton-brown/pie-crust-recipe.htm>

1. Introduction- The History of Apple Pie

- **Ask:** How long do you think people have been eating pie? Why? What kinds of pie?
- **Share:**
 - **1390:** People have been eating pie as early as 1390! There is evidence from a cookbook by the master cooks of King Richard II with a recipe in it for apple pie that includes saffron figs and raisins.



- Pies used to be very different than they are today. Originally, you were not meant to eat the pastry. It was used only as a container and was even called a coffin. It didn't contain sugar, since sugar was very rare and expensive in the 1300s.
- **1500s:** Sugar was more readily available, so cooks started making pastry that was meant to be eaten. An apple pie recipe from the 1500s used hot water, eggs, butter, and flour for the pastry with an apple filling seasoned with cinnamon, ginger and sugar.
- **1796:** The cookbook called American Cookery by Amelia Simmons had two recipes for apple pie. These recipes included lemon peel, mace, and rose water.
- **1890:** The term "à la mode," which is French for "in the fashion" or "in style," was first used to mean "served with ice cream." The story goes that a professor named Charles Watson Townsend ate almost every day at the Cambridge Hotel where he ordered his apple pie with ice cream. A fellow diner saw this and asked what it was called. He didn't have a name for it so she called it "pie à la mode." He liked the name so much that from then on that's how he ordered it. Later he went to a restaurant in New York called Delmonico's where he ordered "pie à la mode." The waiter said he had never heard of it. Townsend made a scene and had them call the manager at the Cambridge Hotel. The next day "Apple Pie à la Mode" became a regular menu item at the Delmonico and an article in the New York Sun newspaper made it a favorite all around the country. The French actually don't use the phrase "à la mode" to order pie with ice cream!

*The above information was sourced from
<https://whatscookingamerica.net/History/PieHistory/ApplePie.htm>

Extension Ideas

- Create a timeline for the history of apple pie.
- Research the history of other traditional desserts.
- Look up the recipe for apple pie from a previous century and give it a try.

1. The Science of Pie Crust

- Read the **Featured Culinary Skill – Preparing Pie Crust** on the Apple Pie à la Mode recipe guide.
- Many different opinions exist on how to make the perfect pie crust.
- **Explain** the fundamental ingredients for a pie crust:
 - Flour – to make up the crust
 - Fat – for flavor and flakiness
 - Salt – to enhance flavors



- Sugar – adds flavor, helps the crust to brown; too much will make the crust brittle and tough
- Liquid – binds the crust together
- **Explain** the key terms in how to define a successful pie crust:
 - **Tenderness**
 - *Tenderness* comes from managing the gluten, which develops from the proteins in the flour.
 - In a pie crust you want just enough gluten so that the dough holds together.
 - You can control the gluten by the flour you use. All-purpose and pastry flour have moderate protein content.
 - You can also use as little liquid as possible.
 - Knead your dough very gently so as not to develop the gluten strands too much.
 - **Flakiness**
 - *Flakiness* comes from the solid fat that is used to make the dough. The fat is mixed into the flour so that you still have some pieces that you can see and feel.
 - During baking, the fat, which is made up of fat and water, melts and releases steam. This leaves air pockets that results in a slightly risen crust of layers separated by the air pockets—also known as flaky crust. The size of the fat pieces in the raw dough results in the size of the flakes.
- **Watch** the video - Make the best pie ever using science (2:48)
<https://www.youtube.com/watch?v=1RdSSJThXvU>

2. Pie Crust Test Kitchen

- **Explain:** Today you are going to make two different pie crusts. But you can only change one thing, one **variable**, between the two of them.
- **Ask:** Why do you think you should only change one thing?
 - **Explain:** That is the only way you will know that whatever differences you observe in the pie crust are due to that variable.
- **Read** the Raddish Recipe Guide: Apple Pie à la Mode
- **Decide** which variable you want to change.
 - Examples: The type of flour, the type of fat, the tools that you use to mix the dough, etc.
 - **Review** what you learned about the purpose of each ingredient to facilitate this decision.



- **Conduct your experiment**
 - Follow the recipe exactly the same way twice except for the one variable.
- **Examine your findings**
 - Have your family and friends eat the pie and provide feedback on the crust.
- **Teach** your family and friends about the terms tenderness and flakiness while you eat.

3. Kitchen Prep

- a. Read the title page together.
- b. Identify and gather ingredients and tools.

4. Prepare Apple Pie à la Mode

- a. Ask children to read or describe each step.
- b. Give each child a turn measuring, mixing, and rolling.
- c. While the Apple Pie à la Mode is baking, have students prepare to teach their friends and family pie eating volunteers about tenderness and flakiness.
- d. Once the Apple Pie à la Mode is ready, taste and share!
- e. While you are eating, ask your volunteers to give you feedback about the crust.
- f. Make your own conclusions about what affect your variable had on the finished pie crust.



Lesson 3: Homestyle Whipped Potatoes and Traditional Harvest Meals Around the World

Activity time: 60 minutes

Learning Outcomes

- Students will learn that Thanksgiving is a harvest festival.
- Students will learn that the traditional Thanksgiving feast was not always turkey.
- Students will learn that many other cultures and countries around the world celebrate a harvest festival.
- Students will use a world map to find countries where different harvest festivals occur.
- Younger students will use a combination of drawing, dictating, and writing to compose a report on a harvest festival in a different culture.
- Older students will gather information from print and digital sources, take brief notes, and sort information into a report on a harvest festival in a different culture.
- Students will make Homestyle Whipped Potatoes.

