

Name: _____

Club: _____

Easy as Pie



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THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



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Member Project Guide

Project Background

This project is intended for 4-H members of all ages. Some cooking experience may be helpful. This is intended to be a single year project. This project is eligible for competition at the county level, however there is no State Fair category for the project.

Within this project members will be shown several different ways to make a pie crust. From there they will learn recipes for a variety of types of pies. Members will be asked to complete some learning activities. These will help them understand some of the techniques they are learning.

A Note to the Project Helper

In some cases the 4-H member may need assistance with their project. They may have asked you to serve as a Project Helper. You may be a parent, relative project leader, friend, club advisor, or another person that is important in the 4-H member's life. Your duties begin with helping the youth create and carry out project guidelines, as outlined in this project guide. This is followed by helping the youth focus on each activity, providing support and feedback, and determining what was done well, what could have been done better, and where to go next.

As a project helper, it is up to you to encourage, guide and assist the 4-H member's life skills and knowledge of the importance and fun of baking.

Your Role as a Project Helper

Your contributions are critical to the delivery of the 4-H program. It is essential that your interactions support positive youth development within the framework of these eight key elements

1. Positive relationship with a caring adult.
2. Safe environment, emotional and physical.
3. Opportunity for mastery.
4. Opportunity for value and practice service.
5. Opportunity for self-determination.
6. Welcoming environment.
7. To be an active participant in the future.
8. Engagement in learning..

For more information on the eight key elements, please refer to the Advisor Handbook available at www.ohio4h.org. In addition, on a practical level, your role as project helper means you will:

1. Guide the youth and provide support in setting goals and completing this project.
2. Encourage the youth to apply knowledge from this project book.
3. Serve as a resource person.
4. Encourage the youth to go beyond the scope of this 4H project book to learn more about baking.

Project Guidelines

Step 1: Complete all activities

Step 2: Take part in **at least two** learning experiences

Step 3: Become involved in **at least two** leadership/citizenship activities

Step 4: Complete the project Review

Step 1: Project Activities:

Ages 9-12: Please complete at least 3 project areas

Ages 13 and up: Please complete at least 4 project areas including either Double up or Meringue, What is that? Or both.

_____ Tools of the trade

_____ Building Blocks: Let's make pie crusts. Make at least one of each type
Of pie crust.

_____ Keep it Cool. Make a no-bake pie.

_____ A single one: Make a blank baked pie crust pie
And a single crust fruit pie

_____ Double up: Make at least one double crust pie

_____ Meringue, What is that?

Step 2: Learning experiences

Learning experiences are meant to complement project activities, providing the opportunity for you to do more in subject areas that interest you. Take part in at least two learning experiences, and write them down below. Some ideas include: Attend a class related to baking pies,. Organizing a club meeting about your project. Tour a local bakery, prepare a demonstration or exhibit about your project, or participate in county project judging.

Plan to do	What I did	Date Completed	Project Helper
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Step 3: Leadership and citizenship activities

Choose at least two leadership/citizenship activities from the list below (or create your own) and write them in the table. Record your progress by asking your project helper to initial next to the date that each activity is completed. Here are some activities that you can choose from.

Plan to do	What I did	Date Completed	Helper Initials
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Help someone shop for groceries

Take a pie to a friend, neighbor, or relative.

Help someone clean up the kitchen after a meal

Serve a snack at a club meeting

Teach club members something you learned from this project.

Tools of the trade

Making pies requires just a few essential tools. Some of these tools are essential and some are optional.

You will need:

Mixing Bowls

Measuring spoons

Measuring Cups

A pastry cutter or blender(optional)

Pie pans (A 9 inch pan is a standard size) The recipes in this project will use a 9 inch pie pan.

Dark pie pans or glass (pyrex) pie pans produce a crisper crust. Shiny pans reflect heat a soggy crust.

A rolling pin

Aluminum foil or pie shields

Dry beans or pie weights

A paring knife

A rolling mat or smooth cutting board large enough to roll your pie crust out (optional)

Find pictures of these items and make a collage.

You may also find other tools in your search that would be useful in pie making. You can include these in your collage as well.

Let's Make Pie Crust

Crumb Crusts:

Crumb crusts are a quick and easy way to make a pie shell. Crumb crusts work best for no bake or cream pies. A standard crumb crust uses graham cracker crumbs. We will start out with a recipe for a graham cracker crumb crust. After you master this you can get creative by using other types of crumbs such as chocolate cookies, vanilla wafers, pretzels, or other types of cookies or crackers. You can also add in things like nuts or coconut. Look up different recipes for crumb crusts or use your imagination.

