



BEFORE NEXT MEETING

- ___ Plant your garden
- ___ Transplant your tomatoes
- ___ Watch for weeds as you wait for vegetable seedlings to appear
- ___ Set out the chives as outlined in Meeting 1

FOR NEXT MEETING

- ___ Report on progress of your garden, showing your garden record, page 39

Next Meeting:

DATE: _____

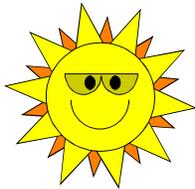
TIME: _____

PLACE: _____

Meeting 5 ...

Friends & Enemies

DATE: _____

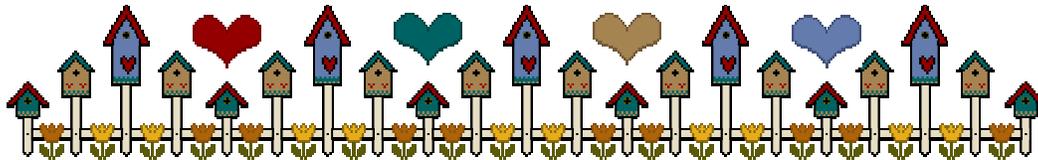


PLACE: _____

TIME: _____

For Roll Call:

Show your “garden record” and report on your garden’s progress.



INTRODUCING THIS LESSON

Friends or “companion plants” may already be in your garden. By this time, you’ll have met some enemies, such as weeds and bugs. Another friend in your garden at this time will be your leader inspecting your work.

In this lesson you will

- 1) have your leader score your garden; the scorecard is on page 54.
- 2) collect and identify weeds from your garden.



Summer Care of the Garden

Now that your garden is planted, the work and fun have just begun! Regular care of the garden during the summer months will pay off in an increased yield of healthy vegetables.



Thinning

Crowded plants do not grow well. Surplus plants are just like weeds and should be removed when they are small.

When the soil is moist, plants can be removed easily without harming the remaining plants in the row.

Any weak or damaged plants should be removed to provide more space for the healthy plants. In some cases, it may be necessary to remove some healthy plants to give the remaining plants enough space and food. Be careful not to pull too many. Follow the suggested thinning distances on the chart, page 37.



Cultivation

The most important reason for cultivating your garden is to kill weeds. A weed is any plant growing where you do not want it. For instance, a corn plant growing in a pumpkin patch would be classified as a weed. Weeds crowd out crops and rob plants of light, food and moisture.

There are some plants that seem to want to grow in your garden rather than any other place.

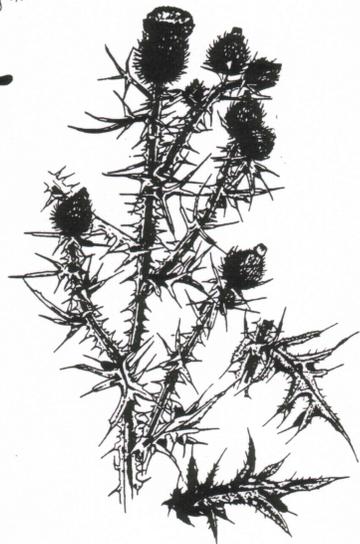
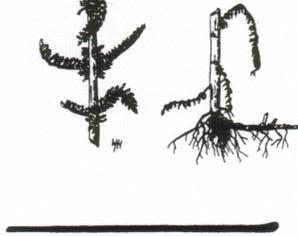
You should become familiar with as many of these weed seedlings as possible and remove them from your garden. Ask your parents or garden leader to help you identify them and tell the difference between them and your vegetable seedlings. Here are some names of common weeds. Can you match the names to the pictures on the following pages?

Shepherd's Purse
Quack Grass
Lamb's Quarters
Plantain
Daisy
Burdock
Dandelion
Thistle
Yarrow
Field Bindweed
Vetch

Start a weed collection from your vegetable garden of weeds at the seedling stage and have your leader help you identify them. The seedlings may be easily pressed between the pages of an old catalogue or phone book. Lay them out flat, carefully close the pages of the book over them so as not to disturb them and weight the book down with other heavy books. The seedlings will be dry and ready for mounting, on page 55, in a few weeks.

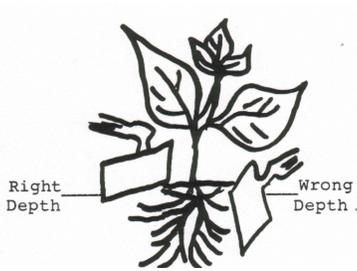
Weed seedlings can be very difficult to identify. If you cannot identify one of your specimens, try an identical seedling at the border of your garden and allow it to grow to an adult stage where you will be able to recognize it. It is as important to be able to identify seedlings of weeds as it is to recognize the adult plants.





