



SKILLS

- Learn about companion gardening ☐
- Gain knowledge about planting/harvest times ☐
- Explore the process of planting a garden ☐
- Expand horticulture/gardening career knowledge ☐
- Develop skills in categorizing ☐
- Increase technology skills ☐
- Complete a Horticulture and Gardening service project ☐



LIFE SKILL - ?

HORTICULTURE and gardening

Do you ever think about the food you eat? How it grows? What plant parts we eat? Most of us take this for granted. Food is used for more than just food ... but many of the items we use everyday come from food. Some of the new skills that you can learn in the 4-H Horticulture and Gardening project are listed on the left. Check your favorites and then work with your 4-H leaders and parents to make a 4-H project plan of what you want to do and learn this year.

COMPANION GARDENING

Herbs can be grown as seasonings for food. They can also be included in traditional gardening as companions to the vegetables. Herbs, combined with specific vegetables, can protect the vegetables from different types of diseases and bugs. Using the word list below, fill in the missing letters to identify the herb or vegetable that can be used for companion gardening.

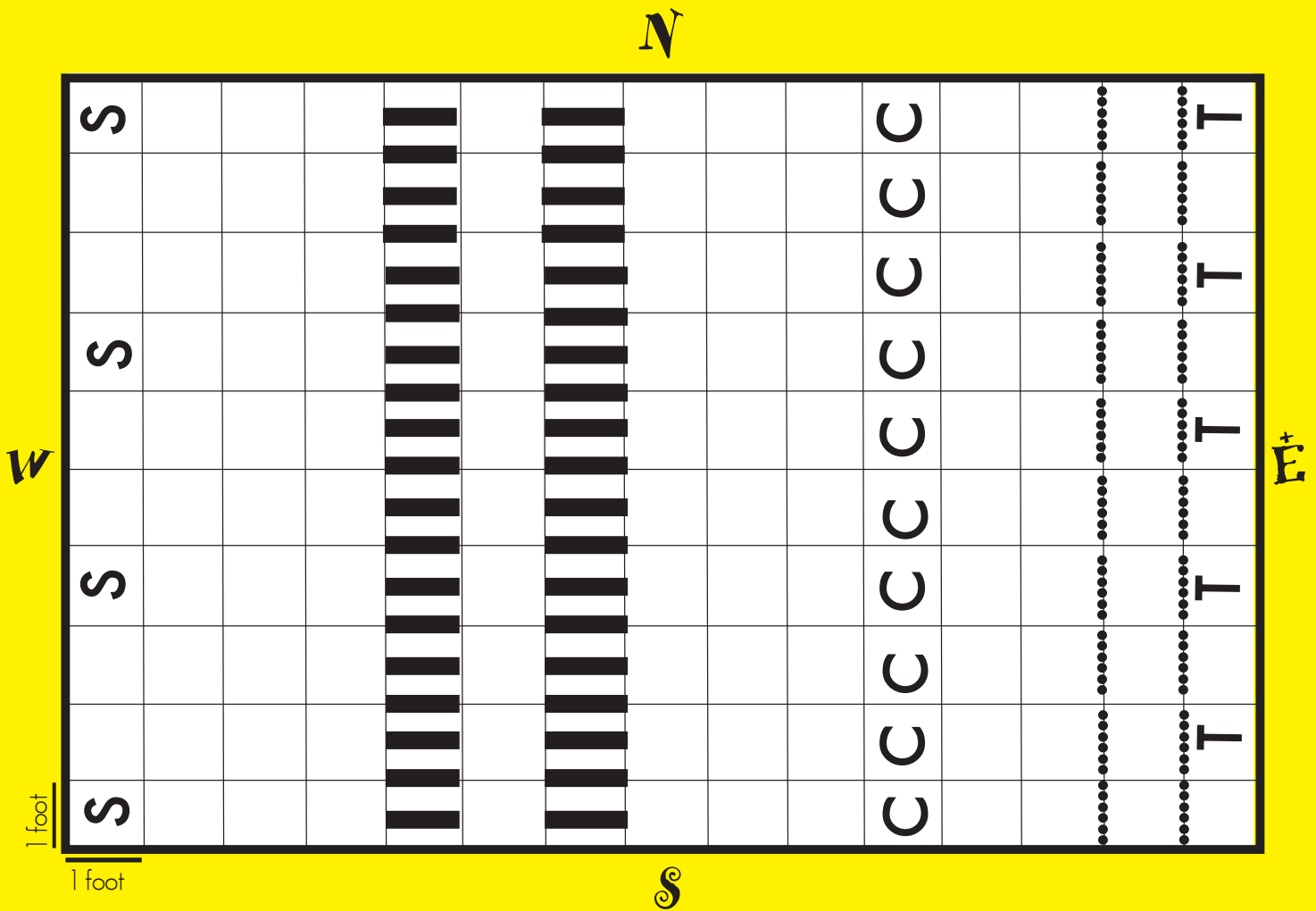
Tomatoes	<u>B</u> <u>A</u> <u>S</u> <u>I</u> <u>L</u>	Repels flies, hornworms, and mosquitos
Carrots	<u>C</u> <u>H</u> <u>I</u> <u>V</u> <u>E</u> <u>S</u>	Deters a variety of insects
Cabbage	<u>T</u> <u>H</u> <u>Y</u> <u>M</u> <u>E</u>	Repels cabbage worms
Onions	<u>S</u> <u>U</u> <u>M</u> <u>M</u> <u>E</u> <u>R</u> <u>S</u> <u>A</u> <u>V</u> <u>O</u> <u>R</u> <u>Y</u>	Deters a variety of insects
Potatoes	<u>H</u> <u>O</u> <u>R</u> <u>S</u> <u>E</u> <u>R</u> <u>A</u> <u>D</u> <u>I</u> <u>S</u> <u>H</u>	Deters potato beetles
Cucumbers	<u>R</u> <u>A</u> <u>D</u> <u>I</u> <u>S</u> <u>H</u>	Deters cucumber beetles
Beans	<u>R</u> <u>O</u> <u>S</u> <u>E</u> <u>M</u> <u>A</u> <u>R</u> <u>Y</u>	Deters bean beetles
Squash	<u>N</u> <u>A</u> <u>S</u> <u>T</u> <u>U</u> <u>R</u> <u>T</u> <u>I</u> <u>U</u> <u>M</u>	Repels squash bugs

