Helps for Beginning 4-H Demonstrations: Extension Circular 0-21-2

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HELPs FOR BEGInNING 4-H DEMONSTRATIONS

-A Foreword-

This circular was compiled in response to requests of agents and leaders for examples of methods used in outlining, building and writing team demonstrations. The ideas contained are given without any thought that they are complete or that they should be used by teams, but rather with the hope that it may make the principles of demonstrations more clear. In the group some demonstrations have been worked out very carefully from outline to completed talks for each team member while others seem to have been developed from club experience only. One form of development may appeal to one leader while it will not to another.

Demonstrations should not be written by adults for club members, but should rather be natural words of young people in explaining work that they have done and practices that they have learned in their club work.

This circular will not be put on any mailing list but will be supplied only on request from Extension Agents.

Demonstration Procedure

"Better to see once than to hear a hundred times." — Chinese Proverb

Better yet, both see and hear.

1. What is a Demonstration?
A demonstration is doing or making something at the same time we are explaining how we are doing it and why we are doing it that way. A demonstration is a means not an end. It is valuable in so far as it teaches better practices to a club, a community group and the demonstrators.

2. Purposes of a 4-H Demonstration
   a. To present to the community improved practices in farm or homemaking as learned in 4-H Club work.
   b. To impress more permanently the facts of the better practices on the minds of team members themselves (must know facts in order to present them to others)
   c. To train team members for leadership (gives confidence, develops initiative)
   d. To emphasize team work and cooperation (both members of a team must have a definite part to do to make a successful demonstration)
   e. To add incentive for developing skill in the work (high scoring teams may be considered to represent club in county or state events)
   f. To develop sportsmanship (teaches leaders and members how to win and lose)
   g. To give the public an idea of the possibilities and scope of 4-H club work (adds to club exhibits and aids in promoting publicity)
With these purposes in mind, it is desirable to make demonstrations a vital part of 4-H Club work. The high scoring club team may, then represent the club at the county demonstration contest. This team should be able to present a demonstration showing an important phase of their 4-H club work.

5. A Demonstration consists of three parts

1st Introduction
- Introduce yourselves
- May tell briefly of your club
- Value and importance of the practice to be demonstrated
- Give steps to be followed if needed for clearness

2nd Demonstration proper (The "do" part where we actually do the work)
- Show and tell:
  - What we do
  - How we do it
  - Why we do it
- Brief facts about members of your club. These will help to tie the demonstration with the club when work requires more time than the explanation.

3rd Conclusion
- The team should:
  - Summarize all points and answer questions relating to the demonstration.
  - Repeat the question if audience did not hear it so that the entire audience may understand the question and its answer.
  - Answer questions graciously and willingly.
  - Refer to proper source of authentic information if not certain of answers to questions.
  - Make a dignified finish such as: "If there are no more questions, this concludes our demonstration. We thank you."
  - Song, poem or some unit action may be given.

4. Steps in building a Team Demonstration
   a. Select subject
   b. List the topics needed to make subject clear
   c. Arrange topics in logical order
   d. Divide discussion and work between team members
   e. Make list of equipment and supplies needed
   f. Select illustrative material necessary to demonstrate each step clearly
   g. Study the subject thoroughly
   h. Each team member outline his discussion in detail
   i. Practice before club - then larger groups
   "Practice Makes Perfect."

5. Planning the Demonstration
   In a team demonstration there are usually two people, A and B, who do the work, with an alternate who is able to fill the place of either should there be a vacancy at any time. The work is planned so that A and B are both busy and one member is speaking and working all of the time while the other acts as helper. If any part of the demonstration lags the audience will lose interest. One test of a good demonstration is--does it hold the interest of the audience. In planning the work of the team, decide upon the main topics to be emphasized in the demonstration and then keep adding and adding to the plan as different suggestions come to the minds of the club members.
After the team and the demonstrations have been selected, several practices with study on the individual parts at home, will help the team to do good work. Frequently teams at first hold "play practices." By this is meant they go thru their parts as though they had all of their material. This simplifies the practice and helps them to become more familiar with what they wish to say. Each member of the team will want to be familiar with all parts of the demonstration and be able to make good in either part. Nothing will help a demonstrator so much as to talk from experience.

How to Present a Demonstration

Stage should be orderly, working space clear so audience may see each step. If posters are used they should be few in number, neatly lettered, and large enough type to be read by the audience. They should be displayed at the exact time needed in the demonstration.

All illustrative material and equipment should be arranged so as to present an attractive picture.

Stage should be prepared and cleared by the team members, leaving equipment in good order.

The team should be dressed for work. Uniforms should be neat and clean and in keeping with the work to be done. The team is the center of a picture which should be simple and attractive.

First impressions on audiences mean much. The first statements should be related to the demonstration and be interesting enough to secure the attention of the audience.

The team should not make reference to Demonstrator A or Demonstrator B, but make transitions from one part to the other inconspicuous and natural. This shows good team work.

Members should work neatly and quietly. They should not talk to one another during the demonstration. They should avoid getting between the work and audience.

The team should work quickly, not hurriedly. They should avoid making any unnecessary motions. Practicing before a mirror is a great help.

The team should look at the audience and smile when talking, they should show that they enjoy demonstration. By looking at the audience, demonstrators can determine whether or not they are making the demonstration clear.

Members should use their own language, not that of bulletins.

The team member who is performing a process should explain it, if possible. This makes a stronger demonstration.

Each member should have a doing and a helping part. The member who has the helping part should be very careful not to detract the attention of the audience from the member who is doing and explaining a particular phase of the subject.

One member should not stand or sit idle while the other works.

The team should explain each step and show the audience all manipulation processes, explaining "why" in each step. The work and explanation should always be kept together.

Team members should not memorize a written speech. They should have the subject so thoroughly in mind that each step in the demonstration can be explained from member's own experience.

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Clothing Club Team Demonstration

Making Buttonholes and Sewing on Buttons

In demonstrating how to make buttonholes and sew on buttons the following steps would need to be covered.

- Location & size
- Cutting of buttonholes
- Selection of thread
- Stranding
- Overcasting
- Buttonhole stitch
- Locating the button
- Sewing on button

Now we are ready to divide the topics between the demonstrator and the helper.

To have the audience see what you are doing, use a coarse cloth, such as burlap, so the threads of it can easily be seen across the room. A darning needle and bright yarn will show better than a small needle and thread.

Use ideas from any of the problems or any other sources, which will add to the demonstration. It is well to remember that each step or part of a step should be kept simple enough so the audience will grasp it quickly.

Garments made by the team or other members of the club might be handed to the audience for their inspection. Both the fun and the bared ends may be displayed.

Suggested Chart for Order of Demonstration

<table>
<thead>
<tr>
<th>A (Talks &amp; Shows)</th>
<th>B (Helper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce Team</td>
<td>Place supplies conveniently for A</td>
</tr>
<tr>
<td>Tell of purpose and plan of demonstration</td>
<td>Hold material for A to use</td>
</tr>
<tr>
<td>Location and size of buttonhole</td>
<td>Remove supplies</td>
</tr>
<tr>
<td>Cutting of buttonholes</td>
<td></td>
</tr>
<tr>
<td>Selection of thread</td>
<td></td>
</tr>
<tr>
<td>Stranding and overcasting</td>
<td></td>
</tr>
<tr>
<td>Buttonhole stitch</td>
<td>A (Helper)</td>
</tr>
<tr>
<td>Locating the button</td>
<td>Hand and remove supplies for B</td>
</tr>
<tr>
<td>Sewing on buttons</td>
<td></td>
</tr>
<tr>
<td>A (Talks &amp; Shows)</td>
<td>B (Helper)</td>
</tr>
<tr>
<td>Summarize steps</td>
<td>Puts away all supplies</td>
</tr>
<tr>
<td>Closes demonstration</td>
<td></td>
</tr>
</tbody>
</table>

Suggestions for A's Part of the Demonstration

1. Lead in short club song
2. Introduce teammate and self, telling who they are, where they are from, and some of the achievements of their club.
3. Tell plan of demonstration, for example, "In our third problem we have learned how to make buttonholes, so today we want to show you how we locate them on the garment, methods we use for cutting them, the stranding," etc.
4. Explain and show how to locate and determine the size to cut buttonholes, how to do the various kinds of stranding, the overcasting, and the buttonhole stitch.
5. While B talks, hand and remove supplies for her.
6. Summarize steps which have been explained.
7. Close demonstration by telling value of club work to members and the community, may end with an appropriate quotation or song.
Suggestions for B's Part of the Demonstration

Assist in opening song.
Hand, hold and remove supplies for A.
Sew on buttons.
Put away all supplies
Assist in closing the demonstration.