Graham Cracker Crumb Crust

18 graham cracker squares

1/4 cup granulated white sugar

6 Tbsp. Butter, melted

Place the graham cracker squares in a zip top bag. Crush them into fine crumbs using a rolling pin. (You can also use a blender or food processor to grind the crumbs)

Place the crumbs in a medium mixing bowl. Stir in the sugar and butter.

Pour the mixture into a 9 inch pie pan. Spread the mixture evenly across the pan. Press the mixture into the bottom and up the sides of the pan to form a firm, even crust. Bake the crust at 375 degrees for 5 minutes. Cool thoroughly on a cooling rack.

Pastry Crusts:

A good pie shell is flaky, crisp, and has a good flavor. There are many recipes for pie pastry. For this project we are using two easy to work with recipes. The first is a pat in the pan recipe that does not need to be rolled out. The second is an easy to work with recipe that turns out well and has good flavor. A few tricks to make sure your pie pastry turns out well are: A.) handle the dough as little as possible B.) don't over mix the dough. Also when you roll out your pastry, try not to use too much flour.

Pat in the Pan Pie Crust

Ingredients

- 1½ cups of flour
- 1½ teaspoons sugar
- ½ teaspoon salt
- ½ cup vegetable oil
- 3 Tablespoons cold milk

Instructions

1. Place the flour, sugar, and salt in the pie pan and mix with fingertips until evenly blended.
2. In a measuring cup combine the oil and milk and beat until creamy.
3. Pour all at once over the flour mixture. Mix with a fork until the flour mixture is completely moistened.
4. Pat the dough with your fingers, first at the sides of the plate and then across the bottom.
5. Flute the edges.
6. Shell is now ready to be filled.
7. If you are preparing a shell to fill later or your recipe requires a prebaked crust, preheat oven to 425.
8. Prick the surface of the pastry with a fork and bake 15 minutes.
9. Check often and prick more if needed.



Never Fail Pie Crust

This recipe make enough dough for 2 double crust pies or 4 single crust pies.

Ingredients:

4 cups All-Purpose flour

2 tsp salt

1 3/4 cup vegetable shortening

1/2 cup cold water

1 Tblsp apple cider vinegar

1 Tblsp granulated sugar

1 egg

Directions:

In a large mixing bowl combine the flour and salt. Using a pastry cutter or your fingers, mix the shortening into the flour mixture until it looks like coarse crumbles

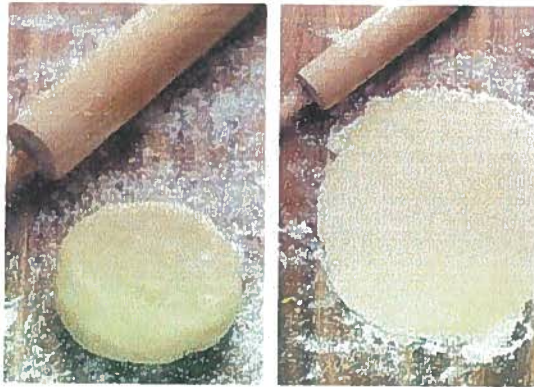


In a small bowl combine the water, vinegar, sugar, and egg. Mix well. Make a well in the middle of your flour mixture and pour the water mixture into it. Using a fork gently stir the flour into the water mixture, when it is all combined gently knead it together until it forms a ball. Form the dough into a large flat disk and wrap in plastic wrap or place in a zip top bag and chill for at least 1/2 hour.

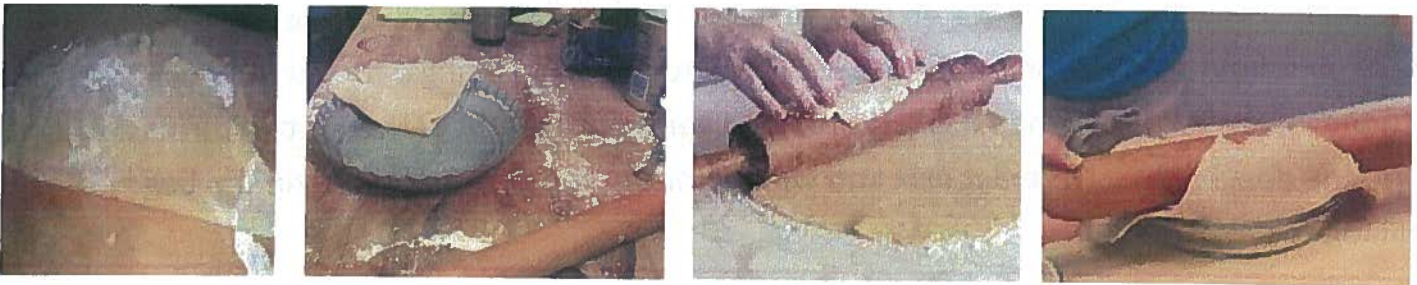
* Knead: Using your hands, push the dough together and fold it onto itself until it forms a ball.