WORD BOX

RADISH
BASIL
HORSERADISH

CHIVES
SUMMER SAVORY
THYME

NASTURTIUM
ROSEMARY



HOW DOES YOUR GARDEN GROW?

Use the step-by-step directions below to plant a garden on the chart above. The Vegetable Planting Guide on Page 3 will help you answer the questions included below.

- Plant your rows facing east. Begin planting your non-stake tomatoes by starting at the northeast corner of your garden. Follow the vegetable planting guide on the next page to properly plant five tomato plants. Denote the location of the tomato plants with a "T."
 - If you plant the tomatoes on June 1, what is the earliest date that the tomatoes would be ready to eat? **JULY 10**
 - What would be the latest date? **AUGUST 9**
- Sweet corn is next. You have decided to plant only 10 feet of corn. Mark your corn with a "C."
 - If you have one packet of corn seed, how many rows of corn can you plant if your garden is 10 feet wide? **5**
- You have decided to plant one row of summer squash. The squash will be planted on the west end of the garden. Mark the correct placement of the squash with an "S."
 - If the squash was ready to pick on August 20, on what date were the seeds planted? The squash had 55 days to grow. **OCTOBER 14**
- Lima beans will also be planted. Use a to denote where the lima beans will be located in the garden.
- Which plant will be harvested first? Next, plant a cool crop of 120 carrot plants in their place. Place a ● to denote the location. **TOMATOES**