Making Buttonholes and Sewing on Buttons

Song--
Sewing clubs are hummers
They're all right
Sewing clubs are winners
Day and night
Sewing clubs are the clubs for me
They're as fine as clubs can be
What's the matter with our club?
We're all right!

A (Clara)

We represent the J.U.G. Clothing Club of Locust County. My teammate, Mary Smith, is the president of our clothing club and has been a club member for three years. I am the news reporter in our club. We have twelve members in the J.U.G. Clothing Club. We have made a total of seventy-three garments this year. Mary not only helps her mother with the home sewing, but has earned most of her spending money helping neighbors with their plain sewing and mending. I make nearly all of my own dresses and undergarments and father tells me I do a good job patching his shirts and overalls. Every girl wants to be attractive and clothing clubs teach girls not only how to make their clothes, but how to select the color and design, how to wear them and how to care for them. Our clothing club girls firmly believe that careful attention to clothing club work will give happiness throughout their lives. We believe that team demonstrations will help us give to others some of the fine practices we have learned.

Today we are going to demonstrate "Making Buttonholes." Many women dread to make buttonholes. This is because they don't know just what to do or how to do it and still many garments are cheapened because of incorrect or poorly made fastenings. Mary and I will show and explain to you the steps in making buttonholes and sewing on buttons. The steps are (1) locating the buttonhole, (2) determine the size, (3) cut, (4) strand, or overcast, (5) buttonhole stitch, (6) locate the button, (7) make the shank. (8) reinforce the button. Buttonholes are always made on two thicknesses of material to make them firm. To locate the buttonhole, we first determine where it is to be and place pins on the thread of the material. (Shows). It is important to have them on the thread so the buttonhole will be straight. The distance between the pins is determined by the diameter of the button to be used. (Shows button and tells why placed.) The pins are placed at right angles to the thread of material to mark the exact location and length of the slit to be cut. Next, cut with a sharp scissors along the thread of the material from pin to pin. Remove the pins. (Show each step.)

In selecting the thread to work the buttonhole, choose a thread which matches the thread of the fabric in color and in weight. This brown gingham is soft and fine, so I have chosen this matching brown thread in size 50. Crewel needles have long eyes and are very easy to thread.
The buttonhole is now ready for overcasting or stranding. I am using heavy material and bright yarn so you can easily see the stitches. Overcasting is done to give strength and to keep the raw edges from fraying. To overcast, begin at the lower right hand corner inserting the needle through the buttonhole slit. Take short even overcasting stitches all the way around. Be careful not to pull the material as this would make the buttonhole large and unshapely.

Mary will now show you the buttonhole stitch.

E (Mary)

Many people confuse buttonhole stitch and blanket stitch. The buttonhole stitch is made with a purl--spelled p-u-r-l, while the blanket stitch has no purl and is not so firm and strong. (Show chart illustrating purl.) I will work with coarse material and use yarn for my thread so you can easily see the stitches. (I will insert the thread as we did for overcasting.)

While Clara holds this piece I will show you how we make the buttonhole stitch.

In making buttonholes it is better not to begin with a knot, but start with a few small stitches that will be covered. These may be stranding stitches. Commence to make the buttonhole stitch from the same place where the overcasting began.

I am right-handed, so I work from right to left. Insert the needle at the end of the slit and have it come out the depth that the buttonhole is to be and at right angles to the slit. Having the needle in this position, take the thread from the eye of the needle end throw it around the point of the needle, throwing it in the direction in which the work is advancing. Draw the needle away from the worker so that the little knot (purl) comes on the edge of the slit. Be careful to pull the thread as tight as the cloth but not tight enough to draw. In making the next stitch, have it very near the last one and exactly the same distance from the slit. Again throw the thread under the needle in the direction the work is being done.

The end of the buttonhole may be finished with five or more stitches forming a fan end. (Show large drawing of fan end.) These are kept the same depth as the rest of the buttonhole. The fan is the strong end in which the button rests.

Both ends of the buttonhole may be finished with the bars or one end may be a fan and the other a bar. To make the barred ends, proceed across the side of the buttonhole as before. When the end is reached, take two or more long stitches, then cover these stitches with blanket stitches.

Turn the cloth around and hold what was the upper edge at first on side next to the worker, proceed as on the first side. The buttonhole is now finished and we will test it. A good buttonhole (1) is straight with thread of material (2) has even stitches (3) the bars or fans ends are even and well made (4) fits the button (5) thread used harmonizes in color and is of good weight for material (6) is made on double thickness. (This may be placed on a placard or use large size buttonhole worked on heavy material.)

The blanket stitch received its name because it is frequently used on blankets to prevent the edges from raveling. It is used to finish and decorate the raw edges of flannel, canvas or woolen material. The bar end of a buttonhole is made with blanket stitches and is worked holding material just opposite the way for making buttonhole stitch. (Shows.)
The buttonhole is now finished. We will now locate the button. Buttons are always sewed on two thicknesses of material to make them firm. I have selected this button with two holes but one with four holes would be treated in the same way. Place the buttonholes over the material pinning carefully in place. Place a pin in the center of the buttonhole. Remove the buttonhole. I am using size 50 thread in matching color. Use double thread with ends knotted neatly. Insert needle where pin marks (remove pin) and bring it up through eye of button. Stick down through second hole.

**Shank Reinforcing Finishing**

Now insert a pin under this thread (Shows.) This will help to make the shank. Continue stitches until button is firm. Insert needle through material and wind firmly around stitches forming the shank. Remove pin. (Show shank) Now the button may be buttoned easily. Fasten the thread secure. (Show complete button.) Buttons should not be put on a single thickness of material. To make stronger reinforce with sewing a small piece of material at the place where the button is to be. Turn under edges of the piece, baste in place. Sew neatly all around the edges with herring stitch. (Show.) Sew on button as I have just shown you. My teammate, Clara, will now conclude the demonstration.

A (Clara)

We have demonstrated to you how to locate, determine the size, overcast, strand, the buttonhole and blanket stitch. We believe making good buttonholes that won't pull out are everyday necessities. We have attempted to show you just what we do and how to do it. If there are any questions we will try to answer them.

This lady has asked, "What is the purpose of the fan end?" I will refer this question to Mary who demonstrated making the fan end.

B (Mary)

(Answers question.)

A (Clara)

If there are no more questions, this concludes our demonstration. We thank you for your kind attention.

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**Example**

*THE RAG DOLL SEED CORN TEST*

A. "My associate, Billie Smith and I, Arthur Brown, are representing the Corn Creek Corn Club. We want to show you today the method of conducting the Rag Doll test to determine germination of seed corn.

Seed corn should be tested every year. Testing kernels from 200 different ears is desirable and at least 100 representative ears should be tested. If these first 100 or 200 ears tested all show a high uniform germination, further testing is not necessary. However, if some of the ears show poor germination, every ear to be used for planting should be tested individually and only the very good ones saved."

