Learn how to garden with us

Witt STEM School
4th Grade Class

Information Booklet
WHIT STEM ELEMENTARY IS PROUD TO PRESENT

START YOUR GARDEN WITH THE 4th GRADERS!

FREE PLANT!

10255 W.104th Dr.
WESTMINSTER, CO 80021

DATE: MAY 4TH, 2021
TIME: 1:30pm - 4pm

Start Your Garden With the 4th Graders!
There is a problem worldwide called food insecurity and we’re going to take the first step to solve that problem. One of the ways that we can solve it is: the community can grow their own food. If we grow our own food there will be less food insecurity.

Now lets answer the question, what is the best garden?

Raised garden beds are the best garden to make because they are useful in many ways, like it can help prevent weeds from growing in your garden. The materials to make a garden bed are lumber, 4 in- 3 feet in height, rich soil and compost. Where I recommend to place them is where you can see it from inside the house because it’s more likely you will work on it. Another benefit is the plants get warmed up easily.

How Do You Plant A Garden?

To start, you pick the seeds you want to plant and then dig out a hole and place the seed in the hole then cover it up. You want to water the seed(s) once every day. Also make sure your seeds have enough sunlight if you don’t have enough sunlight then you could place a light near the garden bed. But make sure it’s at the right temperature! If you’re planting a wild garden then make sure to take out weeds. And also check to see if there are pests when the plants sprout food.

To finish up, you’ll need all of those steps to grow a garden. And if you did them all then congrats because that was all the steps you needed! So I hope you’re happy because now you’re growing food for yourself!

Our community makes it better by planting our food and also makes it perfect. Now let’s answer some questions about this community. Planting our food makes us live and have more food.

How do you plant a garden:
Cover the soil with black plastic and/ or mulch to help.
Choose the right location choose a location for the garden that has plenty of sun and close proximity to your hose or water source.
select your veggies.
prepare the soil
check planting dates.
plant the seeds.
Add water.
Keep the weeds out.
Give your plants room to grow.
Ten steps to a successful garden:
Step 1. make good use of your location.
Step 2. Plan your garden layout.
Step 3. Grow recommended varieties.
Step 4. Obtain good seed, plant, equipment, and supplies.
Step 5. prepare and care for the soil properly.
Step 6. Plant your vegetables right.
Step 7. Keep down weeds.
Step 8. control pests
Step 10. Harvest at peak quality.

Steps to start a vegetable garden:

Choose the right location: Choose a location for the garden that has plenty of sun, ample space and close proximity to your hose or water source. Find a level area to help prevent erosion.

Select your veggies: Decide what produce to include based on your climate, space, tastes and level of expertise. Newcomers may want to consider some of the easier crops to grow, like carrots, beans, cucumbers, peppers and lettuce.

Prepare The soil: Mix compost and natural fertilizers into your garden to condition the soil for your plants. Garden-supply stores can test the acidity of your soil and recommend supplements, or you can simply purchase specially made soil in bulk.

Check planting dates: Growing conditions and ripening cycles are different depending on the plant and the season, so you should not sow all the seeds at the same time. Planting dates can be found on seed packets. Review the ideal conditions for each veggie you want to plant before creating a gardening schedule.

Plant the seeds: Place your seeds or plants into the soil, following the depth and spacing directions carefully.

Reap what you sow: Harvest vegetables when they’re young and tender, but only pick them when you plan to use them. Pull root crops as soon as they reach edible size. Collect leaf crops by cutting them within 2 inches of the ground.

Finally, enjoy your harvest.
Steps To A Garden

By Gavin, Corrin, William, Valarie, Patrick, Abigale

To make a garden there are some steps.

Step 1:
You will need to have the right tools, like a shovel, a watering can, and a hand towel. These tools will help you get your garden to grow properly. You will also need some help finding the tools from a parent. But you don’t need a watering can. You can also get a salt or pepper shaker and put water in it like a watering can.

