Bottle/ Bucket Calf

IOWA STATE UNIVERSITY
Extension and Outreach

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Iowa 4-H Teaches Life Skills

The mission of 4-H is to help youth become self-directing, contributing members of society. The Iowa State University Extension 4-H Youth Development Program continues to offer opportunities for youth to practice life skills, the learned abilities they need to develop successful attitudes and behaviors for life.

The 4-H Youth Development Program is based on experiential learning, the idea that people learn best by practicing new information in real-life situations and reflecting on (thinking about) that experience.

Youth need to learn many life skills. The Bottle/Bucket Calf project focuses on two life skills: decision making and learning how to learn. In 4-H, youth gain life skills while learning project skills. Bottle/Bucket Calf project skills relate to selecting an appropriate calf, housing, nutrition, observing the calf, and using management practices to maintain the calf's health.

With the support and guidance of parents and 4-H leaders, youth involved in 4-H Youth Development Programs are more prepared to grow in personal well-being and to be contributing members of our society. 4-H helps youth gain the most from and give the most to life.

Experiential Learning Model

If you are raising a market or breeding animal, the following publications are additional resources available at your local extension office.

4H 106-B
Breeding Beef ID Report
4H 106-BI
4-H Market Beef ID Report
4H 228-JR
Youth and 4-H Market Beef, Sheep, and Swine Record Worksheet for Junior 4-H'ers
4H 228-WS
4-H Market Animal Project Worksheet
4H 229-WS
4-H Breeding Animal Project Worksheet
4H 229-bWS
Lifetime Cow Record
4H 252A
Bite into Beef, Beef Level 1
4H 252B
Here's the Beef, Beef Level 2
4H 252C
Leading the Charge, Beef Level 3
4H 252LDR
Beef Group Activity Guide

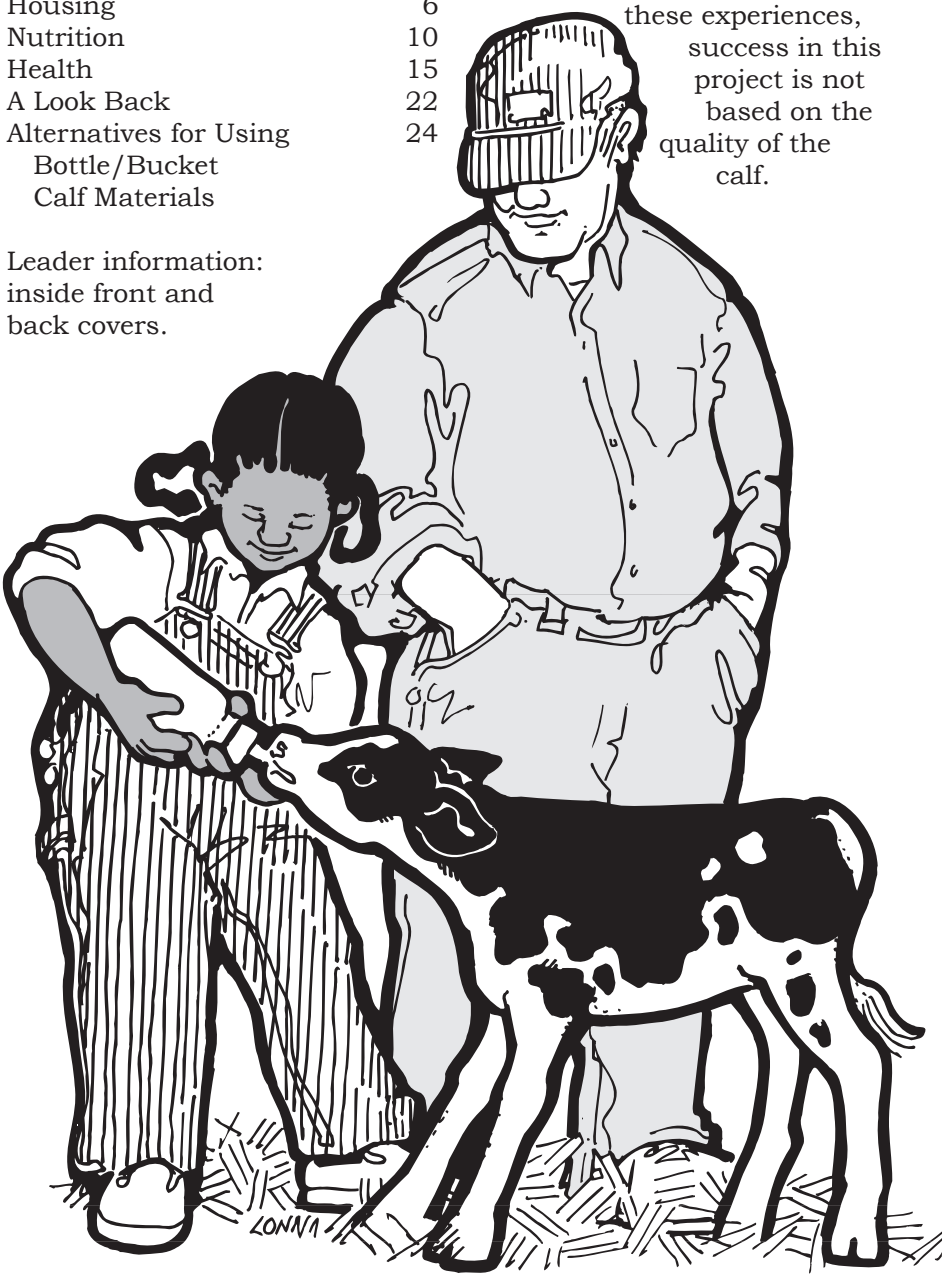
If you are raising a dairy cow, the following publications are additional resources available at your local extension office.

