



# Pumpkin Project

Owl - St. Matthew: Preschool

## Background

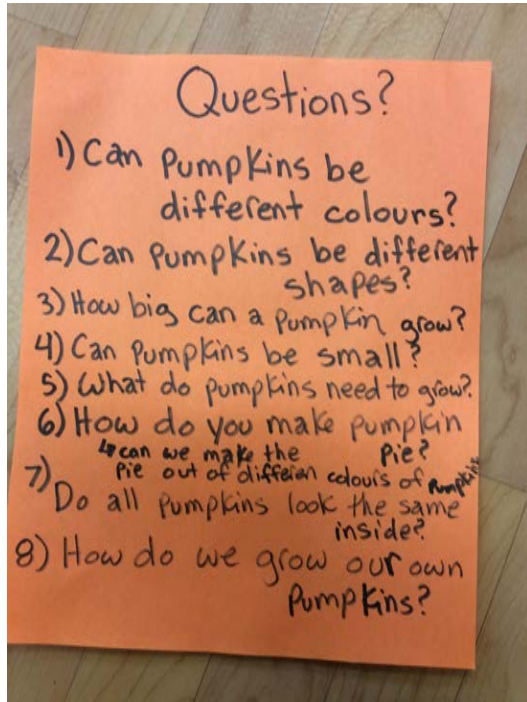
The pumpkin project in our preschool program started on September 26th, 2016 and finished on January 31, 2017. The ages of the children ranged from 2.5 years of age to 3.5 years old. The teachers guiding the project were Betty Gliedt RECE, Marianne Butler RECE and Nadine Duimering RECE.

## Phase 1: Beginning the Project

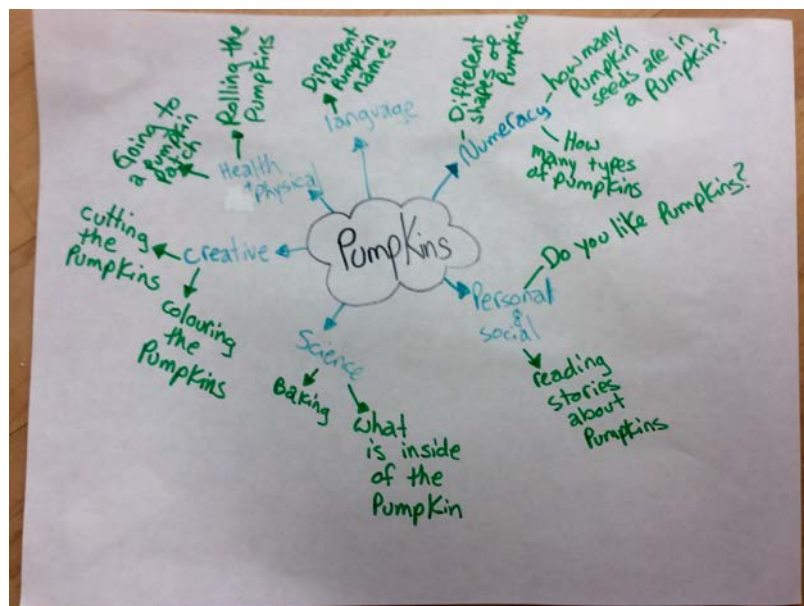
In the fall near the end of September, Nadine went to the Farmers Market in St. Jacobs and bought a pumpkin. She bought a pumpkin because at school, she was reading a book about pumpkins and the children started to ask her questions. Below is a list of the questions that the children asked. She brought the pumpkin into the preschool room and watched to see what the children would do. The children all began touching the pumpkin and asking for paper and crayons.

The children were talking to Betty about pumpkins. Hubert asked Betty if we could make pumpkin pie. Danilo asked if the pumpkin was orange. This is how we knew that the children were interested in learning more about pumpkins.

The children started colouring and drawing their own pumpkins. Below is a representational drawing of a pumpkin. Marianne asked the children what they would like to know and learn about pumpkins and wrote a list. Below you see a picture of the questions asked by the children. We thought about going to a pumpkin patch to ask the professionals. We also used the internet and some books to do more research about pumpkins. If you read a little further on you will see what some of the children said about what we know about pumpkins.