B. *Arranges materials.* ***** * *** *

B. "To carry on intensive seed corn tests which Arthur has told you about, the Rag Doll tester has been found the most effective. We will now show you the procedure in running the Rag Doll test.
First we obtain a piece of sheeting or muslin, 5 or 10 inches wide and about 3 or 4 feet long. (Holds up the cloth to show audience the size. Leys it on table.) The next step in conducting this test is to mark the cloth into sections with a soft lead pencil. First we make a line length-wise in about the middle. Then we make cross-lines about every three inches, leaving about 5 inches at each edge. When we have finished, the cloth is marked for use." (Makes the marks as he discusses above. Holds up the cloth to show markings.)

A. (Picks up the cloth from supplies and hands it to B. Hands B the pencil and yardstick. Helps hold cloth while B is making the lines.)

* * * * * * * * * * * *

A. "Next we give a number to each square. We start with '1' in the upper left-hand corner and number downwards. When the left-hand side is numbered, we go to the upper right-hand corner and continue numbering, finishing in the lower right-hand corner. Then the piece of cloth looks like this." (Does the numbering as he discusses it. Holds up cloth to show markings.)

B. (Helps hold cloth while numbers are being written on it.)

A. "Now we give the cloth a good wetting, after which we spread it out evenly on the table, with the side that is marked and numbered placed to the top." (Sticks cloth in bucket of water, wrings it out some, and spreads it on table.)

B. (Brings bucket of water and takes it away when A has finished with it.)

A. "Individual ears are given numbers to correspond with the numbers on the cloth. In his building where the farmer is doing the work he may have his ears in a rack and simply write the number with chalk just below or above the ear. Or he may lay the ears on long boards and write the number under each one. Another method is the one we are using here. Write the number on a small piece of paper and tie it or pin it onto the butt end of the ear, like this." (Ears should be laid on board beforehand with numbers pinned on most of them. Write numbers on a few tags and pin them on the ears.)

B. (Wipes hands on towel. Brings up board with ears laid out on it. Hands A tags, pencil and pins. Hands him ears and takes them away when A has affixed labeling tags.)

* * * * * * * * * *

B. "The next step is to remove 6 kernels from various portions of each ear with a pocket-knife and place them in the square on the cloth with the same number as the ear. To save time here today we will show you how this is done with only 2 or 3 ears.

"Let's suppose now that six kernels of corn have been placed on each of the squares. We will turn each edge over toward the middle to help keep the kernels in place. We place this thin stick across one end of the cloth and carefully roll the cloth around it, not too tightly, and taking care not to mix the corn. Each end is now tied up and the roll is also tied loosely in the center. Following this, we soak the rag doll in a bucket of water for a period of 2 to 10 hours." (Rolls up the cloth, ties it up and places it in the bucket of water.)

A. (Opens and hands B his pocket knife. Hands and takes back 2 or 3 ears from which kernels are removed. Assists B in placing kernels on the cloth. Hands B the stick. Helps tie up the roll. Brings the bucket of water.)
B. "Assume now that the ragdoll has been soaking for several hours. We remove it, pour the water out of the bucket, and set the doll back into the bucket. Of course, normally the farmer would be using several dolls where we have used only one in this demonstration. The bucket is covered with something to keep the ragdoll moist. It is then kept at room temperature or above for a period of 5 to 7 days. At the end of this period, the ragdoll is unrolled and readings made." (Removes rag doll and places it back in the bucket after water has been poured out. Covers bucket with flat pan or board and sets it aside.)

A. "Now suppose that the work we have done here today had been done a week ago instead. The rag doll would now be ready for reading. To show you the method of checking the results, Billie and I started a rag doll test on these same ears a week ago. We will now unroll it. Notice how careful we must be in doing this. Because the sprouts are quite long and tangled together we must do this slowly to avoid mixing the kernels. Now you can see how it looks unrolled."

A. (Holds up rag doll tester to show sprouts coming out at ends. Unrolls it and then holds it up at an angle to show sprouted kernels.)

B. (Gets the rag doll tester and hands to A. Helps unroll it. Holds one end when A is showing results to audience.)

A. "You can see how easy it now is to check back and see which ears have good germination and which, if any, have not. As Arthur reads the results from the test, I will copy them on the tags on the ears. Where all 6 kernels off of the ear have sprouted, I write 'C.K.' on the tag. If some kernels are dead or unsprouted, I write '1 dead, 2 dead, or whatever the results may be!'" (Writes results on tags pinned onto the ears.)

As you noticed, most of the ears had perfect germination. Those will make good seed. Ears No. 2, 3, and 13 are entirely dead. We remove the labels from them and they go into the bucket for feed. I said feed not seed. Some of the other ears are questionable because, they contained 1 or 2 dead kernels out of the 6. But we'll keep them for the present and if we fail to get enough ears with perfect germination, we may test them again to check this first test. Also this test proves that we'll have to test every individual ear if we want to get good seed corn out of this lot."

B. (Reads results from each square aloud to A. Pulls tags from ears 2, 3, and 13 and throws those ears into basket.)

"Ladies and gentlemen we have shown you how easy it is to make and use a rag doll seed corn tester and told you its value. If our demonstration is a success you will go home and test your corn next winter. If we have not made the processes clear to you, we would like to do so now if we can. Are there any points that were not clear to you. --Since there are not more questions this concludes our demonstration.

A. (Stands by ready to answer questions.)

Example

POULTRY CLUB TEAM DEMONSTRATION

Jimmy "Ladies and Gentlemen: My teammate, Harold Davis and I, Jimmy Harris, will demonstrate how we tear down orange boxes so that the lumber in them can be 18235fr
used for the construction of chick feeders and water stands.

"Our club lessons teach us that profitable poultry production is dependent on two things—efficient production and careful marketing. Efficient production means that there are certain factors we must keep in mind during the chicken rearing project. These are:

1. Low Overhead Costs
2. Low Feed Costs
3. Low Mortality
4. Rapid rate of growth

"Each of these items requires attention. Take, for instance, this item of low overhead costs. We consider as overhead—houses, feeding and watering equipment, fencing, hazards, depreciation, interest and taxes. These are fixed or permanent costs that remain about the same from year to year. Because of this, we are anxious to learn ways of decreasing the cost of buildings and feeding and watering equipment because by so doing we also lower our costs of interest, depreciation and taxes. This helps us in our effort toward efficient production."

(While Jimmy is introducing the demonstration both demonstrators stand facing the audience as Jimmy introduces Harold and himself. As Jimmy goes on he may use a chart explaining the factors of efficient production. In the meantime, Harold arranges equipment so that he may open his part of the demonstration.)

Harold. "Jimmy has always had an ambition to be a carpenter and this ambition certainly helps him in decreasing his overhead costs. I wish that we all would spend a little time taking things apart to see how they 'tick' so that there would be fewer broken orange box boards and more chick feeders.

"Sometimes we can gently hammer the boards on the inside of the box and loosen them but just about as often the board splits or breaks and we have kindling instead. Notice how Jimmy has placed the box on a solid, flat place on the floor. Now I will take this short end of a two by four and place it in the inside of the box next to the end we want to loosen. Then I will place my foot on the two by four and grasp the sides of the end piece with both hands and make a rocking motion. This loosens the nails in the end piece so that the end may now be pulled free of the sides quite easily. We will do the same with all of the boards now so that we will have all of them ready for building feeders."

(Harold proceeds with demonstration doing what he is explaining. Jimmy helps as unobtrusively as possible and stacks loosened boards.)

Jimmy. "These are perfectly good nails left in the boards and so Harold and I make a practice of carefully pulling them out and using them in building feeders and water stands for our chicks.

"The nails are easily pulled from the boards with the fingers and as you notice are not bent. For the type of building we do, these nails are just the size we need.

"If a nail should happen to pull through the end of a side piece and remain in the end piece, it must be removed with a claw hammer. We always place a small wood block under the hammer head because it helps to make the nail pull easier and also keeps the nail from becoming badly bent. If we left these nails in the end boards, Dad would soon keep his tools under lock and key."

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Now that the orange box has been properly torn down and carefully stacked on the table, we would like to tell you something about our club. Early last February, Jimmy’s dad called us boys together and asked us if we would like to join a 4-H poultry club. You know, of course, what the answer was. We sure did. Inside of a week there were eleven of us studying our first problem. Mom says she didn’t know there was so much to learn about chickens until she saw us studying so much, but she hasn’t missed a club meeting.