Cultivation

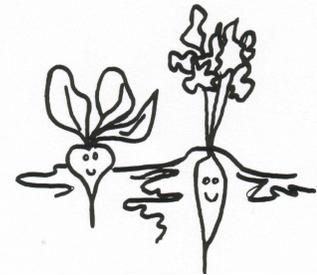
Cultivation of your garden should be repeated as often as necessary to control weeds. As the growing season advances, cultivation should not be as deep to avoid damaging vegetable roots.



Hilling

Some crops need to be covered with soil as they grow to prevent them from sunburn. This is called hilling. Hill your plants with your hoe as you cultivate.

Beets and turnips do best with only the large, bottom root and a few side roots covered. Completely cover carrots to the stem to prevent the sun from burning the top of the carrot.



Watering the Garden

During dry periods in the summer, watering can mean the difference between a good garden and a fair one. Remember, one good soaking is better than many light waterings, since it encourages deep rooting instead of surface root development. Watering should be done in the evening because the combination of water droplets on the plants and a hot noon-time sun will cause burning.



Chemical Weed Control

There are many chemicals to control weeds in your garden - they are called HERBICIDES. They are often expensive, require special equipment and are not very practical for small, home garden plots. If you do decide to use a herbicide, contact your garden leader or the garden centre where you purchased it to get instructions on how to use it properly.

Plant Diseases and Pests

Almost every garden will be troubled by certain diseases and insects. Many of the vegetables chosen for your 4-H garden should not have many disease or insect problems. However, one disease that may affect tomatoes is blight. Carefully following the package direction, dust tomatoes with a "Potato and Tomato Dust".

Corn may be affected by the corn ear worm. Treat corn with "Sevin" following the manufacturer's directions.

If your garden is suffering a great deal of damage, ask your leader for HELP!!!

Companion Planting

Do you think plants can influence each other?

Companion gardening is a gardening technique which makes use of plants which grow well together. These plants repel or attract other plants and insects by releasing substances in their roots and by odor.

Some possible ways plants could affect each other are:

1. Repel or trap destructive insects away from another type of plant if they are side-by-side.
2. Attract beneficial insects that prey upon pests.

3. Root secretions which repel destructive insects.
4. Provide shade, wind protection (and protection from windborne disease and pests) or provide other physical effects.

To improve the likelihood of success when companion planting, you should:

1. Avoid close planting of highly competitive, densely foliated plants near the crop. For example, avoid planting African marigolds, catnip, celery, pansy, and tomato as companions unless sufficient space is allowed.
2. Avoid companion plants which could serve as alternate hosts for pests or diseases of the crop. For example, flea beetles will attack nasturtiums as well as cabbage.
3. Choose plants which add beauty to the landscape. Plant some low growing marigolds beside your tomatoes. Leave the other tomatoes without 'companions'.



COMPANION PLANTING GUIDE		
Vegetable	Good Companion	Bad Companion
Beans	potatoes, <u>carrots</u> , cabbage, <u>cucumbers</u> , marigolds, cauliflower, summer savory	<u>onion</u> , garlic, gladiolus, (any member of onion family), fennel (bad for most vegetables), pole beans
<u>Beets</u>	<u>onions</u> , kohlrabi	pole beans
<u>Carrots</u>	peas, lettuce, <u>chives</u> , <u>onions</u> , leek, <u>tomatoes</u> , beans, cauliflower	dill
<u>Cucumbers</u>	beans, <u>corn</u> , peas, radishes, sunflowers	potatoes
Peas	<u>carrots</u> , radishes, <u>corn</u> , <u>cucumbers</u> , beans, most vegetables, herbs	<u>onions</u> , garlic
Potatoes	beans, <u>corn</u> , cabbage	pumpkin, squash, <u>cucumbers</u> , sunflower, <u>tomato</u>
<u>Tomatoes</u>	<u>chives</u> , <u>onion</u> , parsley, asparagus, basil, marigold, nasturtiums, <u>carrots</u> , mint	kohlrabi, potato, cabbage

*Underlined are 4-H project plants

Describe the following vegetables:

Kohlrabi: _____

Fennel: _____

Garlic: _____

MY GARDEN INSPECTION

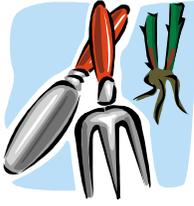
Keep your garden area neat. Remember there will be a surprise inspection of your garden during July or August. This inspection by your leader is worth 25 points towards your final project mark.