4H 106-A
Dairy and Dairy Goat ID Report
4H 392
Learning about Dairy—Dairy Resource Guide
4H 392-WS
Dairy Project Worksheet
4H 393-WS
4-H Dairy Cow Lifetime Record
4H398A
Cowabunga, Dairy Level 1
4H 398B
MOOOving Ahead, Dairy Level 2
4H 398C
Leading the Way, Dairy Level 3
4H 398LDR
Dairy Group Activity Guide

Overview

Contents

The Bottle/Bucket Calf project is an opportunity for youth in grades 4 to 6 to learn about caring for a young calf. Youth select a calf with an adult partner (parent, 4-H leader, neighbor, relative, etc.). The partners then work together to raise the calf, completing learning experiences that focus on calf housing, calf nutrition, and calf health. Since this project emphasizes what the youth learned through these experiences, success in this project is not based on the quality of the calf.



Partner Pointers

A partnership is a cooperative effort that benefits everyone who is involved. Partnerships are common in the livestock industry, but the Bottle/Bucket Calf project may be your youth's first experience with a partnership. This experience can show youth how everyone benefits when they contribute to a partnership.

Your main roles as a Bucket/Bottle Calf project partner include:

• serving as a resource person to help youth learn more about raising a calf.

• encouraging life skill development by helping youth learn about decision making and learning to learn.

decision making—choosing among several alternatives.

learning to learn—understanding the methods and skills needed for learning.

• asking and answering questions that enhance the learning experience.

• providing a safe, supportive educational environment.

More specific roles are included at the end of each section.

Selecting Your Calf

Life Skill: decision making, gathering information, and choosing from alternatives.

Project Skill: selecting an appropriate bottle/bucket calf.

People make decisions every day. Some choices, such as "Which shirt should I wear today?" are fairly easy to decide. Other decisions are more difficult, such as "Which summer camp should I attend?" or "Which bicycle should I buy?"

Your Bottle/Bucket Calf project will involve a lot of decisions. Let's start with the most exciting—"Which calf should I select for this project?"

You will need to gather some information before you can make this decision. This process will involve identifying your goal, locating possible calves, considering each calf, and choosing one calf.

Words to Know

Colostrum—the first milk produced by a cow after calving.

Disposition—the temperament or mood of a certain calf.

Identify Your Goals

Clear goals will help you decide what is most important to you. If your goal is to add a calf to your family's dairy herd, breed and heredity may be the most important factors. If your goal is to learn how to care for a calf, gentleness or cost may be more important.

Think about what you hope to learn from the Bottle/Bucket Calf project. In your goals, include things you want to learn about bottle/bucket calves and things you want to learn about yourself. Discuss your goals with your partner, then write them in the space below.

Project Goals

(What I want to learn about selecting a calf)

Example: I want to learn where I can buy a calf.

1. _____

2. _____

3. _____

Life Skill Goals

(What I want to learn about decision making, gathering information, or choosing from alternatives)

Example: I want to learn how to make good choices.

1. _____

2. _____

3. _____

Locate Several Calves

You can look for a calf several places. Your family may have a herd with an available calf. You also could check with neighbors, relatives, or other cattle producers. Attending an auction at a sale barn is another alternative.

With your partner's assistance, locate three available calves and describe them here.

Record the breed of calf, sex, and any distinguishing marks.