Betty made a web with the children on ways to explore the pumpkin. She decided to make a web because it would help put all of our ideas together. The web is used to help guide our learning and direct our thoughts. We made a web of the children's' thoughts and ideas of what they would like to learn, and also how they would like to explore the pumpkins. Betty put it in a web form so the children could see it.



We asked the children what they knew about a pumpkin. Their response was as follows.

Sebastian W. (age 3 3/4) - a pumpkin is an orange circle.

Ava (age 4) - a pumpkin grows on the ground.

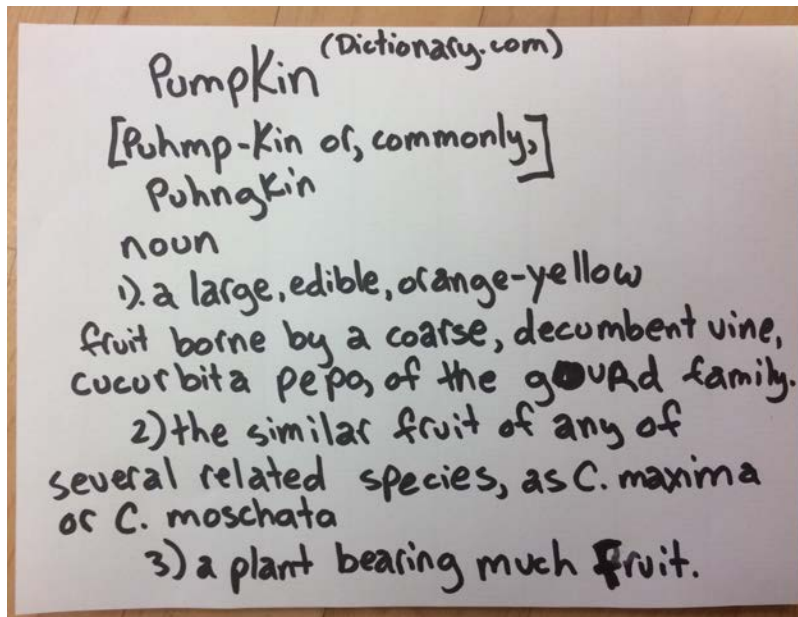
Hubert (age 3 1/2) - a pumpkin is orange. You bake it into a pumpkin pie.

Ningning (age 3 1/2) - a pumpkin grows big.

Jasmine (age 4) - a pumpkin is big and orange. It grows on the grass and it needs water.

Eden (age 4) - a pumpkin grows in the rain.

Here is a formal definition of a pumpkin from the dictionary.



We made a list of resources that we could use to help with our pumpkin project: iPad, pumpkin patch, books, and the grocery story.

Vocabulary List:

Gourds  
Flower  
Fruit  
Germinate  
Growing  
Leaf

Life cycle  
Plant  
Roots  
Seeds  
Seedling  
Soil

Sprout  
Stem  
Sun  
Water  
Vine

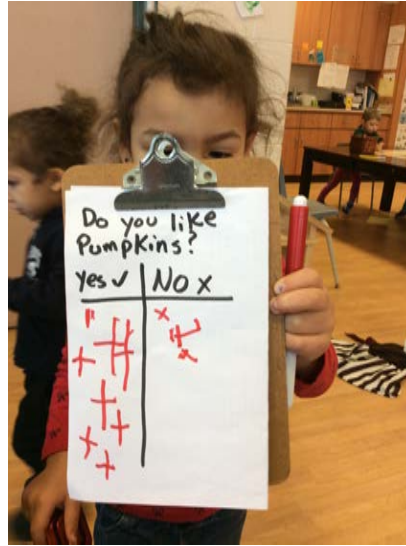
## Phase 2: Developing the Project

The preschoolers enjoy painting and getting messy. They wanted to paint a pumpkin. Therefore, we made a giant pumpkin together to use as our background for documenting our project. We asked them what colour they wanted and they all said orange. We poured orange paint onto the paper and then the children used their hands and paint brushes to paint with. Ningning asked if we could put orange tissue paper on top of the paint. We got some tissue paper, scrunched it up and put it all over the orange paint. We got messy but it was fun.