Have your leader fill in the scorecard below.

GARDEN SCORECARD

	Possible Score	My Score
Neatness, attractiveness of the plot - might include sign, border	5	
Freedom from weeds and disease	5	
Productiveness as shown by good growth or plants, health of plants and uniformity of garden	5	
Garden plan and arrangement of vegetables, location of the garden and convenience for working	10	
Total	25	
Remarks:		
Inspector's Signature:		

MEMBER'S ACTIVITY



MY WEEDS

Collect three weeds, press and identify. To keep your specimens from bending and breaking, mount them on a piece of stiff cardboard. Mount below when ready.



BEFORE NEXT MEETING

- Keep working in your garden
- Watch for any weeds, disease or insects
- Read up on next meeting material

FOR NEXT MEETING

— Report on progress of your garden, showing your garden record, page 39

Next Meeting:

DATE: _____

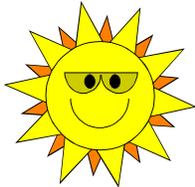
TIME: _____

PLACE: _____

Meeting 6 ...

Ready or Not!

DATE: _____



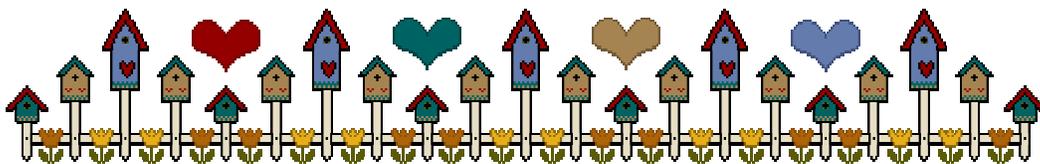
PLACE: _____

TIME: _____

For Roll Call:

Report on the health and welfare of your garden, noting date, insects or diseases, and what you did.

DATE	PROBLEM WITH	WHAT I DID
_____	_____	_____
_____	_____	_____
_____	_____	_____

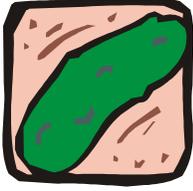


INTRODUCING THE LESSON

Just what you're waiting for - time to reap the fruits of your labour - pick some vegetables. You will find out when and how to harvest and store your crop. It's also time to plan a celebration and serve some of your vegetables.

Harvesting and Storing your Vegetables

Harvesting Vegetables



Most vegetables are best for eating if you pick them while they are young and tender. The right time for harvesting varies, of course, from one kind of vegetable to another. Keep a close watch when they are nearly ready so that you can pick them before they become over-ripe and tough. Vegetables taste best if picked just before cooking and eating. Vegetables to be stored during the winter must be mature so they will store well.

Tomatoes

Pick tomatoes when fully ripe for best flavour, colour and texture. Vine-ripened tomatoes store well for several weeks in the refrigerator. In the fall, pick all ripe and mature tomatoes before a heavy frost.



Fruit ripening and quality are strongly influenced by temperature. Mature green or turning tomatoes can be ripened satisfactorily indoors at temperatures between 15.5°C and 21°C. Slower ripening at the lower temperature range favours firmer, fresher fruit. Select only the best fruits for ripening and use the others in relishes or other mixtures.

Mature green tomatoes are more sensitive to chilling injury than partly ripened fruits. Do not store these in the refrigerator since they tend to decay more rapidly than if allowed to ripen at room temperature.

Here are a few tips for harvesting your vegetables.

Beets

Harvest beets for eating fresh quite early. Beets for pickling, table use or storage should be no more than 8 cm (3") in diameter. Dig beets for storage in October.

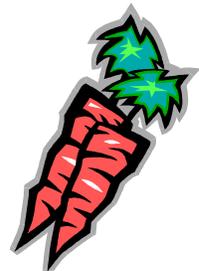


Store only beets which are solid, firm, and free of cracks. Cut tops 1.3 cm (.5") from crown and do not remove main or side roots.

Carrots

Harvest carrots when at least 2.5 cm (1") in diameter. Carrots left in ground too long may be damaged by hard frosts. Dig mature carrots in early October.

Store with tops removed 1.3 cm (.5") from crown.