Materials

- Recipe guide and ingredients and tools listed within.
- World Map
- Access to the internet (suggested sites provided below)
- Writing and drawing utensils
- Harvest Festivals Around the World Research Worksheet (included)

Resources

- www.harvestfestivals.net
- www.theholidayspot.com/thanksgiving/around_the_world/
- www.onegreenplanet.org/uncategorized/ten-amazing-harvest-festivals-from-around-the-world/
- www.nationalgeographic.com/travel/top-10/harvest-festivals/
- www.shareable.net/blog/6-awesome-harvest-festivals-from-around-the-globe
- www.foodnetwork.ca/global-eats/photos/cool-food-festivals-around-the-world/#!Mid-Autumn-Festival-China

1. Introduction - Traditional Table

- Read the Traditional Table Section of the Homestyle Potatoes Recipe Guide
- **Ask:**



- Compare and contrast the differences between Thanksgiving then and now.
- Who was included in the first Thanksgiving? Why?
- Why do you think Thanksgiving is held at that time of year?
- What foods are favorites from your family's Thanksgiving meal?
- Are there any foods that are unique to your family's Thanksgiving menu?
- **Share** the history of Harvest Festivals:
 - Harvest Festivals have been celebrated since the beginning of agriculture.
 - Harvest Festivals are special holidays to give thanks for prosperity and abundance with feasts or family togetherness.
 - The American Harvest Festival is held on the fourth Thursday in November and is called Thanksgiving. On this day Americans gather together with their friends and family to prepare and share food and to give thanks.
 - Other cultures and countries celebrate harvest festivals as well.
 - **Ask:** Do you know of any?
 - Today you will have the opportunity to learn about other harvest festivals and their traditional foods; and teach what you have learned to others.

2. Harvest Festivals from Around the World

- **Share:** Chuseok (Chu Suk) is a Korean Harvest Festival.
 - **When:** It is held on the 15th day of the eighth month of the lunar calendar.
 - **Why:** Chu Suk is the time to celebrate the family and give thanks for their blessings. Memorial services are held during which family members visit the tombs of their ancestors and offer them rice and fruit.
 - **What:** The eve of Chu Suk is called Kang Kang Sue Wol Lae. A ceremony is held where women sing and dance in a circle. People also have wrestling, archery, folk music, and play a game called turtle tag.
 - **Food Served:** There is a special feast to show thanks for each other. The feast starts with a family gathering at which "Songphyun" is served. These are special rice cakes made of rice, beans, sesame seeds, and chestnuts.
- **Watch:** A video from Korea Today – Korea's Chuseok Holiday (4:13)
https://www.youtube.com/watch?v=OkySuOoQO_Q



- **Model** answering the questions from Harvest Festivals Around the World Research Worksheet (included)
- **Research:** Have students choose their own Harvest Festival to research.
 - Festival ideas:
 - Trung Thu in Vietnam
 - Holi in India
 - Harvest Moon Festival in China
 - Homowo (yam) Festival in Ghana
 - Thanksgiving in Canada
 - Succoth a Jewish Harvest festival
 - Obzinky in Czech Republic
 - Sobotka in Poland
 - Egyptian Harvest Festival to the god Min
 - Helpful websites:
 - www.harvestfestivals.net
 - www.theholidayspot.com/thanksgiving/around_the_world/
 - www.onegreenplanet.org/uncategorized/ten-amazing-harvest-festivals-from-around-the-world/
 - www.nationalgeographic.com/travel/top-10/harvest-festivals/
 - www.shareable.net/blog/6-awesome-harvest-festivals-from-around-the-globe
- **Complete worksheet:** Have students complete the Harvest Festivals Around the World Research Worksheet (included).
 - Younger students can dictate answers and use drawing and drama to share their new knowledge.

3. Kitchen Prep

- Read the title page together.
- Identify and gather ingredients and tools.
- Read the **Featured Culinary Skill – Using a Peeler** section of the Homestyle Whipped Potatoes recipe guide.
- Discuss kitchen safety, particularly stove top safety. (Visit Raddishkids.com/pages/safety)

4. Prepare Homestyle Whipped Potatoes

- Ask children to read or describe each step.
- Give each child a turn peeling, cutting, and whipping.



- Once the Homestyle Whipped Potatoes are ready, gather your family and friends together to Taste and Share!
- While you are enjoying your feast, share what you have learned about harvest festivals in other countries.

Harvest Festivals Around the World Research Worksheet

Name of Festival: _____

Place(s) where it is celebrated: _____

Find it on a map and draw or print out a map of this place.

What time of year do they celebrate? Why? _____

What reason are they celebrating? Is there a story attached to the festival?

What activities do they do to celebrate?

What foods do they eat?

Why those foods? Do they symbolize something? _____

Compare and contrast this festival with American Thanksgiving.

Choose something to share from this festival:

- a recipe
- a song
- a dance
- a reenactment of something historical
- a story of the festival's origins
- a drawing or dramatization of how people celebrate this festival