Step 2:
You need to make a big wood box or you can plant it in the ground. You need the right amount of soil to make the plants grow. Then you need to get the seeds to plant them. Then you need to water them and give them food. Then you gotta wash off all of the plants.

Step 3:
Then you need to have a box of soil or soil on the ground. Then you need seeds to put into the soil. Then you need the sun and water on the seeds to make it grow. Then you pick them so you can eat it. It needs to be repeated until you have the food you want.

Step 4:
You will need a team if you’re going to plant a farm, so get lots of people to help you plant veggies. Just don’t do it during winter because the plants will not grow until during summer time. If you plant them in the winter they will die and you will not get food to eat.

Step 5:
You will need to protect your garden from animals too. You will need to protect it from rabbits, crows and maybe other animals. You should put up scare crows and fences to keep the animals out. Again you should stay away from birds, rabbits etc.

Step 6:
You have the food you want and you can do whatever you want with it. Or you can sell it for money or you could donate it to people who need it. You could use it for your meals to cook it or just eat it. Make sure to wash it before you eat it and wash your hands.
Well, here we are going to look at some facts about cucumbers:

Cucumbers really are a source of so many things. They contain Vitamin B1, B2, B3, B5 and B6, Folic Acid, Vitamin C, Iron, Calcium, Zinc, Magnesium, Phosphorus and Potassium, whilst also being around 95% water.

Cucumber can actually cure bad breath, pretty cool right?

Cucumber is a widely-cultivated creeping vine plant in the Cucurbitaceae gourd family that bears cucumiform fruits, which are used as vegetables.

There are three main types of cucumbers and they are Armenina, English, and Persain.

Cucumber are classified into three main cultivator groups: slicing, pickling, and burpless/seedless—with within which several cultivars have been created. So cool right?

Space cucumbers 12 inches apart for trellised plants in an area with abundant sun and fertile, well-drained soil.

Cucumbers will grow quickly with little care. Be sure they receive an inch of water every week.
The Latin name of Tomatoes is Solanum lycopersicum.

Tomatoes take around 50 to 60 days.

Fresh tomatoes are produced nationwide in the United States, with California and Florida as the leading producers.

Tomatoes need six to eight hours of sunlight and 1 to 2 inches of water a week.

Tomatoes need compost or animal manure to grow.

Tomatoes need about 18 - 24 inches of space.

Tomatoes need protection from Hornworms, Slugs and the Tomato fruit worm larva. Because these pests can lay eggs around the Tomatoes so they can’t grow!
Snap Pea

By Caceres, Dylan, Dayanara, Clark, Danny

The snap pea is a delicious food that many people like and can be in a lot of different foods. They can be cooked, they can be fried, they can be in a soup but either way they can be so delicious any way you make them.

What is the Latin name for snap pea? Pisum sativum Macrocarpon Group Is the Latin name of a snap pea.

How long does it take to grow? They seem to grow very nicely and produce well. Peas grow best in well-drained soft soil. If your soil is clay- be sure to amend the soil to make it loamier so it drains better when planting the pea seeds. In cooler weather plant the peas seeds about 1 inch deep.

Peas need to be planted in an area that needs at least six to eight hours of full sunlight exposure daily. Pea plants will grow slower in the shade but they will grow with more tartness than they would in a full sunlight location.

Plant 2 inches apart in double rows spaced 6 inches apart with 24 inches between each set of rows.

What type of soil does it need? It needs Organic matter soil.