VEGETABLE PLANTING GUIDE

VEGETABLE	SEASON	SPACE BETWEEN ROWS (feet)	SPACE BETWEEN PLANTS (inches)	YIELD PER 50 FEET	AMOUNT OF SEED OR NUMBER OF PLANTS	DEPTH TO PLANT (inches)	DATES TO PLANT	DAYS TO ALLOW FOR FIRST HARVEST
Beets	Cool	1	3	1 bushel	1 ounce	1/2 to 1	4/1 to 6/25	55 to 65
Blackeyed peas	Cool							
Broccoli	Cool	3	18	36 heads	36 plants		4/15 to 6/15	40 to 55
Cabbage	Cool	3	18	36 heads	36 plants		4/15 to 6/15	55
Cantaloupe	Warm	4	48	25 melons	1 packet	1	5/15 to 6/1	85 to 90
Carrots	Cool	1	2	1 bushel	1/2 ounce	1/2	4/10 to 6/20	70 to 75
Cauliflower	Cool	3	18	36 heads	36 plants		4/15 to 6/25	50 to 60
Chinese cabbage	Cool							
Collards	Cool							
Cucumber (for slicing)	Warm	4	18	3/4 bushel	1 packet	1	5/15 to 7/1	55 to 70
Cucumber (for pickling)	Warm	4	18	3/4 bushel	1 packet	1	5/15 to 7/1	55 to 70
Eggplant	Warm	2	24	60 fruit	24 plants		5/15 to 6/15	55 to 70
Potato (pieces)	Cool	3	10	1 bushel	60 pieces	4	4/20 to 6/1	90 to 130
Sweet potato (plants)	Cool	3	12	1 bushel	50 plants		5/20 to 6/10	130 to 140
Leaf lettuce	Cool	1	4	150 plants	2 packets	1/2	3/20 to 6/15	40 to 50
Lima beans	Warm	2	6	1 bushel	1/2 pound	1-2	5/15 to 6/15	65 to 75
Okra	Warm							
Onion (sets)	Cool	1	2	1 bushel	1 pound sets	1-4	4/1 to 5/1	90 to 120
Onion (slips)	Cool	1	2	1 bushel	300 slips	1-4	4/1 to 5/1	60
Peas	Warm	1	1	1 bushel	1/2 pound	2	3/20 to 6/15	60 to 75
Peppers	Warm	2	18	2 bushels	35 plants		5/15 to 7/1	55 to 70
Radishes	Cool	1	1	500 roots	1/2 ounce	1/2	3/20 to 6/15	25 to 30
Snap beans (bush)	Warm	2	2	1 bushel	1/2 pound	1-2	5/10 to 7/20	55 to 60
Spinach	Cool	1	3	25 pounds	1 ounce	1-2	3/20 to 6/15	40 to 45
Summer squash	Warm	4	48	100 squash	1 packet	1/2	5/15 to 6/15	50 to 60
Winter squash, pumpkins	Warm	6	72	25-50 squash	1 packet	1	5/15 to 6/15	85 to 110
Sweet corn	Warm	3	12	50 ears	1 packet	1-2	5/10 to 7/10	65 to 85
Tomato (staked)	Warm	4	24	100 pounds	25 plants		5/15 to 6/20	40 to 70
(Non-staked)		4	36	100 pounds	17 plants		5/15 to 6/20	40 to 70
Turnips	Cool	1	4	1 bushel	1 packet	1/2	4/1 to 6/15	60 to 90
Watermelons	Warm	6	48	15 melons	1 packet	1	5/15 to 5/25	75 to 90

REFLECTION

As an advanced horticulture and gardening project member, you have gained many useful skills. These are skills you can use for a lifetime. Reflect on the things you have learned. Think about how having this knowledge makes you feel. Using the letters below, highlight your new skill set and feelings. An example has been provided.

What I've Learned ...

How I Feel ...

G growth seasons

grateful

A

R

D

E

N

LEARNING TO LEAD

As a 4-H project leader, you should be able to share your skills, knowledge and experiences with younger 4-H members. The following group activity can be used to assist you in planning your next project group meeting and in teaching younger members horticulture and gardening information.

GARDEN GROUPINGS

Materials needed:

- Copies of the fruits and vegetables on the following pages
You will need one set of cards for each person or group (two to four people per group); Laminating the cards is optional.
- Ziplock™ bags

Directions:

- Cut out the fruit and vegetable cards following the dotted lines.
- Place the cards in a Ziplock™ bag.
- Pass the Ziplock™ bags out -- one to each person or group.
- Place the cards on a table face up.
- Group the fruits and vegetables into groups of threes based on commonalities i.e., color, plant parts we eat, used for decorations, can be eaten in a salad, used to make salsa, names start with the same letter of the of the alphabet, etc ...
- Make a list of the groups and the fruits and vegetables that make up the list.
- The objective is to create as many groups as possible.
- The fruits and vegetables may be used more than once.

CAREER SEARCH

1. Find a person in your community or family member who uses horticulture/gardening in his or her profession. Set up an interview. Create a list of questions you would like to ask. A few examples are ...

