Dear Parents & Youth,

Welcome to the 2022 Youth Vegie Garden Project. Youth all over the nation are getting involved in America’s number one hobby: gardening. You will be receiving by email, 2 additional newsletters throughout the growing season that are designed to help you with the project. Please call the Extension Office at 316-284-6930 if you have any questions. Have Fun!

Gardening is such an enjoyable family activity that everyone can be part of. Garden Centers now carry plants of all sizes and varieties. Choose disease resistant varieties and plants intended for our area of the country when planting from seed.

Growing vegetables your family enjoys adds interest to your garden and meals. But trying something new can get youth excited about different foods. Today, you have received sunflower seeds and plants for your veggie garden.

Gardening with kids is a great family bonding experience that can teach life skills, too. After learning to care for their garden throughout the summer, your child will feel great pride in their work.

Kansas State University is committed to making its services, activities and programs accessible to all participants. Reasonable accommodations for persons with disabilities may be requested by contacting Scott Eckert at (316) 284-6930. Notify staff of accommodation needs as early as possible.
California Wonder Bell Pepper:
The standard bell pepper for many decades, this 1928 introduction is still the largest open-pollinated, heirloom bell you can grow. A perfect stuffing pepper at 4” x 3 1/2”, thick-walled, tender and flavorful.

Crimson Sweet Watermelon
A pretty, light green melon with dark stripes, the Crimson Sweet is famous for its high sugar content and great flavor.

Big Mama Hybrid Tomato:
Big Mama will weigh as much as 1 1/2 lbs. each, 4” across and 2 3/4” deep. They will produce firm fruit with good flavor and excellent quality. The vines are tall and spreading.

Mammoth Sunflower:
Attractive flowers grow on long stalks. Harvest hundreds of plump seeds by fair time!

Garden Location:
Where you plant your plants in the garden is important. Plants need at least 6 to 8 hours of sunlight a day to produce well, and full sun is best. They also don’t like wet feet. A sunny, well-drained part of your garden is the best spot for them. Avoid planting near large shrubs and trees.

Hardening Off Plants:
All plants, home grown or store brought, need to be hardened off. They have spent the last 6-8 weeks in a warm climate and need a chance to toughen up before meeting the great outdoors. The plants in this pack are particularly fond of warm weather, so give them lots of time to acclimatize by placing potted plants outside for a several hours at a time for a few days before in-ground planting.

PlantSpacing:
Space staked tomato plants two to three feet apart. Wire cages or tomato plants without support need to be 24 to 26 inches apart. Cucumber can be planted 2 feet apart in rows at least 3 feet apart.
**Better Soil:**
No matter what kind of soil you have in your garden, you can shape it into a great home for your plants with just a little work.

Adding organic matter to the soil helps improve troublesome light, sandy soils which drain too rapidly or heavy, clay soils which take forever to drain and warm up in the spring. Apply at least a 2-inch layer of organic matter to the garden area and work it into the soil as deep as possible. Use decomposed leaves, compost, grass clippings, garden residue or commercial products such as peat moss or cotton burr compost.

Organic matter will feed the millions of microscopic soil organisms who live and work in your soil. This active soil life breaks down organic matter into nutrient-rich-humus—in effect, making fertilizer for your vegetable crops.

In problem soils, such as extremely sandy soil which drains and dries too quickly, organic matter builds up the water-holding capacity of the soil. With a lot of organic matter in it, the soil can act more like a sponge, holding moisture. This is vitally important for plants, because they really depend on the continuous supply of moisture all season long.

However, your plants don’t want to sit in puddles and organic matter can improve heavy soils that stay wet. The particles of organic matter, when worked into the soil help loosen the tight particles of clay, so that air and water circulate better. It’s also important to work the soil before transplanting time until it’s loose to a depth of at least 6-8 inches. You can do the work with a garden tiller or with a shovel. The plant roots will be able to expand quickly in the loose seedbed and you’ll also uproot and kill many weeds by working through the soil. However do not work the soil while it is wet.

**Fertilizer:**
It’s very important to work some fertilizer into the soil before transplanting time, so that your transplant can get off to a good start.

Apply two pounds of 5-10-5 fertilizer or one pound of 10-10-10 fertilizer per 100 square feet (10 foot by 10 foot area). Incidentally, the numbers 5-10-5 refer to the percentages, by weight, of Nitrogen (N), Phosphorus (P), and Potassium (K) in the bag of fertilizer. They’ll always be listed in that order: N-P-K.
As a gardener, you must realize that each season some things are simply out of your control — rainfall and sunshine, for example. But at a very important time in the life of your plants — transplanting time — you are the boss.

Make no mistake about it — transplanting is a major step. If you do it carefully and use a little extra time and care, you can look forward to a crop that will be on time — or even ahead of everybody else’s — healthy and prolific.

Mistakes, such as rushing your plant into the ground before they are properly hardened, or roughing up the roots when you’re handling them, can really set the crop back.