What pests it needs protection from? The spotted cucumber beetle or armyworms too are the ones that bite holes in leaves. When holes in blossoms appear, inspect the peas.
By Caceres, Dylan, Dayanara, Clark, Danny

What is the Latin name of your plant? Carota is the Latin name of my plant. Before you even think about sowing the tiny seeds, you need to know how to fix your soil and avoid stunted and distorted roots. Growing healthy carrots requires loose soil and a heavy addition of organic amendments and sandy loam soils. Carrots are a full-sun plant. While they tolerate partial shade, carrots require at least six to eight hours of direct sunlight during the day. Sunlight is important to the vegetable’s development and carrots that do not receive the proper amount of sunlight produce poor crop yields. The optimum soil for carrots is loose, free of debris and clods, and either loamy or sandy. Plant seeds early in spring to avoid summer heat, which will turn the roots hard and bitter. Prepare your seed bed as soon as the soil is soft enough to work, by tilling and adding organic amendments. Spacing between rows requirements are 16-24 inches. Plant with a space between plants of one to three inches at a depth of ½ inch, or thin carrot seedlings after they sprout. What pests does it need protection from? The carrot root flies lay eggs in the soil near your carrot patch. Shortly afterward, tiny white maggots hatch and burrow into the plants’ root systems, eating as they go.
Community Garden Essay

By Maximiliano

Things I need for my community garden:
Benches
Heaters
Mask, face shields, bandanas, gator and gloves
Seeds
Water
Pots or boxes

Community Gardens are helpful for homeless people and people that cannot afford food. To plant a community garden you would need seeds. If you want to plant seeds you need pots or boxes. First put the dirt in the pots or boxes. Then put the seeds in the dirt. After that water the plants and wait for it to grow. When the plants are grown they are ready to eat.
Lettuce

By Ashton, Jessica, Zander, Mallory, Ethan, Virginia

Most lettuce varieties mature in 45 to 55 days, allowing many gardeners to plant two or even three crops. But looseleaf and butterhead leaves can be harvested at just about any time in their development. Heading varieties take longer to mature. Romaine takes 75 to 85 days and crisphead 70 to 100 day.

Did you know that Lettuce is the second most popular fresh veggie in the US, behind only the potatoes! The average American eats about 30lbs of lettuce a year!

Did you know that generally, lettuce is safe for most people to eat. It isn’t a common allergen. Lettuce is good for you, you can have it in salad. Because it’s low in calories, there’s not a big problem with eating too much lettuce.

The lettuce takes 6 to 8 weeks and lettuce grows well in summer/spring.

Lettuce is a herbaceous plant that can reach 6 to 12 inches in height. Lettuce produces masses of leaves that grow around a short stem. Some varieties of lettuce produce yellow, golden, reddish, bluish or variegated (multicolored) leaves. Lettuce develops 3-feet-tall flowering stalk with yellow flowers on top of it.

Requires 6 to 8 hrs of direct sunlight. Space the seeds two inches apart with rows twelve to eighteen inches apart, depending on the variety. Don’t sow the seeds too deeply as they need light to germinate. Cover them with a thin layer of soil. Once the seedlings are growing well, thin to ten to twelve inches.
Squash

By Ashton, Jessica, Zander, Mallory, Ethan, Virginia

“Squash” comes from the Narragansett Native American word askutasquash, which means “eaten raw or uncooked.” Squashes are one of the oldest known crops—10,000 years by some estimates of sites in Mexico. Since squashes are gourds, they most likely served as containers or utensils because of their hard shells. Also known as summer squash, yellow varieties of squash provide numerous health benefits. The vegetable is high in vitamins A, B6, and C, folate, magnesium, fiber, riboflavin, phosphorus, and potassium. That’s a serious nutritional power-packed veggie. Yellow squash is also rich in manganese.

Grows in 60 to 90 days
It grows everywhere but best in Michigan and California
6 hours of sunlight
1 inch of water a week
It needs sandy soil
It needs 3-6 feet of space, possibly more depending on the variety
I'm going to start a farm to help the homeless.

I will start here.

Oh! I see some one!

Oh-OK I will get you some.

Hello! I need some food really bad. I'm so hungry.

Here is two bags of food. Have a good day.

Thank you so much! I hope you have a good day too.

And you do that for every person that comes in!
The Garden
By Aliyah

Hi may I help you?
Yes.
Here is some food. Thanks.
Thanks.