Sebastian W. (age 3 3/4) painting the pumpkin.

We started talking about who liked pumpkins and who did not like pumpkins. We decided to do a little survey, first we asked all of the children to raise their hands if they liked pumpkins. It was a little hard because some children raised their hands twice. Therefore, we decided to do it on paper. Eden wanted to do the survey to see who liked or disliked pumpkins, on a paper, so we could see it visually. Eden went around with a clipboard asking the children if they like pumpkins. Depending on what the child liked, their vote was recorded on the yes or no side. After tallying the votes up we had more children liking pumpkins than not.



Eden (age 4) placing a line under the yes or the no section of the survey.

Our field study led us to Steckle farm in Kitchener. We decided to go to Steckle Farm because we know that they grow fruit and vegetables. We hoped they would be growing pumpkins. We also knew the preschoolers would enjoy seeing other farm life such as the animals. The trip was fun and we learned a lot about different kinds of vegetables and fruit. We learned about planting and the new vocabulary that goes along with it. We even went on a wagon ride around the farm.



Chase (age 3 1/2) collecting some produce at the farm.

We did see one pumpkin on our wagon ride. It was a big one. Hubert (age 3 1/2) said, "Wow, look at the big pumpkin." We then realized that pumpkins could grow really big. (That was question number 3 on our list). We saw some baby pumpkins too. We realize that pumpkins come in all shapes and sizes. (Questions 2 and 4)

We learned how some vegetables and potatoes grow. You need to plant the seed or part of the potato in some soil, and you need to water the plant and make sure the plant gets sunlight. (Question number 6)



A farmer at Steckle Family Farm showing us how to grow a plant.

Some of the preschoolers (and even the staff) were surprised to find out that pumpkins were a fruit and not a vegetable. To explore this further, we used our iPad to investigate if a pumpkin was a fruit or a vegetable.

Joshua Engel, an enthusiastic eater and adventurous cook says,  
"Botanically it's a fruit: it is the seed-bearing part of the plant. The same goes for all squashes, melons, and cucumbers."

Unfortunately, we did not see as many pumpkins at the farm as we wanted to so we decided to go to the grocery store to search for more. We wanted to bring pumpkins back to our room to explore them further. We set off to the store. We brought our wagon so we could pull some pumpkins back to the centre. Audrey was a big helper and insisted on pulling the wagon for us.



Audrey (age 3) pulling the wagon.  
Audrey said, "I can do it."



Aden (age 3 1/4) helping to pick out the pumpkin.  
Aden said, "Let's pick this one."

When we arrived at the grocery store, we saw some funny looking pumpkins that were different shapes and colours. We explained to the children that there were squash and gourds inside the bin with all the pumpkins. We also saw many different sized pumpkins. Nadine told us that some pumpkins are small for baking and others were big for carving. There were many pumpkins to choose from... now just to find the right one.



Nadine helping to find the perfect gourd.



What we chose: two gourds and one pumpkin. The one pumpkin is for baking.





Carson (age 2 3/4) said, "Let me pay."  
Marianne picked him up to reach and give the money to the cashier.

During our second field study, we were able to see a variety of pumpkins. We learned how to walk in a group (gross motor) and how to follow street signs (literacy) to the grocery store. We learned about buying pumpkins and how money works (numeracy).

We decided that we needed to carve some pumpkins. We used our social skills to decide what we wanted to carve on the pumpkin. Zoe (age 3 1/2) wanted a happy face and Liam (age 2.5) wanted a scary face. Nadine cut the top of the pumpkin off with a knife and then we used our gross and fine motor skills to get the seeds out using our fingers and spoons. We saw many seeds when we opened up our pumpkin. We counted the seeds (so many we lost count), and sorted the seeds into sizes. We had lots to say about the seeds.