What do you like best about your job?

How does horticulture/gardening relate?

What kind of education/training do you have?

What other questions would you like to ask? Think about it and write them in the space below.

2. How will you record the interview? Will you write or tape the responses? Will you videotape it?

3. How are you going to share the interview with others? Will you write a report? Create a news article? Design a video, Power Point™ or DVD? Whatever the format, make sure that it is okay with the interviewee!

4. What did you learn with this project? List below three new skills you developed:

SERVICE IDEAS

Share your knowledge with others! Give a project demonstration about one aspect of horticulture/gardening.

Assist an assisted living home in developing a flower, herb or vegetable garden.

Grow an herb container garden. Decorate the pots and give them away as gifts.

RESOURCES

School and public libraries
Horticulture and Gardening manual
4-H project leader/groups

The following Website was used to create this activity sheet. To learn more horticulture and gardening skills visit:

www.n4hccs.org

www.utextension.utk.edu/4h/projects/

Don't forget! For more ideas and info, contact your local 4-H office.

OTHER

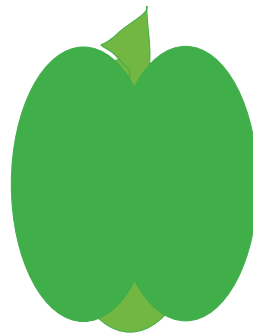
4-H Demonstration

4-H Skill-a-thon

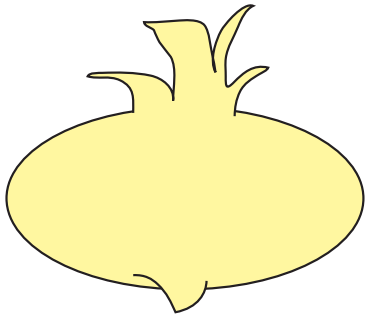
Combine efforts with a Nutrition, Health and Fitness project group leader to create and design a "Good Foods" guide. Use the guide to highlight various foods, why they are good for you and how to grow them.