Rolling it Out

After your dough is chilled, you are ready to roll it out and make a pie crust. Cut your dough into quarters and shape it into a disk about 1 inch thick and 6 to 8 inches around. Place it on a lightly floured surface. (You can also try placing it between 2 pieces of lightly floured waxed paper). Begin rolling out the dough with light strokes of the rolling pin starting in the center of the dough and rolling to the outside. Work your way around the dough , rolling until you have it approximately 12 inches in diameter and about 1/4 inch thick.



Now you are ready to transfer it to the pan. You can lightly flour the dough and gently fold it into quarters, move it to the pan and unfold it across the pan. You can also gently roll it up onto your rolling pin and then unroll it into your pan.



If you are making a single crust pie trim the dough about 1/2 inch from the edge of the pan and fold the excess under to form a built up edge and then crimp the edges. (See page 11, Crimping)

If you are making a 2 crust pie you will trim the crust even with the edge of the pie pan. You will then fill the crust. When the crust is filled you will roll out your top crust and transfer it as before. Trim the dough about 1/2 inch from the edge and fold it under the bottom crust and then crimp the edges.

Crimping:

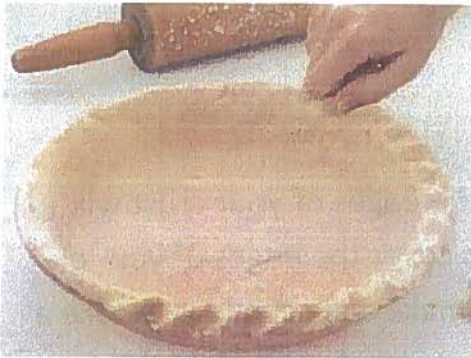
Fluted Edge:

From the inside of the pie plate, press the dough with your finger against the thumb and fore finger of your other hand. Continue to do this all around the edge of the pie.



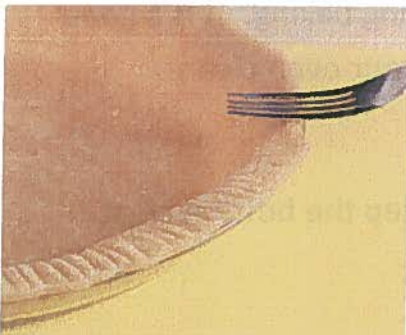
Rope Shaped edge::

Press the dough between your thumb and bent forefinger. While pressing, push slightly forward on a slight angle and pull back with our thumb. Place your thumb in the dent left by your finger and repeat the process all around the crust



Fork:

You can also crimp by using the tines of a fork and press all the way around the crust.



Blind Baked Pie Crust:

When you want to make a pie that calls for a pre-baked single crust, it is called Blind baked . This would be used for cream pies, Fresh berry pies and other pies that have a filling that is not baked.

After forming your crust and crimping the edges you will prick the shell all over with a fork. This will keep the pie crust from puffing up in big bubbles by allowing steam to escape. In order to keep the crust flat and to keep the edges from falling into the bottom you will need some help. Place a piece of foil into the crust and then place pie weights or dry beans into the foil. Bake it for 6 minutes at 450 degrees. Remove the beans and foil and continue baking for another 5-7 minutes or until the pastry is golden brown.



Some tips

When baking a single crust pie or double crust pie, sometimes the edges of your crust will brown too much before the filling is done baking. To prevent this cover the edges of your pie with pie shields while baking. A simple and inexpensive way to make a pie shield is to take a 12 inch square of foil. Fold it into quarters, and using scissors, cut a circle out of the center of the foil. This can now be placed over the edges of the pie crust and lightly crimped around the pie during the baking to prevent the edges from burning.

Sometimes your pie filling will bubble up and some will drip out during baking. It is a good idea to put foil on the shelf below your pie to catch drips and keep your oven clean.

