

Horticulture #TCDProjectChallenge Instructions:

- Read through the Lesson Plan.
- Complete the challenge.
- Fill out the Lesson Worksheet (include circling your age level, Before and After Self-Evaluation, Life Skills Learned, Leadership (if applicable), Evaluation, Citizenship, Signature and Date).
- Take a picture during some part of your Challenge.
- Email your challenge picture and a picture of the front and back of your completed Lesson Worksheet to pmaddy@ksu.edu or text it to 785-877-7262.
- Challenge pictures will be posted (not the worksheet pictures) on our respective county 4-H Facebook pages and our Twin Creeks District Facebook page.
- Your name will be entered into a drawing for a project prize that will be given at our 2020 Achievement Banquet next fall.
- Each time you complete a challenge, your name will be entered into a drawing for that project area.
- You can complete any and all challenges, even if you are not enrolled in 4-H or in that specific project area.
- Challenges are divided into three age groups -- 7 to 9, 10 to 13, and 14 and up.
- Pictures of your challenge and lesson worksheets are due by the last day of the month, April 30, 2020.**
- Printed copies of the challenge can be picked up at your local Extension Office.
- Do not hesitate to contact me if you have any questions (pmaddy@ksu.edu or 785-877-5755 or 785-877-7262). I am excited to see your pictures and what you learn through these challenges.

HORTICULTURE: *Make a Plan*

Age 7 to 9:
Complete #1—3

Age 10 to 13:
Complete #1— 4

Age 14 & up:
Complete #1—6



Time: *60 Minutes*

Goal:

Make a plan for your home garden this year.

Self-Evaluation BEFORE: Using the rating scale below, answer the following statements:

- 1 = not at all
- 2 = a little
- 3 = a lot.

I know how to...

Figure out which vegetables will grow in NW Kansas.....1 - 2 - 3

Plan my garden to fit my family's needs.....1 - 2 - 3



#TCDProjectChallenge

Instructions:

1. Using your measuring tape, measure your garden space, whether it's an in-ground garden or in containers. Then make a scale drawing of your garden using the provided grid paper. Just reduce the number of feet to an equal number of inches on the paper. Hint: Each box on the grid is a square inch. For example, I measured my raised garden bed to be 4 feet x 8 feet. On my grid, I drew a 4 inch by 8 inch box.
2. Now decide what vegetables you want to grow. What do you like? What grows well here? How much can your family eat?
3. Color in the vegetables you expect to plant, then cut them out. Paste them to your grid where you plan to plant them in your garden. (Use the Vegetable Garden Planting Guide for ideas!)
4. Using the Vegetable Garden Planting Guide, figure out how much space each vegetable requires and how many plants you can fit into your garden space. Write these calculations on your garden plan.
5. Next, use the Recommended Vegetable Varieties guide to decide what varieties you will plant. Write these on your plan next to each vegetable.
6. Finally, use the Vegetable Garden Planting Guide to estimate when you should plant each type of vegetable and include those dates on your plan.

Ingredients/Materials:

- Measuring tape*
- Pencil*
- Crayons, Colored Pencils, etc.*
- Glue or Tape*
- Scissors*

Did You Know?

You can grow a garden just about anywhere—you don't have to live in the country or have a big yard to be a gardener! Even if you don't have a garden space in your yard, you can grow lots of plants in containers set in a sunny spot. Use your imagination! You can grow vegetables in old tubs, milk jugs, wooden barrels, planters, and much more. Just make sure you have a few holes in the bottom for extra water to run out.

Source: See Them Sprout

#TCDProjectChallenge

HORTICULTURE: *Make a Plan*

Life Skills Learned: *(Check all that apply.)*

- Positive Self-Concept
- Inquiring Mind
- Concern for Community
- Sound Decision-Making
- Healthy Interpersonal Relationships

Leadership (teaching someone what you have learned — Int./Sr. levels.)