Jack (age 3) said, "These seeds are slimy."

James (age 3) said, "This pumpkin is heavy."

Olivia (age 3 1/2) said, "This pumpkin is round."

Samantha (age 2 1/2) said, "Can I eat the seeds?"

Liam (age 2 1/2) getting the  
seeds out of the pumpkin.





Mackenzie (age 3) and Ava (age 4) finding lots of seeds.



Chase (age 3 1/2) using a spoon to find some seeds.



Danilo (age 3 1/2) scooping the seeds out of the pumpkin. Danilo says, "Look, it's slippery."

The children explored with the gourds too. They noticed that they were different shapes and a lot smaller than the pumpkins. They were also different colours than the pumpkins. Betty brought in a few more gourds that she had at home. The gourds were rough and bumpy, not as smooth as a pumpkin. Sometime gourds are used to decorate around the house in the fall.



Jack (age 3) looking at a gourd and feeling the bumps.



Zoe (age 3 1/2) exploring the orange gourd.



Before we cut into the gourd to examine it, we gathered around to make some comparisons to a pumpkin. This gourd was the same shape as a pear not round like a pumpkin. It was lighter than a pumpkin and smoother too. This one had no bumps or warts. The children were eager to feel the gourd and to see what it felt like. It was cold and slimy.



After cutting the gourd:

James (age 3) said that the gourd looked yellow.

Danilo (age 3 1/2) was counting the seeds.

Samantha (age 2 1/2) and Mackenzie (age 3) thought the gourd was cold to the touch.



James (age 3) smelling the gourd.

We also explored pumpkins by being creative. The preschoolers wanted to do a lot of pasting and painting to create pumpkins. We often got very sticky and messy but it was fun to explore with different mediums of art. We painted with pumpkins and gourds.



Avery (age 2 1/2) was all sticky from the glue.



Maja (age 3 1/2) painting her pumpkin. She said, "I like painting."



Carson (age 2 3/4) painting a real pumpkin. He wanted a blue pumpkin.



Jack (age 3) using his mouth and a paintbrush to do his painting.

Audrey asked how big can pumpkins grow? No one in our class knew so we asked the children where we could find out. Audrey said, "Look on the iPad." So we looked on the internet to see what the biggest pumpkin was and guess what we found out?

The biggest pumpkin was in Germany 2014 weighing 2323.7 pounds. The pumpkin was from Beni Meier. That is one big pumpkin. The world record changes every year, we wonder... who is next and how much will it weigh.

We wanted to see if pumpkins come in different colours. Nadine found a white pumpkin at Sobeys. She brought it in for us to explore. It was heavy and very fascinating.



Jasmine (age 4) said, "It was really heavy and big. We cut it open to see if the inside looked the same as the ones from the orange pumpkins."





We were surprised to see that the inside was orange and not white.



Ava (age 4) said, "I'm getting the guts out."

The white pumpkin and the orange pumpkin looked very similar inside. The inside of the white pumpkin still looked orange and the seeds were the same too. The big difference was just the outside colour and that the white pumpkin was more dense and heavy than the orange pumpkin.

Hubert really wanted to bake with the pumpkins so we decided to make pumpkin tarts. First, we had to go to the grocery store to pick up a few items.



James (age 3), Sebastian W. (age 3 3/4), Eden (age 4), Carson (age 2 3/4) and Marianne, helping to carry the items.

Then it was time to bake. We looked at the recipe and carefully followed it. Some of us bake at home with our moms and our dads.

Aden (age 3 1/4) said that he makes cookies at home with mom.

Sam (age 2 1/2) said she helps mom crack the eggs.

Maja (age 3 1/2) said she helps dad bake yummy cookies.



Audrey (age 3) and Nadine taking an egg shell out of the bowl.



Sean (age 3) and Avery (age 2 1/2) mixing the ingredients together.



Sebastian K. (age 3 1/2) and Mackenzie (age 3) putting the pumpkin into the bowl.



Audrey (age 3) said, "Mmmm" after they were baked.



Sam (age 2 1/2) said, "This is yummy."