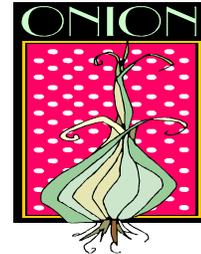


Cucumbers

Harvest for pickling when fruit is about 10 cm. (4") long. Slicing varieties are best when about 15 cm (6") long and 5 cm (2") in diameter. Harvest crops weekly.

Onion

Harvest when tops are dry and bulbs are firm and mature.



Zucchini

Harvest when small and tender being careful not to injure the vines. Prompt harvesting will promote further fruit production.

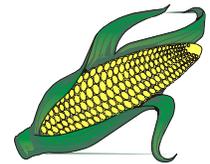


Will keep 1 - 2 weeks in refrigerator.

Corn

Harvest when cobs fill out and silk turns brown.

Flavour deteriorates quickly after harvest. Eat the same day as harvested, if possible.



Sorting and removing spoiling vegetables during storage will preserve your supply.

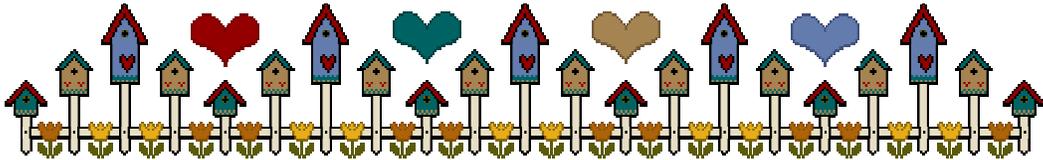
Harvested vegetables are still living organisms and will continue to grow if the temperature and humidity are not controlled. That continued growth soon uses the food stored in the vegetable and causes it to rot. It is important to retard growth in storage and prolong the life of the vegetable. Follow the storage recommendations on page 61.

Good storage conditions vary for different vegetables. Vegetables do not keep long once removed from storage.

Ask your leader where he/she stores vegetables.

Storage	Cool & Moist	Dry & Cool	Dry & Warm
Vegetables	<u>carrots, beets,</u> cabbage, parsnips, cauliflower, turnips, potatoes	<u>onions</u>	<u>green tomatoes,</u> winter squash, pumpkin
Conditions	Between layers of moist sand, leaves or sawdust. Potatoes only should be in dark <u>but no sand.</u>	In slatted crates or mesh bags.	Should not touch each other.
Suitable place at your home			

* Underlined are your required 4-H vegetables.



OPTIONAL ACTIVITY



Store Onions in Style!!

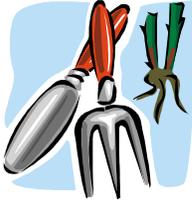
Braid onions before the tops have become too dry to be flexible. Work in a length of heavy twine as you French-braid the stems, working in additional stems as the braid progresses. No one stem extends the full length of the braid. The twine will keep the braid from breaking when the stems dry out - and can also form a loop for hanging. To remove an onion, cut or twist off a bulb.

OR

Make use of old pantyhose! Fill them with onions. Cut about 1" off each toe and knot it for easy opening to remove an onion. Knot at the top and hang.



GROUP ACTIVITY



Plan A Celebration

To celebrate your gardening year - plan to prepare some vegetable dishes for your last meeting or before the Rural Youth Fair.

Suggested Menu

You may want to use the following menu.

Appetizer	Veggie Sticks
Main Course	Corn-on-the-Cob with herb butter
Dessert	Zucchini Loaf
Beverage	Milk and/or Juice

Recipes Follow:

Veggie Sticks

- 2 medium carrots
- 2 medium cucumbers
- 2 small zucchini (8 - 10")

Wash, scrape carrots. Cut in 3" pieces. Quarter cucumbers and zucchini lengthwise. Scoop out any seeds from cucumber. Cut as carrots. Serve pieces standing in mugs. Appetizers for 4 - 5.



Vegetable Topped Hamburgers

Leave the regular toppings home and serve your fresh ones instead.

hamburgers, rolls
thinly sliced tomatoes
thinly sliced cucumbers
thinly sliced onions

Arrange fresh vegetables on a platter so everyone can pick up their own toppings.

Herb Butter for Corn-on-the-Cob

1/4 cup softened butter
2 Tbsp chopped fresh parsley
2 Tbsp chopped fresh chives
1 tsp salt
Dash pepper
Corn-on-the-cob

Cream butter and remaining ingredients. Place on waxed paper, roll and chill. Slice as butter to serve. Makes 6 servings.