- Taught lesson to other 4-Hers
- Taught lesson to classmates
- Other _____

Self-Evaluation AFTER: Using the rating scale below, answer the following statements:

- 1 = not at all
- 2 = a little
- 3 = a lot.

I know how to...

Figure out which vegetables will grow in NW Kansas.....1 - 2 - 3

Plan my garden to fit my family's needs.....1 - 2 - 3

Evaluation:

Which vegetables do you think you will like the best when you harvest your garden this year? _____

When do you plan to start your seeds and/or buy your transplants?

If you have extra produce from your garden, who could you donate to in your community? _____

Citizenship (Community service examples of sharing what you learned.):

- Help your guardians, a neighbor, or someone else you know create a plan for their garden.
- Work with your local community garden, school, nursing home, or other group to help care for their garden.
- Other _____



Member's Signature

Date

Resources:

Adapted from:

See Them Sprout, Gardening Youth Activity Guide, Level A, Purdue University Cooperative Extension Service

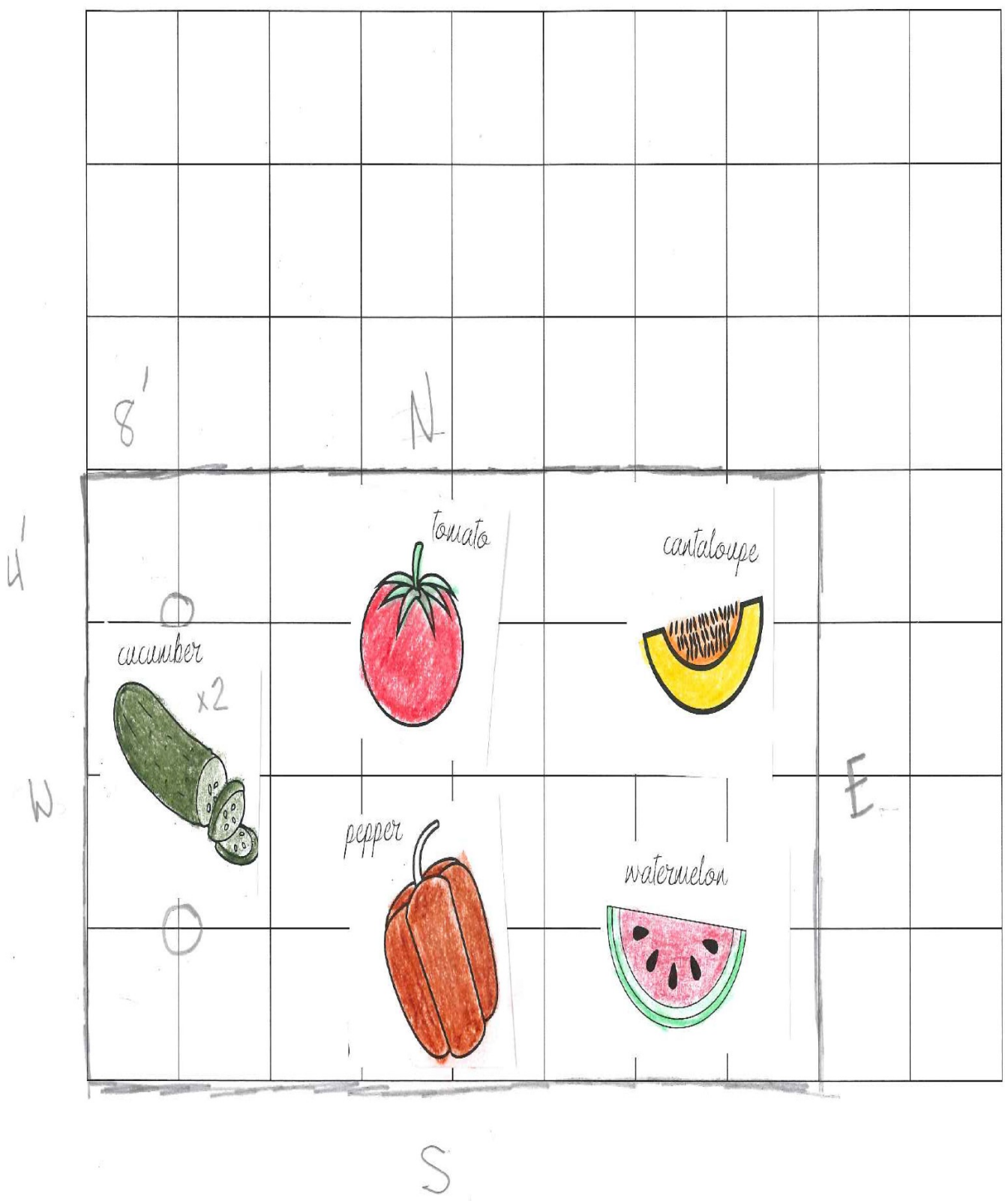
Patsy L. Maddy, 4-H Youth Development Agent
Jenilee Godsey, Youth Ag - Alyssa Rippe-May, Livestock/Horticulture
Keith VanSlike, Ag & Natural Resources - Karen Shepard, FCS
Stacy Brown, Director & FCS



Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact Twin Creeks Extension District, 785-877-5755.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service
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~ Alyssa's Raised Bed Garden ~



potatoes



peas



watermelon



tomato



pumpkin



eggplant



squash



strawberry



broccoli



green beans



lettuce



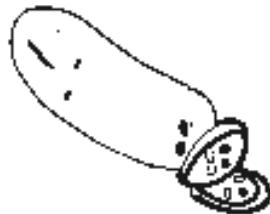
cantaloupe



carrot



cucumber



pepper



radish



onion



corn



beets



spinach



A well-planned, properly tended vegetable garden not only provides an excellent source of fresh, nutritious vegetables, but also relaxation and enjoyment for the entire family. With a few simple tools, a little space, and a desire to nurture plant growth, anyone can create a thriving vegetable garden. Even a 100-square-foot garden can produce a good portion of the vegetables for a family of four.

Successful gardening begins with proper planning. This includes knowing how much to plant, when to plant, and proper spacing, covered on the following pages. For more on this and other home gardening topics, see the [Kansas Garden Guide](#) (S51).

Vegetable Yields

Vegetables	Average crop expected per 10 feet	Approximate planting per person	Vegetables	Average crop expected per 10 feet	Approximate planting per person
Asparagus	3 lb.	10–15 plants	Muskmelon (cantaloupe)	10 fruits	3–5 hills
Beans, snap bush	12 lb.	15–16 feet	Mustard	10 lb.	5–10 feet
Beans, snap pole	15 lb.	5–6 feet	Okra	10 lb.	4–6 feet
Beans, lima bush	2.5 lb. shelled	10–15 feet	Onions (plants or sets)	10 lb.	3–5 feet
Beans, lima pole	5 lb. shelled	5–6 feet	Onions (seed)	10 lb.	3–5 feet
Beets	15 lb.	5–10 feet	Parsley	3 lb.	1–3 feet
Broccoli	10 lb.	3–5 plants	Parsnips	10 lb.	5 feet
Brussels sprouts	7.5 lb.	2–5 plants	Peas, English	2 lb.	15–20 feet
Cabbage	15 lb.	3–4 plants	Peas, southern	4 lb.	10–15 feet
Cabbage, Chinese	8 heads	3–10 feet	Peppers	6 lb.	3–5 plants
Carrots	10 lb.	5–10 feet	Potatoes, Irish	10 lb.	50–100 feet
Cauliflower	10 lb.	3–5 plants	Potatoes, sweet	10 lb.	5–10 plants
Celeriac	6 lb.	5 feet	Pumpkins	10 lb.	1–2 hills
Celery	18 stalks	10 stalks	Radishes	10 bunches	3–5 feet
Chard, Swiss	7.5 lb.	3–5 plants	Salsify	10 lb.	5 feet
Collards and kale	10 lb.	5–10 feet	Soybeans	2 lb.	50 feet
Corn, sweet	1 dozen	10–15 feet	Spinach	4–5 lb.	5–10 feet
Cucumbers	12 lb.	1–2 hills	Squash, summer	15 lb.	2–3 hills
Eggplant	10 lb.	2–3 plants	Squash, winter	10 lb.	1–3 hills
Garlic	4 lb.	1–5 feet	Tomatoes	10 lb.	3–5 plants
Kohlrabi	7.5 lb.	3–5 feet	Turnip greens	5–10 lb.	5–10 feet
Lettuce, head	10 heads	10 feet	Turnip roots	5–10 lb.	5–10 feet
Lettuce, leaf	5 lb.	10 feet	Watermelon	4 fruit	2–4 hills