It is a good idea to bake pies in the lower part of the oven to help keep the bottom crust from getting soggy.

Keep it Cool

Now that you have learned about making pie crusts we can make some pie. Let's start easy with some pies using a crumb crust and a No-Bake filling.

Chocolate Cream Pie

Ingredients:

1-6 serving size Cook and serve Chocolate Pudding Mix

2 cups 2 percent or whole milk

1- 16 oz tub whipped topping, thawed, divided.

1 9 inch graham cracker pie shell

Directions:

In a medium saucepan, combine the pudding mix and the milk. Cook and stir over medium heat until it comes to a boil. Remove from heat and transfer to a large bowl. Cover the pudding with plastic wrap directly on top of the pudding to keep a skin from forming. Chill until cool. Fold in half of the whipped topping. Pour into the prepared graham cracker crust. Chill for one hour. Top with remaining whipped topping. Chill again until ready to serve.

Switch it Up

You can use the same basic recipe for chocolate cream pie to make other flavors. Here are some suggestions, or come up with your own

Banana Cream Pie: Use vanilla pudding mix. Before pouring pudding into the pie shell, slice 2 medium bananas into the bottom of the pie shell.

Peanut Butter Cream Pie: Use vanilla pudding mix. While pudding is still hot, stir in 1/2 cup creamy peanut butter. Finish as directed above.

Turtle Pie: Use chocolate pudding mix. Before pouring pudding into pie shell, spread 1/2 cup caramel ice cream topping into shell and then sprinkle with 1/2 cup chopped toasted pecans.

A Single One

Fresh Strawberry Pie

Fresh berry pies are easy to make and make wonderful use of in season berries. You can use your blind baked crust to make your favorite berry pie. This recipe is for strawberry pie but feel free to substitute your favorite berries.

Ingredients:

1-9inch pre baked pie shell

3/4 cup sugar

2 Tablespoon cornstarch

1 cup water

1 package (3 oz) strawberry gelatin

4 cups hulled and sliced fresh strawberries

1 cup whipping cream, chilled

1/4 cup powdered sugar

Directions:

In a medium saucepan, combine the sugar, cornstarch and water. Cook over medium heat, stirring constantly. Bring to a boil and continue to cook for 2 minutes until thick and clear. Remove from heat and stir in gelatin. Cover and chill for about 25 minutes.

Arrange strawberries in prepared crust. Pour the gelatin mixture over berries, chill until set.

Just before serving place whipping cream in a chilled mixing bowl. Add in powdered sugar. Beat at high speed with a mixer until soft peaks form. Top pie with whipped cream.

Switch it up

Use your imagination. Try different berries with different gelatin combinations. Try mixing berries. Maybe strawberries and blueberries for a patriotic pie.

Peach crumble pie:

Ingredients:

1 9 inch unbaked pie shell

4 cups sliced fresh or unsweetened frozen peaches thawed and drained

1 Tablespoon Lemon Juice

1/2 cup brown sugar

1/2 cup granulated sugar

3 Tablespoon Cornstarch

1/2 teaspoon almond extract

Crumb Topping

1/2 cup flour

1/2 cup brown sugar

1/4 cup butter

Directions:

Combine crumb topping ingredients into a bowl and cut together until crumbly (just like you did with the pastry recipe) set aside.

Combine the thawed and drained peaches, lemon juice, sugars, cornstarch and almond extract. Pour into crust. Top with the crumb topping. Bake at 400 degrees for 45-50 minutes until golden brown and you can see juices bubbling.

Switch it up

Apple Crumb pie: Use 4 cups peeled, cored and sliced apples, 1 Tablespoon Lemon juice, 1 cup sugar, 3 Tbsp flour and 1-1/2 teaspoon cinnamon instead of the peach filling. Top with the same topping and bake as directed above.

Double up

Now it's time to try a double crust pie. Start like you did for the crumb topped fruit pie. You can use the same fillings. Apple pie is often a favorite.