Chocolate Zucchini Loaf

2 ½ cups flour	¾ cup oil
1 ½ tsp baking power	6 - 1 oz. sq. unsweetened chocolate, melted
1 tsp baking soda	1 tsp vanilla
1 tsp cinnamon	1 cup milk
¼ tsp nutmeg	1 Tbsp vinegar or lemon juice
1 tsp salt	2 cups grated zucchini, packed and drained
2 cups white sugar	1 cup chopped walnuts
4 eggs	

Sift together flour and next 5 dry ingredients. In large bowl, beat sugar, eggs and oil. Gradually beat in chocolate, then vanilla. Combine milk and vinegar. Stir dry ingredients alternately with wet ingredients into the sugar mixture. Stir in zucchini and nuts. Bake at 350°F for 40 - 45 minutes in a 9" x 5" x 3" pan. Sprinkle with icing sugar if desired.

NOTE: The loaf freezes well; therefore, when zucchini are in season, make a number so that they can be pulled out fo the freezer on cold winter evenings.

NOTE: Do not deplete or empty your garden enough to leave you short on Rural Youth Fair Day. It is suggested that you use carrots, corn, onions, zucchini, etc., from your family's or neighbour's garden throughout the summer. Many avid gardeners will be glad to share their "extra's" with you. Then, after you have taken from your garden what you need for Rural Youth Fair, you will be able to enjoy the rest of your vegetables.

Plans for our Celebration:

WHO?

WHAT?

WHERE?

WHEN?

HOW?

BEFORE NEXT MEETING



- Record any harvesting below
- Keep weeding
- Make sure your checklist is updated
- Plan to celebrate
- Read through last meeting material

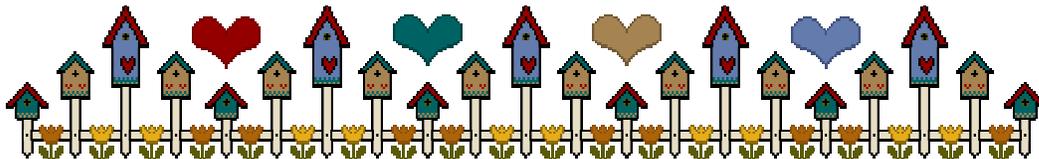
Next Meeting

DATE: _____

TIME: _____

PLACE: _____

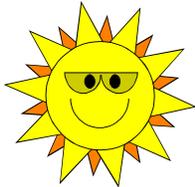
I have harvested the following vegetables from my garden...



Meeting 7 ...

Vegetables on View

DATE: _____

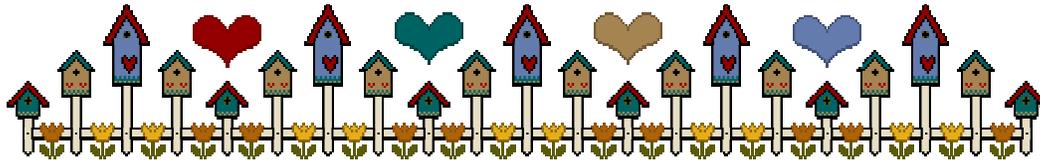


PLACE: _____

TIME: _____

For Roll Call:

My three best vegetables seem to be ...



INTRODUCING THE LESSON



It's time to show the 4-H world that Green Thumb Gardening has made you into a good gardener - you must be after getting this far!!

Exhibiting Your Vegetables

Exhibiting your vegetables at the Rural Youth Fair will be a fitting climax to your busy summer's work and fun. Follow the vegetable exhibiting requirements such as standard number, size and preparation of your vegetables.

You will choose three of your best vegetables to take to the Fair. ***Place them on tin foil or paper pie plates according to the following Vegetable Judging Standards*** and label as required.

Vegetable Judging Standards

Whether you are selecting vegetables for the Rural Youth Fair or storage, quality is the first thing to consider. While there are some differences in preparing vegetables for storing or exhibitions, this rule always applies:

Select the very best!

Here are the general qualities you should look for:

- Colour Colour should be bright, clear, and attractive. A dark, rich colour usually indicates the condition and care given to the vegetable.
- Condition This refers to freedom from blemishes caused by insects, disease, dirt, sunburn or injury. Also, properly cleaned (many vegetables for exhibit are to be wiped and not washed. For exhibit, vegetables should be properly trimmed.)
- Size The size should be moderate, but not large. Oversized vegetables are usually tough, coarse in texture and of low quality. Undersized vegetables are often a result of poor growing conditions and also tend to be tough and of poor quality.
- Trueness to Type All specimens should resemble the variety as closely as possible.
- Uniformity All the specimens in the group should be as uniform as possible in colour, shape, and size.