"Up to now all eleven charter signers of the Happy Chick Club are still active and it looks like by finish up time all eleven will still be going strong. Now are there any questions Jimmy or I can answer for you before we close our demonstration? (Pause)

"If there are no more questions, we thank you."

(As Harold concludes the demonstration both stand attentively to answer questions.)

Example

GARDEN CLUB TEAM DEMONSTRATION

Transplanting Vegetable Plant Seedlings Into a Flat

First "We are a demonstration team from (name of club) 4-H Club. I am (name) and this is my teammate (name of other member). We will demonstrate the method of transplanting vegetable plant seedlings into a flat."

Second "Small seedlings should be transplanted as soon as they become crowded, so that they may continue to grow and develop a strong, stocky plant with a strong root system. The seedlings may be transplanted into a flat such as this. (Takes flat from first member and holds it up to the audience.) "When filling the flat partly rotted manure or coarse sod is placed in the bottom, as we are doing here, to a depth of about one-half inch. This will allow proper drainage." (Does work as he explains it.) "Then we place the soil on top of this. The soil should be fertile and free of clods. A mixture of one part well rotted manure, one part sand, and two parts soil is about the right proportion. " (First member hands material and assists.)

First "We pack the soil a little in the corners and the sides. (Presses the soil down around the ends and sides with his fingers and sides of his hands, then takes a small board, a lathe, or any small board will do and level the soil.) "The board should be placed at an angle and pulled across the flat while the board is worked crosswise. Make sure that the board is held down to the flat on both sides. This prevents the soil on the edges from drying too quickly. The plants should be spaced about two inches apart each way. The holes may be made with the finger or with a small dibble." (Second member should stand flat enough on one edge so the audience will be able to see the work that is being done. First member should punch holes with it. Continue to punch holes until space is used up.)

Second "Now we are ready to transplant the seedlings." (Show plants.) "We took these plants from the seedbed in such a way as to preserve as many roots as possible. When the seedlings are transplanted with a large root system they will continue to
grow and stand a great amount of hardship. We place one plant in each hole and press the soil down around the roots. We are careful that we do not burise the stem." (As he speaks, second member should take plants from package or from small flat, bucket, or whatever they may have been planted in. If not using original soil that the seed was planted in, enough plants for the demonstration may be pulled and wrapped in paper. He puts a plant in the hole and presses soil around the roots firmly. First member should help second member transplant the plants. Second member should be telling the audience something about the plants such as the kinds of plants that should be transplanted.) "When we finish planting, our next step is to water thoroughly." (Take sprinkler and water plants thoroughly.)

First "Next we place the flat in a cold frame or some protected place until the plants begin to crowd, then they are set out in the garden. If weather conditions prevent transplanting in the garden they may be transplanted into another flat where they are spaced farther apart, or they may be transplanted into individual pots. When the plants are to be transplanted into the garden we will take them out to the garden in the flat or whatever container they may have been transplanted into. We will be able to take the plants out of the flat with a large amount of soil on the roots."

Second "Now let me call your attention to the important points in our demonstration as shown on this chart."

| 1. Select proper soil |
| 2. Place soil in flats |
| 3. Smooth and pack soil |
| 4. Space holes |
| 5. Remove plants from seed bed |
| 6. Set plants |
| 7. Water |

First "Are there any questions about our demonstration?" (If there are questions, answer them, if you know them, if not do not be afraid to say so; when you have answered questions if there are any, say - "We thank you.")

Materials Needed

1. A tray or flat 18" wide by 2 ft. long, 3 or 4 inches deep. Leave small cracks about ¼ inch wide in bottom.

2. Sand, manure, soil.

3. Dibble a pointed peglike stick about the size of a finger, — the handle may be long enough to hold to.

4. A sprinkling can and water.

5. Plants, (tomatoes, cabbage, or another plant that should be transplanted.)
Example
SHEEP CLUB TEAM DEMONSTRATIONS
Docking and Castration of Lambs

Outline

A Demonstrates

Introduces himself and team mate
Tells something about their club
Explains importance of castration
Disinfects knife
Castrates - explaining process

B Assists

Bows and smiles when introduced
Brings out equipment
Prepares disinfectant
Holds lamb

A Demonstrates

Gives importance of docking
Docks - explaining process

B Assists

Prepares equipment
Holds lamb

A Demonstrates

Summarizes demonstration
Calls for questions
Answers questions on castration
(Practice he demonstrated)
Thanks audience
Closes demonstration
Helps remove equipment and sheep

B Assists

Cleans equipment and packs it
Answers questions on docking
(Practice he demonstrated)
Removes equipment and sheep

Equipment Needed

Ram lamb seven days to two weeks old
Knife, disinfectant

Talks

A speaks

"My name is Joe Anderson and team mate is Paul Davis. We represent the Sunny Side Ewe and Lamb Club of Centre County. There are eight members in our club who are raising lambs and learning about the sheep business. We will demonstrate for you the methods of docking and castrating which we have learned in our club work.

"It is very important that all ram or 'buck' lambs intended for market be castrated. If this operation is not performed, the lamb becomes coarse and poor market quality. Uncastrated ram lambs usually sell for a discount of $1.00 per hundred on the market. Lambs should be castrated while they are young, that is, from one to two weeks old.

"I prefer to use a knife for castration." (Paul hands Joe a knife which Joe holds up for the crowd to see) "To prevent any chance of infection we will dip the knife in a pan of disinfectant. Paul is preparing a solution of disinfectant." (Paul pours Lysol or other disinfectant into pan of water.) (Joe dips the knife.)

"There is very little bleeding when a knife is used if the lamb is young and care is taken not to get the lamb excited.
Paul has a lamb from his club project which is just eight days old which I will castrate. [(Paul holds the lamb head up, with his belly towards Joe and his hind legs drawn up along his sides.)] The lower third of the sac is cut off. [(Cuts off sac and holds up so crowd may see.)] The testicles are forced down and removed either with the fingers or the teeth. Most sheep men with large flocks use the teeth because the work can be done more rapidly in that way. [(Joe removes the testicles.)] The membrane should not be forced back but the complete testicle and cord pulled out. This completes the very simple operation of castration. It is however, important that the knife and hands be kept clean and that clean bedding be provided until the lambs are healed. Paul will now demonstrate docking. 

Joe speaks (Paul hands the lamb over to Joe who holds him during the rest of the demonstration. Paul now does the speaking and the work.) I will show you the method of docking which we have been using in our club. We have learned that it is a good plan to dock all lambs so there will be no chance of dirt and filth accumulating on their tails and because docked lambs sell for a higher price than undocked lambs. This operation too should be performed while the lamb is young, from a week to two weeks old. If the lambs are strong, both docking and castrating may be done at the same time. If they are done at the same time, castration is done first.

I prefer to use a knife for docking. [(Paul shows knife.)] The knife should also be disinfected for this operation. [(Paul disinfects the knife.)] There will be less bleeding if the knife is not too sharp. The skin on the tail is pushed back toward the rump of the lamb so that after the operation it will heal over the stub of the dock. [(Paul pushes back skin.)] The tail is cut off about one inch from the body. [(Removes tail.)] If excessive bleeding occurs, a string may be tied around the dock for an hour or two. If the string method is used be sure it is removed within a couple of hours. Or the wound may be burned with a hot iron to check bleeding. Many sheep men dock with hot pincers but we have not done so because it requires more equipment and because the wound heals more slowly. Joe will now close the demonstration.

A speaks

We have shown you the methods of docking and castrating which we have learned in our 4-H sheep club work. These simple operations will increase the profit of a sheep flock very much. The important things to remember to make them successful are to perform both operations while the lambs are young, from a week to two weeks of age, handle lambs quietly and to be careful that all instruments are clean and disinfected.