Olivia (age 3 1/2) said, "I like the whipped cream."

Through this activity, we learned about numeracy, our five senses, our likes and dislikes, and some self-help skills. We had to read the recipe and do some counting. We learned what pumpkin tarts taste like and we learned some basic food preparing skills. We used a pumpkin pie recipe that Marianne was given by her Grandma.

We wanted to explore the pumpkins outside in the cold. Would the pumpkin freeze? Betty carried the pumpkin outside to see what would happen. The pumpkin did freeze but unfortunately, someone took the pumpkin so we did not get a chance to cut it open. We then decided to make our own pumpkin out of the snow.

Nadine asked, "How are we going to do that?" Cruz (age 3) said, "We need to shovel the snow." Then Jasmine (age 4) said, "We need to paint it orange." The children got some shovels and started putting the snow in a pile. They tried to shape it round like a pumpkin. After some children used squirt bottles and orange paint to paint the snow pumpkin.



Ningning (age 3 1/2), Jasmine (age 4) and Danielle (age 2 1/2) painting the snow orange.



Eden (age 4), Maja (age 3 1/2), Audrey (age 3), Sam (age 2 1/2) and Avery (age 2 1/2) taking turns to help paint our pumpkin.

We were very proud of our finished product.



Through this project, we used our gross motor skills and creativity.  
We brainstormed together and worked as a team.

Before the project started, we asked the children to draw a picture of what they thought a pumpkin was, and near the end of the project, we asked the children to draw a pumpkin again.



This is a pumpkin from Eden (age 4). One before the project and one after the project.



During the pumpkin project, we found a pumpkin song to sing. We sang it to the tune of Ten Little Monkeys.

1 little, 2 little, 3 little pumpkins.  
4 little, 5 little, 6 little pumpkins.  
7 little, 8 little, 9 little pumpkins.  
All... (Then you insert your action)

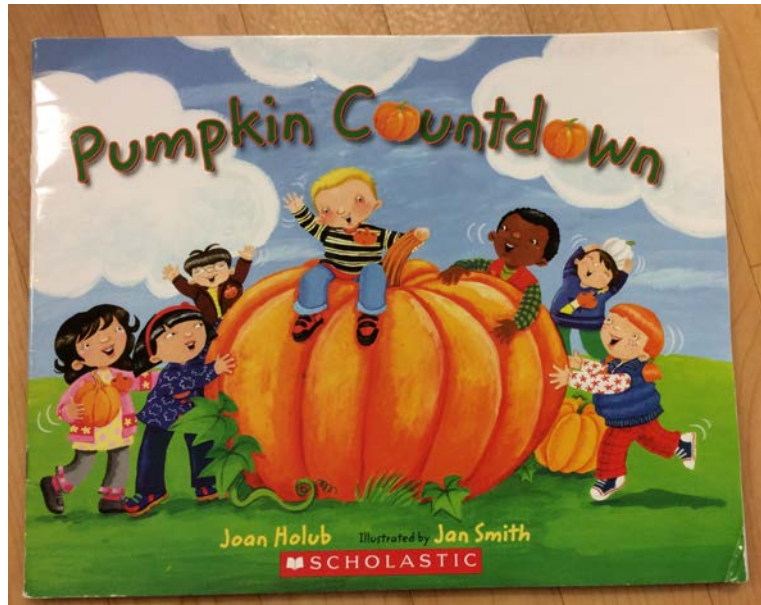
Olivia (age 3 1/2) sang, "sitting on the fence."  
William (age 2 1/2) sang, "standing on one foot."



This song helped with gross motor and turn taking. It also helped the children to use rhyming words and to be creative in literacy.



We also enjoyed reading a popular book that had a cd with it, during our pumpkin project.



It was about going on a field trip to a pumpkin patch. It was all about different kinds of pumpkins and it showed us how a pumpkin grows. It was a book about counting. Many things in the book are things we experimented with and explored.

We did a drawing of a cross section of a pumpkin and a drawing of the outside of a pumpkin. This helped us to learn the biology of a pumpkin. We learned about the different parts.