Double Crust Apple Pie

Pastry for a 9 inch double crust pie

Filling:

4 cups peeled, cored and sliced apples

1 cup sugar

3 Tablespoons all purpose flour

1-1/2 tsp cinnamon

2 Tablespoons chilled butter cut into small cubes

Combine filling ingredients in a large bowl and set aside. Roll out your bottom crust as directed earlier in this project and place it into a 9 inch pie pan. Trim the crust even with the edge of the pan. Pour the apple mixture into the crust. Evenly spread the butter cubes over the apples. Set aside. Now roll the pastry for the top crust. Fold it into quarters or roll it onto your rolling pin and arrange it over the filled pie. Trim your crust to about 1/2 inch from the edge of the pan. Fold the top crust under the bottom crust and crimp to seal. Cut some slits in the top of the crust to allow steam to escape. Cover the edges of the crust with foil or pie shields. Bake at 400 degrees for 45 to 50 minutes or until golden brown and juices are bubbling.

Switch it up

Cherry pie: Use 4 cups thawed and drained frozen tart cherries , 1-1/4 cup sugar, 3 Tablespoons Minute Tapioca , 1/2 teaspoon almond extract and 1/4 teaspoon cinnamon instead of the apple pie filling.

Meringue, What is that?

Meringue is a topping for pies. It is like a fluffy airy cloud that is similar to marshmallow. It is made from beaten egg whites and sugar. Usually it is seen on cream pies. The most popular meringue topped pie is Lemon Meringue pie. Meringue is a little bit tricky to make but once you learn the techniques and tricks it is fairly easy. First let's go over how to make a good meringue and then we will put that to use by making a Lemon Meringue pie.

How to make meringue:

Before you start to make a meringue, it is helpful to know that any fat in the egg white will keep the egg whites from becoming fluffy. Start off by using a paper towel with a little bit of vinegar on it and wipe out the bowl you will be using to beat the egg whites. You may want to wipe off the beaters of your mixer as well.

You will now be ready to separate the egg yolks from the egg whites. Do this into separate small bowls and do 1 egg at a time. Even one speck of egg yolk can keep the egg whites from whipping up. It is easiest to separate cold eggs. Before you try to whip the egg whites, let them come to room temperature.

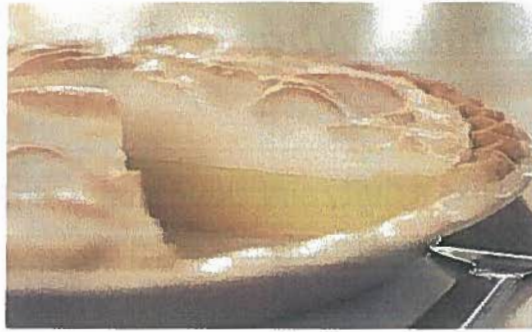
You will then add an ingredient called cream of tartar. This helps stabilize the egg whites.

(You may want to research why this works)

You will then be beating sugar into the egg whites. You will have to do this slowly, 1 tablespoon at a time. This keeps it from getting a grainy texture. You will whip the egg whites until they form stiff peaks and look glossy.

It is now time to top the pie. You want to carefully pile the meringue on top of the hot pie filling. Make sure the meringue goes all the way to the crust and seals in the filling. This will help to make sure the meringue does not "weep" (Some times meringues will form tiny drops of water on top as it sits)

Once the pie is fully covered you will bake it at 350 degrees until it is a light golden brown, approximately 15 minutes.



Lemon Meringue Pie

Crust

1 baked 9 inch pie shell

Filling:

1 cup plus 1 Tablespoon granulated sugar

2/3 cup cold water

1/2 cup cornstarch

3/4 cup freshly squeezed lemon juice

2 tsp lemon zest

4 large egg yolks

Pinch of salt

1-1/4 cups boiling water

Meringue:

4 egg whites

1 teaspoon vanilla

1/2 teaspoon cream of tartar

1/2 cup sugar

Prepare meringue. In large bowl combine egg whites, vanilla and cream of tartar. Beat on high speed with an electric mixer until soft peaks form. Gradually, one tablespoon at a time, beat in sugar. Beat until it is stiff and glossy. Set aside.

In a medium saucepan, combine all the ingredients for the filling except for the boiling water. Whisk until the starch is dissolved and it is all combined. Now whisk in the boiling water and then place the pan on medium-high heat. Bring the mixture to a boil, stirring gently with a silicone spatula or wooden spoon. When it comes to a boil, reduce heat to med-low and continue to stir gently and cook for 1 minute. Pour into prepared pie shell. Top with the meringue. Bake at 350 degrees for about 15 minutes or until the peaks of the meringue are a light golden brown. Cool on a rack. Carefully cover and chill to store.

Now that you have learned the techniques in this book you are ready to explore the world of pies. There are many different recipes for all types of pies. Look for recipes that you like and give it a try.