These are the 5 qualities the judges will be looking for when they judge your exhibit, so keep them in mind when selecting your vegetables.

In addition to the above 5 qualities, each vegetable must be prepared in a certain way for exhibit. On the next page are the specifications for the vegetables which you have grown. These specifications are standard across Canada at all fairs and exhibitions.

Beets



Exhibit a plate of five roots.

Diameter at top should be 5 - 7.5 cm (2" - 3")

The crown should be free from splits, scaling, scabs, and sunburn. The inside should be free from light colour.

Preparation - leave roots intact and remove tops 1.3 cm (.5") above crown.

Score - Colour (exterior - 10, interior - 15); Uniformity - 25; Condition - 20; Quality - 20; Type - 10.

Carrots

Exhibit a plate of five roots.

Long types - length 20 cm (8") and over.

The crown should be free from sunburn.

Roots should be slender, distinctly pointed and free from side-roots.



Intermediate types - length not over 18 cm (7"). Roots should be stump-rooted or pointed according to variety.

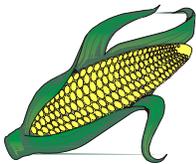
Preparation - roots intact and tops removed 1.3 cm (.5") from crown.

Score: Colour - 25; Uniformity - 25; Condition - 20; Quality - 20; Type - 10.

Corn (sweet)

Exhibit a plate of five ears.

Ears should be evenly filled from tip to base, with rows of kernels long and closely set.



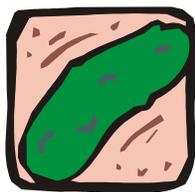
Preparation - exhibit ears with 1/3 husk removed.

Score: Quality - 35; Uniformity - 25; condition - 15; Colour - 15; Size - 10.

Cucumbers (slicing)

Exhibit a plate of three fruits

At least 15 cm (5") long and of proper colour for type. Flesh should be deep and show a minimum of seeds.



Preparation - remove any withered blossoms on end.

Score: Quality - 25; Condition - 20; Uniformity - 20; Colour - 15; Type - 10; Size - 10.

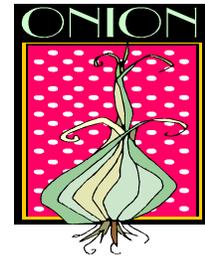
Onions

Exhibit a plate of five bulbs.

All bulbs should be hard and mature. No double-nosed or thick-necked specimens are allowed. Small varieties should be 8 cm (3") in diameter, large 1 cm (4.5").

Preparation - Remove any roots. Remove tops 1.3 cm (.5") from bulb.
Remove only jagged and dirty outer scales.

Score: Quality - 30; Uniformity - 25; Condition - 20; Size - 15; Type - 10.

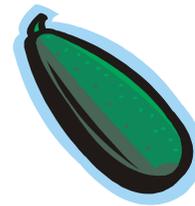


Zucchini

Exhibit a plate of two fruits.

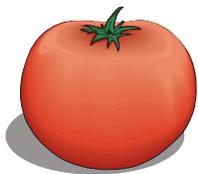
Preparation - show in pairs with stem left intact.

Score: Quality - 30; Uniformity - 20; Condition - 20; Colour - 15; Size - 15.



Tomato (red or green)

Exhibit a plate of five fruits.



Size varies with variety but usually should be approximately 8 cm (3") in diameter. The more globular forms are preferred. They should be firm and in cross-section flesh should be thick both in the outer wall and in the sections.

Preparation - stem left intact

Score: Quality - 30; Uniformity - 25; Condition - 20; Colour - 10; Size - 10; Type - 5.



Tips for Presenting Reasons



1. Be pleasant, stand straight and show interest in what you are doing;
2. Being familiar with the standard format makes it much easier to “fill in” the reasons.
3. Usually there are two (or sometimes three) reasons for a particular placing. Don’t attempt to “make up” reasons that don’t really exist!
4. Words such as “nicer” and “better” are vague and unconvincing.

Use descriptive words referring to the product such as “brighter colour”, “freer from blemishes”, “more uniform in shape and size”.

5. Use the positive approach. Tell why one entry is “better than” another rather than describing the faults of one.
6. It is possible to give excellent reasons even if the placing of exhibits is incorrect.

For Rural Youth Fair

- ___ Bring your 3 vegetables
- ___ Bring your completed project book
- ___ Bring your poster