Calf 1_____

_____

_____

Calf 2_____

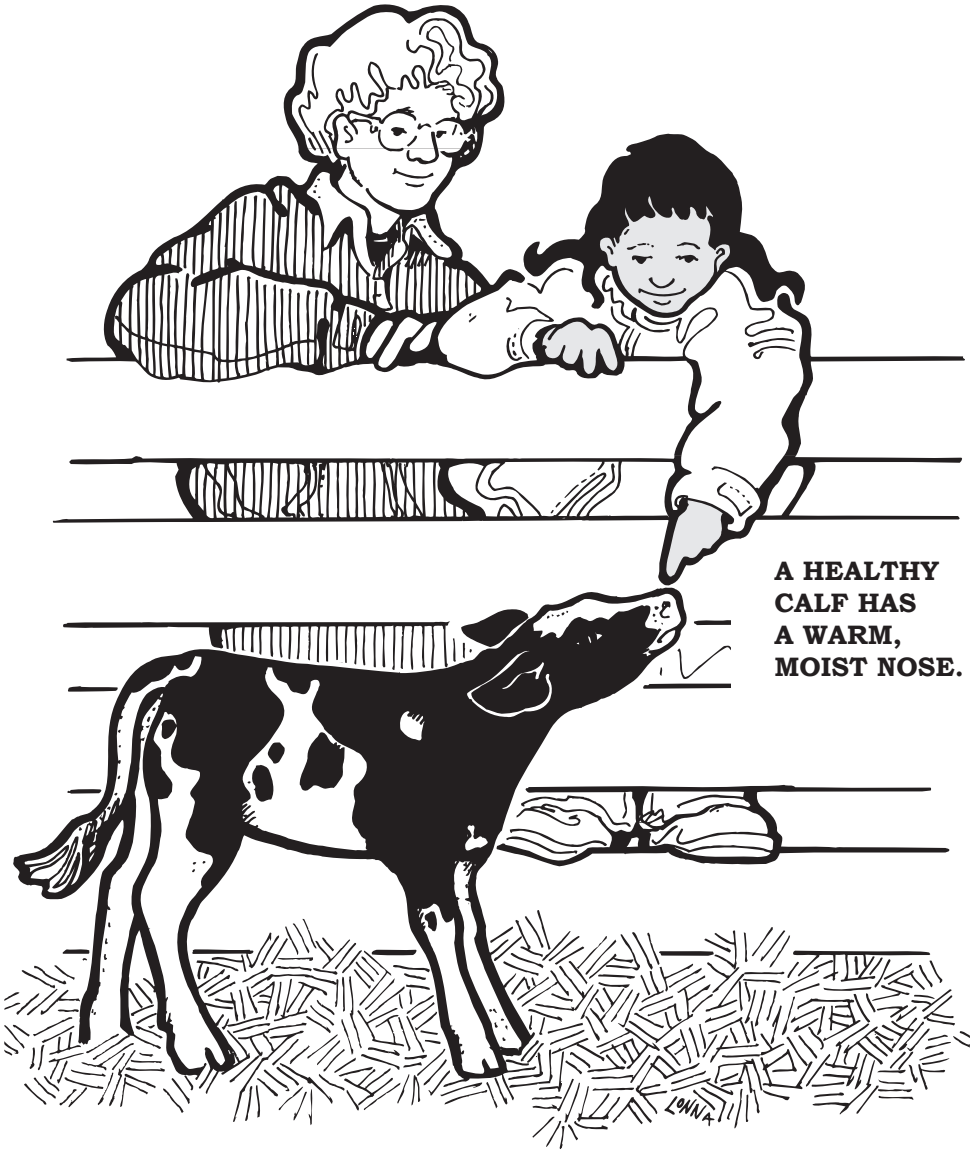
_____

_____

Calf 3_____

_____

_____



A HEALTHY CALF HAS A WARM, MOIST NOSE.

Consider Each Calf

You will need to consider many things before you choose a bottle/bucket calf.

Age—A bottle/bucket calf should be in your possession within one week of birth.

Appearance—A healthy calf should have a smooth, shiny coat; a warm, moist nose; and bright, alert eyes.

Colostrum—A newborn calf should have been fed colostrum for the first 3 days. This special milk gives calves a healthy beginning.

Disposition—Select a calf that is quiet and calm. A wild calf would be a lot more work for you and would be more difficult to manage and show.

Price—Find out the current market price range for newborn calves so you will know how much to spend.

Choose a Calf

Discuss each calf and your goals with your partner. Then decide which calf will be the best for you.

Ask your partner to go with you to purchase the calf you selected. Ask questions and fill out this calf purchase record.

Ask each calf's owner questions and look at each calf carefully. Then take notes on the grid below.