So let’s look at some of the general guidelines for transplanting. Transplant your Veggie Garden on a cloudy day or in the late afternoon or evening if you can. Bright sun can harm newly planted transplants.

Water the transplant an hour before transplanting. This will help keep the soil around the roots and protect them, and the root masses will be easier to handle. Have everything ready before taking the plant out of the pot. Have the soil prepared, the fertilizer applied, all tools at hand, etc.

Don’t put fertilizer under the plants. One of the big mistakes people make is to toss too much fertilizer in the hole before they put in their plants. Excessive fertilizer shocks and burns the plant. In addition to your pre-plant fertilizer that you worked in to the soil, use a dilute soluble fertilizer solution at transplanting time. Commercially available starting fertilizers can be obtained from local suppliers. You can also prepare your own “starter” solution by adding two tablespoons of a high phosphorus garden fertilizer (such as 5-10-5, 10-20-10, 18-46-0, etc.) to a gallon of water. Let this mixture dissolve for several hours with occasional stirring. While some of the largest fertilizer particles will settle out, enough soluble material will remain in the water. Use about 1 cup of this starter fertilizer solution for each plant after planting.

Protect against cutworms. Before putting the plants in the ground, wrap a newspaper collar around the stem to protect the plants against cutworms. These ground-level pests can chew completely through the thin stem. The collar should span two inches above the soil surface to two inches below — the cutworm’s territory.

The newspaper collars are easy to put on and last long enough for the stems to thicken enough to discourage the cutworms. Tight collars of plastic can restrict the stem growth. You can also use a shallow nut can with both ends cut out to protect the plant from cutworms. Carefully push the can two inches into the soil.

Cup the roots in one hand when you take a transplant out of its container. To protect roots from needless exposure, work quickly. A smooth and speedy transition from pot to soil means less of a shock to the plant. Be sure that all of the root ball is covered with soil after you are done planting. If it’s not covered, the plant roots can quickly dry out.

Keep transplants watered. They need water in the beginning to help them get over the shock of being transplanted. To encourage new root growth the plant will often need water about once a week, although this will depend on your soil, the temperature and how much it has rained.

**REMEMBER: YOU'RE THE BOSS!**
Wire cages placed over small tomato plants will hold the vines and fruit off of the ground. Short cages (2 1/2 to 3 feet high) usually support themselves when the wire prongs at the bottom are pushed into the ground.

Taller cages require a stake, post, or wire for support. Large (6 inch by 6-inch) mesh permits easy harvest. Tomato plants must be tied to supporting stakes or a trellis because (unlike cucumber plants) they do not support themselves with tendrils. Loop ordinary soft twine, cord or cloth loosely around the main stem and tie the other end tightly to the stake. Tying the stems too tightly will injure them.

To Use: Stick prongs into the ground approximately 6 inches.

**Information Obtained from publication MF312**
Did you know that the red color of many red- or light red-colored fruits and vegetables is due to the presence of an antioxidant called lycopene? Lycopene is a natural pigment and helps protect plants against photosensitization by absorbing light during photosynthesis. Lycopene also has many healthy benefits for you too! Studies have shown that this special carotenoid antioxidant has many health properties to protect against cancer, cardiovascular disease, high blood pressure, inflammation, Alzheimer’s and Parkinson’s diseases, as well as help people sleep better.

Many red fruits and veggies such as tomatoes, pink guavas, apricots, watermelons, and pink grapefruits are important sources of lycopene. Tomatoes are an especially rich source of lycopene, as well as a high source of vitamins K, A, C, and fiber. Other nutrients that tomatoes contain are iron, potassium, phosphorus, and sulfur. Lycopene is also found in processed tomato products too, such as tomato paste, ketchup, tomato sauce, and soups. Can you spot all of the foods in this picture that contain lycopene?
THINGS FOR YOU TO DO:
Find several leaves of different shapes and sizes. Collect both monocot and dicot leaves. Place a leaf under a piece of paper. Remove the wrapper from a crayon and use the wide edge of the crayon to rub over the leaf. Place another leaf under the paper and use a different crayon to rub a new leaf pattern on the paper. Continue rubbing leaves on the page until you have created a pattern you like.

MONOCOT
- Has only one seed leaf
- Has parallel veins

DICOT
- Has two seed leaves.
- Has netted veins

CAN YOU BE-LEAF IT?
People who study plants can identify them by their leaf edges. Find six different leaves and sketch their edges in the boxes below.
PLANT PARTS

A plant has many different parts. The plant's body parts work together just as your body parts work together. The plant roots are found in the soil. They carry water and nutrients to the plant. The stem supports the plant and carries water and food throughout the plant. Leaves use sunlight to make food for the plant. Flowers are usually the bright and colorful part of the plant. When flowers are pollinated by insects or wind they produce seeds that are stored in fruit. Wow! Plants are really amazing.

PLANT ID

Can you identify the plant parts? Try to identify your veggie plant parts as you plant them in your garden.