Audrey (age 3) said, "These are the seeds." She pointed to the seeds on the drawing.

Oscar (age 2 1/2) said, "I can roll the crayon."

Hubert (age 3 1/2) said, "Is this the inside of a pumpkin?"

We were shocked to discover that the inside of the pumpkin had a brain! Through this activity, we learned some new vocabulary and new terms of a pumpkin. We also did some gross motor activities with the children. We rolled the pumpkins on the floor and we rolled ourselves as if we were pumpkins.

We planted some seeds with Betty, to see how a pumpkin grows.



Yoyo (age 2 1/2) getting the seed ready to plant.



Yoyo (age 2 1/2), Avery (age 2 1/2) and Hubert (age 3 1/2) planting the seeds in the dirt.

Hubert (age 3 1/2) said, "Look I found another seed hiding."

Avery (age 2 1/2) said, "It is little."

Unfortunately, our pumpkin seeds did not grow. We tried to explain to the children that we needed to leave the seeds alone so that they could grow. It was their garden and they said that they wanted to see what would happen if they played in the soil. We do however; have many plants growing around the classroom. With sun light, air and water these plants are able to grow.

## Phase 3: Concluding the Project

We were ready for a party. We enjoyed learning and exploring pumpkins. We have discovered different shapes of pumpkins, different sizes of pumpkins, different colours of pumpkins, how a pumpkin grows, if all pumpkins look the same inside and, of course, how to make pumpkin tarts.

First, we had to decide what we needed for our party.

Olivia (age 3 1/2) said that we needed nametags.

Jack (age 3) said that we needed cookies.

Cruz (age 3) said that we needed juice.

Carson (age 2 3/4) said that we needed to sing songs.

Second, we had to pick a date for our party. We decided on January 31, 2017 because it was the end of the month. We made pumpkin nametags with stickers and we had to decorate pumpkin cookies with icing. Below are pictures that took place at the party.



Yoyo (age 2 1/2), Zoe (age 3 1/2), Danilo (3 1/2) and, Avery (age 2 1/2) making their name tags.



Eden (age 4) , Chase ( age 3 1/2) , Jasmine ( age 4) , Danielle ( age 2 1/2) , Zoe ( age 3 1/2) and Ningning ( age 3 1/2) doing a cheers with the juice.



Zoe (age 3 1/2) and Ningning (3 1/2) enjoying the cookies that they decorated with icing.



Everyone that came to the party.

We invited the parents to come look at the documentation that we had gathered and displayed throughout the project.



The children often looked at the pictures of themselves and their friends. They would point at them and get excited about all the exciting things that they had experienced.

## Teacher Reflections

We have enjoyed doing the pumpkin project. It was great to watch the children interact with one another while learning many new things. This project also taught us something new. We thought that a pumpkin was a vegetable, when really it was a fruit (because it has seeds). We learned the value of doing a group project as the children worked together to finish a task, or to discover something new about the pumpkins. The teachers did plenty of brainstorming with the children and listened to their thoughts and ideas. Watching the children explore and to discover new concepts about the pumpkins was exciting. Their face expressions and enthusiasm rubbed off on all of us. Their excitement made the teachers and parents excited about pumpkins. It was cool to learn along side with the children. Pumpkins come in many shape, sizes and colours. Betty liked how easy it was to go and get pumpkins to bring back to the class and to explore with them. Nadine enjoyed exploring the inside of the pumpkin and playing with the insides. Marianne enjoyed baking pumpkin tarts with the children. We were able to use all of our senses with this project. Sight, we saw the different types of pumpkins. Sound, we could hit the outside of the pumpkin and depending on the sound it made, determined how much was inside the pumpkin. Smell, we could smell the pumpkin, especially when we were baking our yummy tarts. Touch, we could physically touch the pumpkin, some were rough and some were smooth. Taste, we could eat and taste the pumpkin. We had many fun adventures, and look forward to the return of fall so we can experience some of the same wonder again. We hope that you enjoyed reading about our pumpkin project and learning along side with us.