The plants are done growing.
my first comic
By Ashton

1. yah
2. let's make a community garden
3. let's do this
4. done

5. this looks amazing good job
6. let's give some food to people
7. pbl
8. By Corrin

9. time for the first day of fun raising
10. yay
11. time for a hard day of work
12. moh
13. i do not know
14. where is arn? also where is clerks?
PBL
By Caceres

some food is started by an egg, other foods are started by birth this is the food chain

this is a farm...

Colorado Clean-up
By Aries

What a pretty day
What is this?

I'll take it to the trash on the way home.

Wait, which one do I put it in?
Garden
By Dylan

1. sure come over here! To see I think this is weird to say but can I have some food and I'm pretty poor now.
2. no problem you can also bring some of your friends. Thank you so much! I really needed it.
3. Thank you so much for letting me stay. Don't thank me thank him he said you needed come.
4. do you guys want some veggies and fruit? Wanna be friends with me and Rebecca.

PBL
By Gavin

1. we planted some food for the homeless people. It sounds good lets do it.
2. yes we do. we just have to wait it grow.
3. let's let it grow overnight.
4. OK let's let it grow overnight.
5. they have a lot over the eight.
6. yes they have I am surprised.
7. ok lets pick it for the homeless people.
8. we should bring it to them.
9. ok lets pick it up.
10. do you need food.
11. yes.
12. do you want more food. yes.
PBL Event
By Nate A.

Walking to the school to get some food...

I can't wait to make a delicious meal with the vegetables we find!

What food do they have?
My Idea
By William

There are lots of hungry people in the world.

I think I should plant a community garden.

A few months later...

Well that took forever.

Maybe I can take these to a farmer’s market.

Now everyone can enjoy the community garden William planted.

The End

PBL Food System
By Rebecca

we are trying to make this small plant into a strong flower. Right Rebecca?

hello in this book we are helping the earth!!
**Food ideas**
By Logan

Gardens are very important. Without them we would not have vegetables and fruits.

So that's my idea, what's yours?

Farmers are very important. Without them we wouldn't have enough. Like gardens there are vegetables. They make crops of corn, pumpkins and more.

What would be very helpful to farmers? Farmers work hard to make crops. So why don't we help them. If there was an easier way to dig the holes, put the seeds in, put the dirt back on top of the seeds. Would you want to know. Well my idea was to make a big plow I would want that big plow to dig holes in the ground. Put the seeds in and I would say, like it to put the dirt back on top of the seeds.

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**Food fest**
By Daniel

1. **1st**
   - Lady: This will help.
   - Chef: Thanks.
   - Lady: No problem.

2. **2nd**
   - Lady: Thanks.
   - Chef: Here you go.

3. **3rd**
   - Chef: I'm hungry.
   - Lady: Thanks.
   - Chef: Your welcome.

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**Clark clektive planting**

By Clark

1. are we doing this?
2. ok
3. let's make a plan for the planters

**food challenge**

By Jessica

1. I am working on a plant leaf system
2. ok
3. I have a idea
4. so what should we do
5. let's make a salad garden
6. that does you have a idea
7. yes we can make a first vegetable garden
8. let's do this
9. yes
10. yeah
11. yeah
12. you did it
13. yeah
14. we did it
how we are going to get food for the homeless

By Dayanara

1. Where can we get food for the homeless?
2. We could just go to the market and buy some, but I could also just grow a seed of fruit and eat it.
3. I think I might just grow a seed.
4. I should go get a seed somewhere.

PBL COMIC

By Jeremiah

1. This looks like nice place to plant crops.
2. What are you doing here?
3. Oh! I'm planting crops for homeless people.
4. What are you doing?

PBL

By Zoey

1. That's a great idea!
2. So I'm thinking for the PBL, we should all make gardens in the school yards but I don't know where but it'll be cool and fun.
You remember me in 5 seconds?

Of course, knock knock who's there?

I thought you said you would remember me in 5 seconds.

OK? It looks alright.

OK, anyone's today again? I'll water the garden. Off to yummy crops.

Fun fact: if you water plants everyday they will grow into yummy crops.
Thank you