Are there any questions in regard to our demonstration? [(Joe answers any questions about castration which was the practice he demonstrated and Paul answers any questions about docking which was the practice he demonstrated. If no questions are asked or when no more are given close demonstration without delay.)] If there are no further questions, this closes our demonstration. We want to thank you for your attention.
A. Introduction
1. Gives name of club
2. Location of club
   .1 Town or precinct, county, and state
3. Gives name of local leader
4. Gives number of members in club
5. When organized, etc.
6. Introduces teammate & self
7. Tells what demonstration will be
   .1 To demonstrate purpose and importance of pages 13 and 19 and how to fill them out

B. Starts Demonstration
1. Explains page 13 (Turns to sheet when B turns it over)
   .1 Tells its purpose
   .2 Tells its importance
2. Tells how to draw map of farm
   .1 Describes use of squares
   .2 Describes how to draw in different fields
   .3 Explains each field should be numbered Roman numerals
   .4 Explains name of crop should be written in each field
   .5 Explains number of acres should be written in each field
I. B. 2. Explains that blanks at bottom of page should be filled in.
1. Points to questions, one at a time, reading the question and giving oral answers.

II. Henry Helps

A. Stands beside teammate

1. Points to columns as B explains them
2. Transfers field information from page 18 to first three columns of page 19 as B explains
3. Adds and puts in total acres of different crops
4. Totals "acres" column and points out that it checks with map
5. Observes page as B talks about it
6. Fills out remaining columns for respective crops as B talks about them
7. Totals and records totals, respectively, as B talks

II. John Talks

A. Reviews quickly what teammate has just demonstrated, and tells what he will now take up--page 19

2. Tells how field information should be transferred from page 18 to page 19.
3. Explains that totals should be put in acres column for various crops
4. Explains total acres recorded in "Acres" column should correspond to total acres in farm as shown by map.
5. Explains that this is as much as can be done on this page until harvest
6. Explains steps of filling in remaining columns on page 19 when proper time comes
   1. Alfalfa hay
   2. Small grain
   3. Forage and other hay crops
   4. Corn
   5. Any other crops
7. Explains that totals should next be set in showing total production, operator's share and landowner's share of each crop.
III. Henry Talks

A. Summarizes

1. Reviews page 18, its purpose, importance, etc.

2. Reviews page 19, its purpose, importance, etc.

B. Asks for questions

1. Answers questions pertaining to page he demonstrated.

C. Concludes

III. John Helps

A. Stands beside teammate

1. Attentively observes page 18 as A talks about it.

2. Attentively observes page 19 as A talks about it.

B. Stands beside teammate at attention

1. Answers questions pertaining to page he demonstrated.

C. Stands at attention and nods at close.

MATERIALS NEEDED

1. Blackboards or charts ruled with headings put in to represent pages 18 and 19.

2. A place for blackboards or charts so audience can see them.

3. Pointers—one for each member.

4. Chalk or crayon, eraser, long ruler or yardstick.

5. Model set of figures and answers to be used in filling out the pages—unless demonstrators can commit all to memory.

* * * * *
We are members of the Business-Like 4-H Farm Account Club. We are from near Horace, in Bluecou precinct, Bacon county, Nebraska. Our local leader is Mr. John Doe who is a farmer in our locality.

Our club was organized on the evening of December 2, 1936, and our records began January 1, 1937. There were thirteen members in our club when it was first started and since then two members have been added which we all think is quite a good record.

My teammate is John Smith and I am Henry Jones.

We are going to demonstrate how to fill in correctly pages 13 and 19 of the Nebraska Farm Account Book. I will first explain page 13 to you and later my teammate will explain page 19. Page 13 is designed for drawing a map of the farm. Many farmers think this page is non-essential, but we think it is a very important page in the record book. As we will demonstrate to you, a well-drawn map of the farm serves, in later years, to show just what was planted in each field and the yield of the crop on each field. It may also show special treatment or special damages resulting to different fields, all of which is valuable as a record. Such a field record can be of value in planning rotations, in arriving at past average yields of different crops and is an aid in the general management of the farm.

The farm which we are using for this demonstration is square, 160 acres. This makes an easy farm to draw on this page. However, other farms with more irregular lines can also be drawn. The squares can be used to represent any desirable size, depending on the size of the farm to be drawn and the number of fields to be drawn in. It is best to draw the farm to as large a scale as possible. In our case, our farm is just 160 rods square, so we will use the entire farm for the general outline of the farm. That means that the scale in this case is 20 rods between lines, and each square equals 2½ acres.

After the general outline of the whole farm is drawn we will next draw in the different fields as they will be for the current year. It is usually easier to do this by starting with the farmstead and working out from there. Each field should be drawn in as nearly as possible to scale, the same as the general outline of the farm. This farm has 7 different fields and the farmstead. My teammate is drawing in the fields.
After each field is drawn, a number or letter should be given it. We will use Roman Numerals for this.

After each field has been given a number, the name of the crop that is to be grown on each field during the current year should be written in. My teammate is writing in the names of the different crops to be grown on the different fields.

After this has been done the number of acres in each field should be written in. My teammate is writing these in. We are using Arabic figures here to distinguish acres from field numbers.

You will now note that we have the map of the 160 acre farm completed. Field Number I is the farmstead and contains 10 acres; field Number II is permanent pasture and contains 30 acres; field Number III is hog pasture and contains 5 acres; field Number IV is alfalfa and contains 15 acres; field Number V is a field of new alfalfa containing 15 acres; fields Numbers VI and VII are corn fields, each containing 30 acres; field Number VIII is wheat, containing 25 acres. The total acreage in all of these fields including the farmstead is 160 acres which is the size of the farm. It is important to remember that this map should represent the total tilled and untilled acres of the farm.

The questions at the bottom of page 18 ask for some additional information which can easily be filled in. I will read the question in each case and give the figure which should be filled in and my teammate will fill in the blanks. "Number of acres of sweet clover plowed under in the spring?" None; "Number of acres of red clover seeded this year?" None; "Number of acres of alfalfa seeded this year?" Fifteen; "Number of acres of sweet clover seeded this year?" None. The farm is located in Quaker precinct, Township 9, Range 36, Section 32.

My teammate explained to you the uses and importance of a detailed farm map while I drew the map on page 18 of the Nebraska Farm Account Book. I will now explain page 19 and show how these two pages are associated with each other.
John Talks

We will now consider the first three columns on this page headed "Field number," "Crops," and "Acres."

Information about each field as shown by the map on page 18 can now be transferred to these columns. Field No. 1 on the map is the farmstead and contains 10 acres; Field No. II is permanent pasture and contains 30 acres. This is recorded as non-tilled pasture. Field No. III is hog pasture and contains 5 acres and is recorded as tilled pasture. Field Number IV is alfalfa and contains 15 acres. It is recorded under hay. Field No. V is new alfalfa and contains 15 acres. It, too, is recorded under hay. Fields Nos. VI and VII are corn containing 30 acres each, and field No. VIII is wheat containing 25 acres.

Next the sub-totals for each grain crop should be entered in the "Acres" column so that it can readily be seen how many total acres there are to be in each grain crop.

Next we will total the acres recorded in all crops. This total added to pasture and farmstead equals the total acres in the farm. This figure should be the same as the total acres shown on the map which was 160 acres. You will note that this total checks with the map.

This is as far as this page can be filled out until after some crop has been harvested. As soon as a crop has been harvested from a field, the respective "Yield per acre," "total production," "operator's share," and "landlord's share" can be entered. Also any "remarks" can be recorded about the field that might be desirable.