Arugula

Arugula
Astro
Sylvetta

Asparagus

*California types (Atlas and US157)
produce higher yields in warm springs;
New Jersey hybrids produce higher yields
in cool springs.*

Atlas (H)
California UC 157 (H)
Jersey Giant (H)
Jersey King (H)
Jersey Knight (H)
Jersey Supreme (H)
Purple Passion (H)

Bean

Lima

Fordhook 242
Henderson's

Pole

Kentucky Blue
Kentucky Wonder
Northeastern
Purple King
Carminat

Snap

Contender
Derby
Jade
Provider
Royal Burgundy
Strike
Tendercrop
Xera (heat tolerant)

Wax

Carson
Eureka
Goldmine

Beet

Avalanche (white)
Boldor (gold)
Chioggia
Cylindra
Detroit Dark Red
Early Wonder
Kestrel
Perfect Detroit

Red Ace (H)
Ruby Queen
Touchstone Gold

Broccoli

Diplomat (H)
Green Comet (H)
Gypsy (H)
Imperial (H)
Marathon (H) (late)
Packman (H)
Premium Crop (H)

Cabbage

Extremely Early
Gonzales (H) (mini head)
Stone Head (H)
Early Discovery (H)

Midseason

Blue Dynasty
Bravo
Red
Integro (H)
Red Acre
Red Rookie
Ruby Ball

Cabbage, Chinese

Blues (H)
Jade Pagoda (H)
Asian Greens
Joi Chot (H)
Red Chot (H)
Komatsuna
Kyona Mizuna
Met Qing Chot (H)
Tatsot

Carrot

Gold King (no longer available)
Gold Pak (no longer available)
Mokum (H)
Napoli (H)
Purple Haze (H)
Purple 68 (H; fall planting best)
Red Cored Chantenay
Royal Chantenay
Scarlet Nantes
Tendersweet

Cauliflower

Cheddar (H; orange)
Graffiti (H; purple)
Fremont (H)
Self Blanche (late-maturing)
Snowball (early maturing)
Snow Crown (H)

Corn, Pop

Robust 21-82W (white H)
Robust 128YH (yellow, H)
Strawberry (novelty, small red ear, small
white kernels)

Corn, Sweet (all H)

*Sweet corn may be divided into three
distinct types according to genetic
background: normal sugary (su), sugar
enhanced (se) and supersweet (Sh2).*

Bicolor

Ambrosia (se)
Candy Store (sh2)
Delectable (se)
Honey and Cream (su)

White

Argent (se)
How Sweet It Is (sh2)
Silver King (se)
Silver Queen (su)

Yellow

Bodacious (se)
Incredible (se)
Jubilee (su)
Kandy Korn (se)
Merit (su)
Miracle (se)
Sundance (su)

Cowpea

Crowder types
Purple Hull types

Cucumber

Dwarf Plants

Bush Champton
Fanfare
Pot Luck (H)
Salad Bush (H)
Spacemaster

(H) indicates hybrid variety.