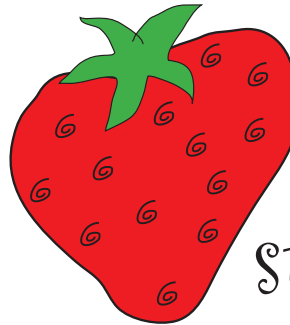
orange



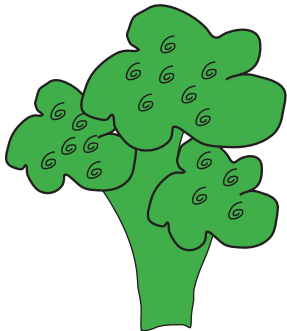
pepper



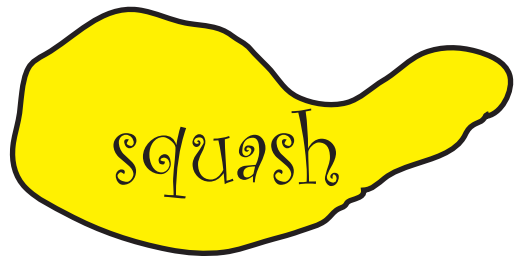
onion



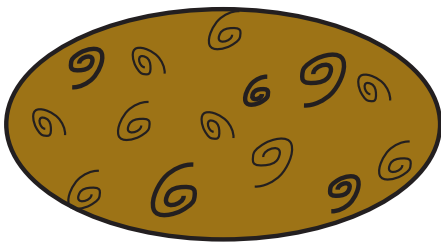
strawberry



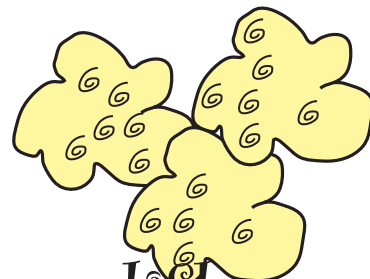
broccoli



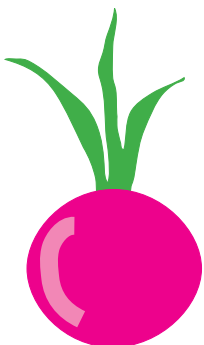
squash



potato



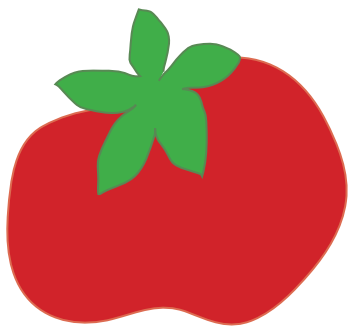
cauliflower



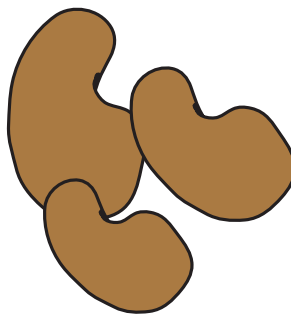
turnip



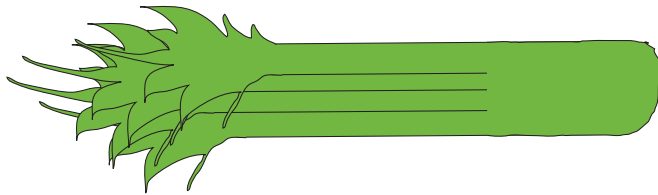
cucumber



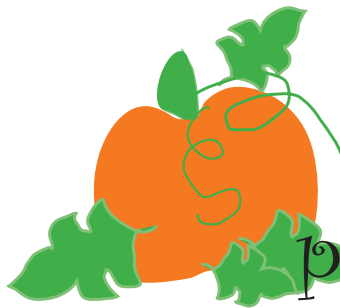
tomato



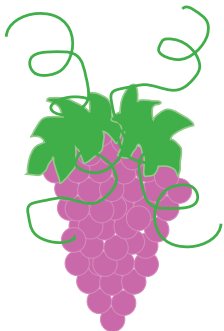
beans



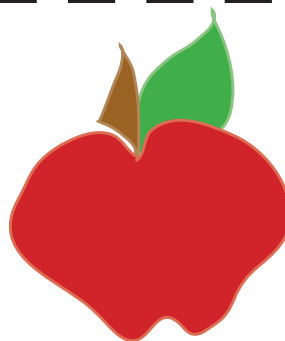
celery



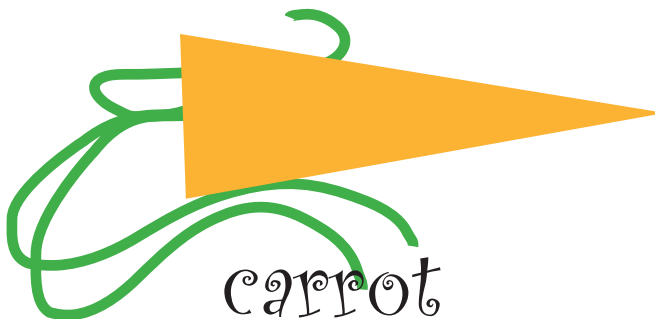
pumpkin



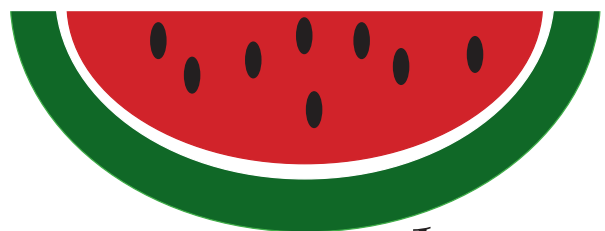
grapes



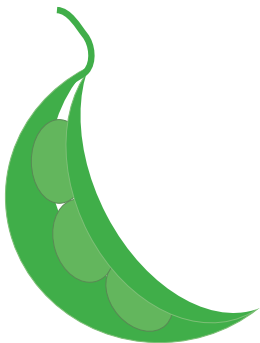
apple



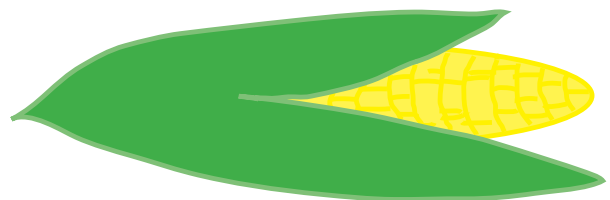
carrot



watermelon



peas



corn