On the farm which we are using in this demonstration, the crops harvested were as follows: Field No. IV made 3 tons of hay per acre which was a total production of 145 tons, and the operator's share was 22/3 tons and the landlord's share was 22/3 tons. Field No. V yielded one ton per acre, the total production from this field was 15 tons, the operator's share was 7 1/3 tons and the landlord's share was 7 1/3 tons. Field No. VI was a corn field which yielded 16 bushels per acre making a total production of 540 bushels. The corn was all divided three-fifths and two-fifths, the operator getting 32 4/5 bushels and the landlord 216 bushels from this field. Field No. VII was also a corn field and it yielded 24 bushels per acre making a total production of 720 bushels, 432 bushels of this was
the operator's share and 228 bushels was the landlord's share. Field No. VIII was a wheat field. It yielded 12 bushels per acre making a total production of 300 bushels. This was divided two-thirds and one-third, the operator receiving 200 bushels and the landlord 100 bushels. In the remarks column opposite this field are two notations, "Hail struck, June 22," and "33 1/3 per cent damage."

If there had been some crop which would not come under the headings given on this page, such as potatoes or beets, one of the other crops such as barley might have been crossed out and the name of the other crop written in, or it might have been written in under "Other Crops."

We will next put the totals for each grain crop in these columns so that it can readily be seen just how much total corn and wheat were produced and just how much of each went to the operator and landlord. The average yield per acre of all acres in a given crop can also be calculated and recorded at this time.

You will note that pages 18 and 19 are closely related. Page 18 shows the location of fields and crops and page 19 shows specific information about the fields and crops. Both pages are highly valuable as a record.

Henry Talks

We have endeavored to demonstrate to you the value and importance of pages 18 and 19 in the Nebraska Farm Account Book and how to fill them out. I have explained the ways in which a detailed map of the farm can be of value as a permanent record, and how such a map can be properly drawn. John has explained how specific information about the different fields on a farm can be recorded on page 19 of the Nebraska Farm Account Book and the value and importance of such information in the record book.

If there are any questions we should be glad to answer them for you if we can. (Answers questions pertaining to his part of demonstration)

If there are no other questions, this concludes our demonstration.
Indicate fields by number. Record soil and crop treatment on different fields, such as application of manure or fertilizer, treatment of grain for smut, etc.

<table>
<thead>
<tr>
<th></th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VII</th>
<th>VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Farmstead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td></td>
<td>Red Clover</td>
<td>5</td>
<td></td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td></td>
<td>Hay Pasture</td>
<td></td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alfalfa</td>
<td></td>
<td></td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Number of acres of sweet clover plowed under in spring: **None**

Number of acres of red clover seeded this year: **None**

Number of acres of alfalfa seeded this year: **15**

Number of acres of sweet clover seeded this year: **None**

Number of acres of wheat seeded this year: **25**

Number of acres of alfalfa seeded this year: **15**

Number of acres of hay pastured this year: **30**

Number of acres of red clover pastured this year: **5**

Number of acres of sweet clover pastured this year: **None**

18235fr
### CROPS RAISED (Chart)

<table>
<thead>
<tr>
<th>Field No.</th>
<th>Crops</th>
<th>Acres</th>
<th>Yield per acre</th>
<th>Total production</th>
<th>Operator's share</th>
<th>Landlord's share</th>
<th>Remarks on crop or soil treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VI</td>
<td>Corn</td>
<td>30</td>
<td>18</td>
<td>540</td>
<td>324</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>VII</td>
<td>Corn</td>
<td>30</td>
<td>24</td>
<td>720</td>
<td>432</td>
<td>288</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corn for silage (tons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total corn</td>
<td>60</td>
<td>21</td>
<td>1260</td>
<td>756</td>
<td>504</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total oats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII</td>
<td>Wheat</td>
<td>25</td>
<td>12</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>Tail struck June 33% prevent damage</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total wheat</td>
<td>25</td>
<td>12</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barley</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total barley</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Hay—Alfalfa (No. cuttings)</td>
<td>15</td>
<td>3</td>
<td>45</td>
<td>22%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wild</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>New alfalfa</td>
<td>15</td>
<td>1</td>
<td>15</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other crops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total crop acres</td>
<td>115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TILLED PASTURE**

<table>
<thead>
<tr>
<th>Grass</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legume</td>
<td>30</td>
</tr>
<tr>
<td>Non-tilled pasture</td>
<td>30</td>
</tr>
<tr>
<td>Woods not pastured</td>
<td>10</td>
</tr>
<tr>
<td>Farmstead roads, idle land etc.</td>
<td>10</td>
</tr>
</tbody>
</table>

**TOTAL ACRES IN FARM**

160

Do not enter on this page crops received as rent from land which you rented to another person. If such crops are fed on the land you operate they should be entered as purchased feed on pages 24 to 37 so that your own farm will not receive the credit for the value of such crops.

16235fr
Example
FORESTRY CLUB TEAM DEMONSTRATION

Evergreen Tree Planting

Ed: "We are members of the Razor Forestry Club of Grewen, Nebraska. I am Ed Old. Allow me to introduce my teammate, Colin Young. There are 14 members in our club and our leader is George Pine. Our club was furnished 1000 Austrian Pine transplants this spring by the State Extension Service. These were divided among our members and despite the very unfavorable season approximately 65% of the trees are growing. In our club work this year we have learned to identify trees and shrubs of this community as well as how evergreen transplants should be handled and cared for. Today we will demonstrate the proper method of planting and caring for small evergreens such as are distributed by the Agricultural Extension Service each spring through provision of the Clarke-McNary Act to residents of Nebraska for planting windbreaks and woodlots on farms."

Colin: "Evergreens such as Austrian, Yellow, and Scotch Pines are especially good for windbreaks in this section of the state. Their advantages are: (Ed displays a poster and points to the statements made by Colin) Drought resistant, long lived, give good winter protection, recover quickly from hail injury and add beauty to the landscape. (The poster should be large enough so that the following statements may be read at some distance. It may read as follows:

Advantages of Evergreens
1. Drought resistant
2. Long lived
3. Give good winter protection
4. Recover quickly from hail injury
5. Beautify the landscape

Note - The poster should be allowed to remain on the wall throughout the demonstration.

"In our neighborhood the hardy pines have stood the severe drouth of the last few years remarkably well and authorities at our State Agricultural College feel that they should be planted in greater numbers. They are highly recommended for planting farmstead windbreaks and also in strips across the farms for the protection of crops. It may not be said that trees increase rainfall but when planted in dense windbreaks at right angles to the prevailing winds, they will cut down the force of the wind and retard evaporation of moisture from the soil. The effect of belts of trees on air currents is illustrated by this chart. (Ed displays a chart showing the effect of trees on air currents. An enlarged drawing may be made to show this. The chart should be large enough so that it may be seen from some little distance. Ed points to it as it is referred to.) You will note that the trees divert the wind upward and serve to protect an area approximately 20 times the height of the trees."

Ed: "During the past eleven years Clarke-McNary trees have been sent out by the Extension Service at cost of packing and shipping, for planting on Nebraska farms. They are sent out in units of 100 in bundles similar to this one. (Colin hands Ed the bundle of evergreens. It should be a bundle about four inches in diameter and could be made up with sprigs off an evergreen but should have one little evergreen tree if possible which would be used when demonstrating the method of planting.) We have learned that it is very important to keep the roots of these little trees from becoming dry. This is important in handling trees of
any kind but is extremely important in the case of evergreens. The bundle of trees should be opened as soon as received but before we do this we make up half a bucketful of thin mud, open up the bundle and place the trees into the bucket so the roots are covered. (Open trees and put in mud.) The trees are then carried to the field and are taken out one at a time and planted. The ground should have been prepared as for any garden crop. (Digs hole in box of dirt and puts in tree as directed.) A hole is dug deep enough so that the tree may be set about an inch deeper than it stood in the nursery. The roots are spread out and the dirt packed solidly about them. Before putting in the last shovelful of dirt, the tree should be well watered. When the water settles away, more dirt should be put in and left loose about the tree. This serves as a mulch and prevents evaporation of moisture."

"Evergreens should have some protection from winds and sun during the first year after being planted. They may be protected with a strip of burlap in this manner. (Ed hands Colin the burlap.) This may be tacked to three stakes, one at each end and one in the middle, which may be set in the soil to give protection on the south and west but open on one side, or shingles may be used in this way. (Ed hands Colin two shingles which he places for protection on the south and west.) If the season should be very dry, it may be necessary to water the trees. When watering, add enough so that the soil will be soaked up about the roots. Cultivate the trees to keep out all weeds and grass and stir the soil after each rain and do not allow the soil to remain crusted. If the soil is dry in the late fall, the trees should be well watered as the ground should not be too dry during winter. Evergreens should be protected from winds during the first winter as well as during the summer because some transpiration occurs even during winter months. A few rows of corn grown on the north of the trees and the stalks left standing will be helpful in stopping winter winds and snow. Some extra care will help to bring the evergreens through the most difficult period of their lives. When well established they will withstand extreme weather conditions exceptionally well. We advocate planting trees. Nebraska needs more of them. They increase the value of a farm by making it more attractive and more comfortable besides furnishing a living memorial to those who plant them.

"We have shown you how small evergreens should be planted and cared for and we thank you for your attention. If there are any questions, we shall be glad to answer them if we can. (Pause)

"If there are no more questions, this concludes our demonstration."
Exhibit

CAJtmc- CLUB DEMONSTRATION

A's Discussion

A's Work

B's Work

Introduction team

Test jar rubbers

Give A pan containing jar rubbers

Give subject of demonstration

Pulling, pinching, twisting, stretching test

Give A ruler

Explain each step as it is done and show equipment used

Test screw lid jars

Give A screw lid jar and lid

Importance of careful testing

Examine lid, rub edge with knife

Give A hot water

Show test with water in jar and leave inverted

Remove supplies

B's Discussion

B's Work

A's Work

Explain each step as it is done and show equipment used.

Test glass lid jar and lid

Hand B glass lid jar and lid

Summarizes

Show how to tighten bail

Hand B hot water

leave inverted

Show test with water and Hand B metal lid with composition rubber

Examine composition rubber position rubber

Examine jars tested

Remove supplies

Equipment

Supplies

Illustrative Material

2 pie pans

Pitcher of hot water

Corroded screw lid

jar rubbers, red & white

Ruler

Glass lid with uneven edge

Three types of jars

Examine composition rubber

Extra bails to show before and after tightening

metal lid

metal lid tested

Remove supplies

glass lid

metal lid with composition rubber

A's Discussion:

"We are members of the Jolly Canning Club of Wellington. My teammate is May Nelson and my name is Ruth White. We have learned in our canning club that a tight seal is necessary for successful canning. A tight seal depends on the jar, lid, and rubber. We will show you how to test jar rubbers and screw and glass lid jars. It is a good plan to have jars, lids, and rubbers tested before beginning to can so the product does not stand while the testing is done.

"A rubber should stand pulling, pinching and twisting and return to its original size and shape. Four inches of a rubber ring should stretch to ten inches without breaking. A rubber should fit closely requiring a little stretching to get it around the neck of the jar.

"To test a screw lid jar examine both lid and jar carefully. If the lid is corroded it may contain tiny holes. If the inner lining is cracked discard the lid. Run the finger around the edge of the lid and also the edge and shoulder of the jar to detect nicks, cracks and other flaws. The uneven edge of a lid can sometimes be remedied by placing on a flat surface and rubbing the edge with the handle or the dull side of a knife blade until it lies flat on the table and touches at all points. If the edge of the lid is sharp it should be rubbed with a metal surface 18235fr"
until dull so it will not cut into the rubber. We make a final test in this way. Put hot water in the jar, place rubber and lid in position, make a tight seal and invert jar. Allow the jar to stand inverted 5 or 10 minutes to detect slow leaks. May will now demonstrate the testing of glass lid jars."

B's Discussion

"I will use the same test that Ruth showed you on the screw lid jar. Run the fingers around the edge of the lid and edge and shoulder of the jar to detect nicks, cracks or other flaws in the glass. Place the lid on a flat surface to see if the edge is even. If it is not, discard the lid.

"Place the rubber and lid on jar. Put the wire bail in place over the top of the lid. If the bail does not go on with a snap when the side clamp or tightening lever is up it needs tightening. Remove it from the jar and with the thumbs bend it down in the center. The ends of the bail usually need to be pressed inward before it can be replaced on the jar. This is done by holding the center of the bail firmly where it has been bent, in one hand allowing the ends to stand up. With the palm of the other hand bend in one and then turn the bail and bend in the other end enough that the bail will fit snugly on the jar. Return the bail to the jar, put it in place over the top of the lid and see if it goes into the groove with a snap. If so, put hot water in the jar, make a tight seal by pressing the tightening lever down and test again by inverting the jar.

"If the bail is too tight it may be loosened by bending in the opposite direction to that given for tightening. This testing of the bail should be done every time the jar is used for canning.

"A third type of jar is one with a metal lid with composition seal. This type requires a new lid each time the jar is used. Examine the jar for defects as before. Pay particular attention to the top edge as the seal is made here. Examine jar. See that the composition on the lid is not cracked or pulled away from the metal. It should be gummy, not granular or hard. This type of jar cannot be tested with water because the composition does not form a tight seal until it cools after the processing period is over.

"The first two jars demonstrated have stood a short time inverted and we will see if they are still tight seals. These do not show a leak now. Sometimes a slow leak shows up after the jar has stood for some time.

"We have shown you how to test three common types of jars. We believe it is important to test a jar every time it is used for canning because if we do not have a tight seal the product will spoil. If there are any questions we will try to answer them. (Repeat question so every one may hear, before giving answer.) If there are no more questions we thank you for listening to our demonstration."
Example

COOKING CLUB TEAM DEMONSTRATION

Measuring Dry and Liquid Ingredients

<table>
<thead>
<tr>
<th>A's Discussion</th>
<th>A's Work</th>
<th>B's Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce team</td>
<td>Dip flour into cup with T</td>
<td>Give A pan containing cup, T. and knife</td>
</tr>
<tr>
<td>Give subject of demonstration</td>
<td>Show ⅔c. then 1c. flour</td>
<td></td>
</tr>
<tr>
<td>Getting ready to cook</td>
<td>Four flour back into bowl</td>
<td>Sift flour into bowl and hand to A</td>
</tr>
<tr>
<td>Explain each step as it is done</td>
<td>Pack flour in cup</td>
<td>Sift the packed flour, measure as demonstrated and hand to A</td>
</tr>
<tr>
<td>and show equipment used</td>
<td>Show how much it measures after sifting</td>
<td></td>
</tr>
<tr>
<td>Importance of careful measuring</td>
<td>Measure 1 c. water</td>
<td></td>
</tr>
<tr>
<td>Precautions to prevent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>packing sifted flour</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B's Discussion</th>
<th>B's Work</th>
<th>A's Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain each step as it is done</td>
<td>Stir flour with spoon</td>
<td>Hand B bowl of flour and pie knife</td>
</tr>
<tr>
<td>and show equipment used</td>
<td>Measure 1 T, ⅔ T, ⅔ T, 1/8 T, 1/3 T and 1/6 T.</td>
<td>Hand B pan containing 2 T. and 1 knife</td>
</tr>
<tr>
<td>Summarize</td>
<td>Measure 1 heaping T.</td>
<td>Measure to determine the number of level T. in 1 heaping T.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Supplies</th>
<th>Illustrative Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan for flour</td>
<td>sifter</td>
<td>Set of graduated measuring cups and teaspoons</td>
</tr>
<tr>
<td>bowl (1 qt.)</td>
<td>2 T.</td>
<td>Pint measure, or pint fruit jar</td>
</tr>
<tr>
<td>2 meas. cups</td>
<td>Pitcher (1 pt.)</td>
<td></td>
</tr>
<tr>
<td>(1 for liquid)</td>
<td>2 pie pans</td>
<td></td>
</tr>
<tr>
<td>(1 for dry)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 knife of spatula</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A's Discussion:

"We are members of the Happy Hour Cooking Club of Leander. My teammate is Mary Jones and my name is Clara Smith. One of the first things we learned in our club is that we can be more sure of having a good result each time we cook if we measure carefully. We will show you how we measure both dry and liquid ingredients.

"Before we begin to cook we have our hair well combed and pinned back, have clean hands and finger nails and put on a clean apron. We read our recipe and collect the utensils and materials we will need. We washed our hands before this demonstration.

"Mary has given me the things I will need to demonstrate measuring flour with a cup. She has sifted this flour and I will pile it lightly into the cup with a tablespoon. If I do not put it in carefully I will pack the flour and there will be too much in the cup. Shaking the cup or dipping it down into the flour also packs the flour. This is a standard measuring cup which means that it holds ⅔ pint. If you do not have a measuring cup test the capacity of your cup by filling it with 18235fr"
water and pouring the vnter in a pint measure or fruit jar. This measuring cup is divided into thirds on one side and fourths on the other side. To measure \( \frac{3}{4} \) cup fill to the \( \frac{3}{4} \) mark and level it with the tablespoon. Some people have a measuring cup set which includes a separate cup for each division. If I had a cup which held only \( \frac{3}{4} \) cup I would level it with a knife or other straight edge. This cup holds one cup to the top so to measure one cup, I fill it a little more than full and place the edge of the knife at right angles to the edge of the cup then move the knife across the top edge of the cup.

"We will show you how much more flour there is in a cup of flour which has been packed than one which has been lightly filled. I am filling this cup by dipping it into the flour shaking it and pressing it with the tablespoon before leveling. I will sift the flour and ask Mary to measure it. You see she has ( ) cups of flour after it has been piled lightly into the cup. This shows why our cookies and muffins are sometimes too stiff.

"This is a cup for measuring liquids. You see it has a little space above the I cup mark so liquids will not spill easily. I place the cup on a level surface and fill it until the water reaches the one cup mark. If it is above the mark I pour out a little. Mary will demonstrate how to measure with a spoon."

B's Discussion:-

"I will show you how club girls measure dry materials like flour, baking powder and spices, with a spoon. I am using a tablespoon because it shows a little plainer than a teaspoon. A teaspoon would be measured in the same way. To measure a level tablespoon place the sharp edge of the knife at right angles to the bowl of the spoon and run it along from the handle to the tip of the spoon. To measure \( \frac{3}{4} \) spoonful divide one spoonful lengthwise through the middle and push out one half. For \( \frac{3}{4} \) spoonful divide one half spoonful crosswise a little closer to the handle than the tip of the spoon and push out one half. For \( \frac{1}{8} \) spoonful, divide \( \frac{1}{8} \) spoonful from the center of the spoon to the center of the outer rim and push out one half.

"To measure \( \frac{1}{3} \) spoonful begin with a level tablespoon and divide it into thirds crosswise. Push out \( 2/3 \). For \( \frac{1}{6} \) spoonful divide \( 1/3 \) spoonful in the center crosswise and push out \( \frac{1}{2} \).

"\( \frac{3}{4} \)-H recipes call for level measurements and to show why they are more definite I will take a heaping tablespoon of flour and ask Clara to measure it and show how many level tablespoons it contains. The amount in a heaping tablespoon of flour would vary according to the way the flour is heaped on it. It might be a little more than a rounding teaspoon or it might be heaped as much as the one I showed you which contained ( ) level teaspoons. Some people have a set of measuring spoons like this. These hold 1 t, \( \frac{1}{2} \) t, and \( \frac{1}{4} \) t. Each would be leveled in the same way that I showed you in measuring 1 T.

"Clara and I have shown you how to measure both dry and liquid materials in a cup and how to measure various divisions of a tablespoon of flour. We have shown the importance of sifting flour before measuring and also of handling flour carefully after it is sifted. We believe that it is important for club girls to use level measurements, because they are definite and we are more sure of our results than if we 'guess.' If there are any questions we will try to answer them. (Repeat question so everyone may hear before giving answer.) If there are no more questions we thank you for listening to our demonstration."
**Example**

**HOME MANAGEMENT TEAM DEMONSTRATION**

**Washing Dishes**

<table>
<thead>
<tr>
<th>A's Discussion</th>
<th>A's Work</th>
<th>B's Discussion</th>
<th>B's Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce team</td>
<td>Show on chart</td>
<td>Acknowledge introduction</td>
<td></td>
</tr>
<tr>
<td>Give plan of demonstration</td>
<td></td>
<td>Bring on tray of soiled dishes</td>
<td></td>
</tr>
<tr>
<td>Washing dishes can be a joy</td>
<td></td>
<td>Hold chart showing steps of dishwashing</td>
<td></td>
</tr>
<tr>
<td>Steps in dish-washing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help scrape and stack dishes</td>
<td>Scraping &amp; stack</td>
<td>Soaking when necessary</td>
<td>Arranging pans for convenience</td>
</tr>
<tr>
<td>Hand dishpans to B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have soapy and water handy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soapy water for washing &amp; clear water for rinsing</td>
<td>Fixes water for washing &amp; rinsing</td>
<td>Remove teakettle &amp; chips when A is through with them</td>
<td></td>
</tr>
<tr>
<td>A good dish cloth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order for washing dishes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washes dishes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empties water and cleans dishpans</td>
<td>Wiping dishes</td>
<td>Shows qualities of good dish towel</td>
<td></td>
</tr>
<tr>
<td>Rinse dishcloth and hang on line</td>
<td>Beauty in clean sparkling dishes</td>
<td>Wipes dishes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hangs towel on line</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shows putting away</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Care of dishpan and dish cloth and towel</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Summary</strong></td>
<td></td>
</tr>
</tbody>
</table>

"We are a demonstration team from the Clic-Clock Club. My team mate is Irene Smith and I am Betty Brown. We are taking the 'Learning to be a Homemaker' project and are going to show you some of the things we have learned about washing dishes, including the steps and how each is done. Some people dislike dishwashing because it is a homely task, but we club girls like it. We like to see how many minutes we can cut off our time for dishwashing and we enjoy seeing a stack of clean sparkling dishes. The steps include:

1. Removing dishes from table
2. Scraping and stacking, arranging them at the left of the dishpan.
3. Soak dishes which are hard to wash
4. Arrange pans for washing and rinsing.
5. Pour water and add soap
6. Wash dishes
7. Dry dishes
8. Put away"
"As we are removing dishes from the table, we scrape and stack them, placing them at the left of the dishpan. Those dishes which need it are put to soak. We use cold water for dishes which have uncooked eggs, uncooked flour or starch or milk on them. We use hot water for dishes which have held sugar, syrup, greasy foods, or most cooked foods. Dishpans are arranged with the pan for washing at the right of the stacked dishes and the rinsing pan at the right of the washing pan. If this can be done at a place convenient to the cupboard, it will save time in putting the dishes away. Otherwise a convenient clean place to put them when drying them, is necessary."

"We like to wash dishes in hot soapy water. Today we are dissolving soap chips in hot water. A soap shaker is convenient for using small pieces of soap. We need to be sure the dish cloth is clean, because a greasy cloth will soil the water. We do not like to think of eating from dishes which have been washed with a dirty cloth or dirty water. The general order for washing dishes is: (1) glassware, (2) silverware, (3) china, and (4) kitchen utensils. If we have a large number of dishes, we change the water several times. Rinsing is done in a pan of hot water and then they are drained (if space is sufficient) for drying."

"Clean, soft white tea towels add to the joy of dishwashing. Glassware and silver are dried with a tea towel. China need not be dried with a towel if it is rinsed in scalding water and well drained. However, some like to dry all of their dishes with a towel. Today we are drying all of the dishes. When the dishes are finished, they are put in the cupboard in an orderly way, sparkling and ready to be used and enjoyed at the next meal. The dishwater is poured out, the dishpans are cleaned and put away and the dish cloth and dish towels hung in a clean airy place.

"We have shown you today how we club girls wash dishes. We have given the steps of the process and shown you how we arrange our work, the equipment we use, how we wash them, dry them, put the dishes away and care for our equipment."