	Calf 1	Calf 2	Calf 3
Age			
Appearance			
Colostrum			
Disposition			
Price			

Calf Purchase Record

Calf's name

_____

Purchase date

_____

Purchase price

_____

Other information

_____

_____

_____

_____

Ask someone to take a picture of you and your new calf. You may even want to have the calf's original owner or your partner in the picture, too.

(Attach picture here.)

Talk It Over

Write answers to the following questions in the space provided. Then discuss your answers with your partner.

Where did you find three calves?

What factors did you consider when choosing your calf?

Why is it important to consider more than one calf?

Why do you need to consider your goals while choosing a calf?

What is another purchase you have made that required choosing from alternatives?

What did you learn that you can use when you make other decisions?

Additional Challenges

Challenge #1

Talk to a dairy or beef producer. Find out how the producer selects animals to add to the herd. What will you want to ask the producer?

Question 1:

Question 2:

Question 3:

Challenge #2

Design a magazine ad to sell a calf. Think of the qualities that are the most important in a calf, and emphasize those qualities in your ad. Attach to this page with tape or staples.

Partner Pointers

When selecting a calf for the Bottle/Bucket Calf project, youth will practice gathering information and making decisions. This is a life skill youth will use in a variety of situations, such as how to spend money, select clothes, choose classes, or make a purchase.

Your involvement in this process might include:

- helping youth set realistic goals.
- helping youth locate possible calves for this project.
- discussing what was learned from this decision-making process.

Housing

Life Skill: learning to learn—using learned information and applying it to own situation.

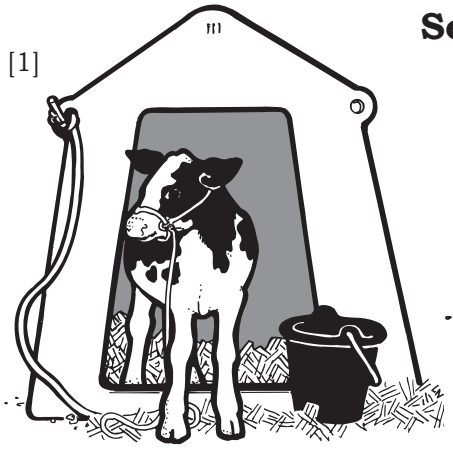
Project Skill: creating a healthy, safe, and economical place for a calf to be housed.

The old saying "you learn something new every day," is true, but it is a challenge to apply all this new information to your life. One way you know if you have learned is to use the new information in a real life situation. When you use learned information in new situations or to solve problems, you are using an important life skill—learning to learn.

Before you bring your calf home, you will need to decide where your calf will live. In this section, you will learn calf housing guidelines that will help you create a good place for your calf to begin life.

Set A

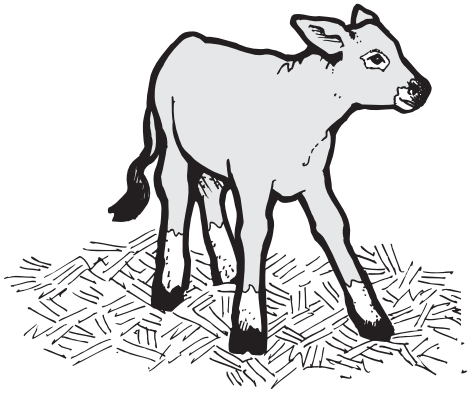
[1]



[2]

Set B

[1]



[2]

Set C

[1]

[2]

Words to Know

Stale—no longer fresh and clean.

Stress—tension caused by a new and unusual situation.

Resources—supplies that are available to use.

Unique—something unusual that is not often seen.

Look at the sets of pictures on page 6. Circle the picture from each set that shows how you would house your calf. Answer the questions below.

Set A

Which picture shows the best housing for a calf? Why?

_____

_____

How big do you think a house for a calf should be?

_____

_____

Set B

Which picture shows the best bedding for a calf? Why?

_____

_____

What would make good, soft bedding for a calf?

_____

_____

Set C

Which picture shows the best protection for a calf? Why?

_____

_____

Why does a calf need protection from wind and rain?

_____

_____

Learn New Information

Read the calf housing guidelines below. Then review the sets of calf housing pictures. If you chose picture [1] of each set, you chose the best way to house a calf. The ***first*** picture in each set is correct.

Calf Housing Guidelines

Individual pens (Birth to 3 months)

Individual pens reduce the chance of spreading disease from one calf to another.

Adequate Space

Create a house with three solid walls using materials you have available (fiberglass, plywood, scrap lumber, or baled hay).

Provide a 4-foot x 6-foot house with a 4-foot x 2-foot outside fenced run (or the animal can be tied or tethered).

Bedding

Bed calves deeply in clean and dry straw, shredded newspaper, or wood shavings.

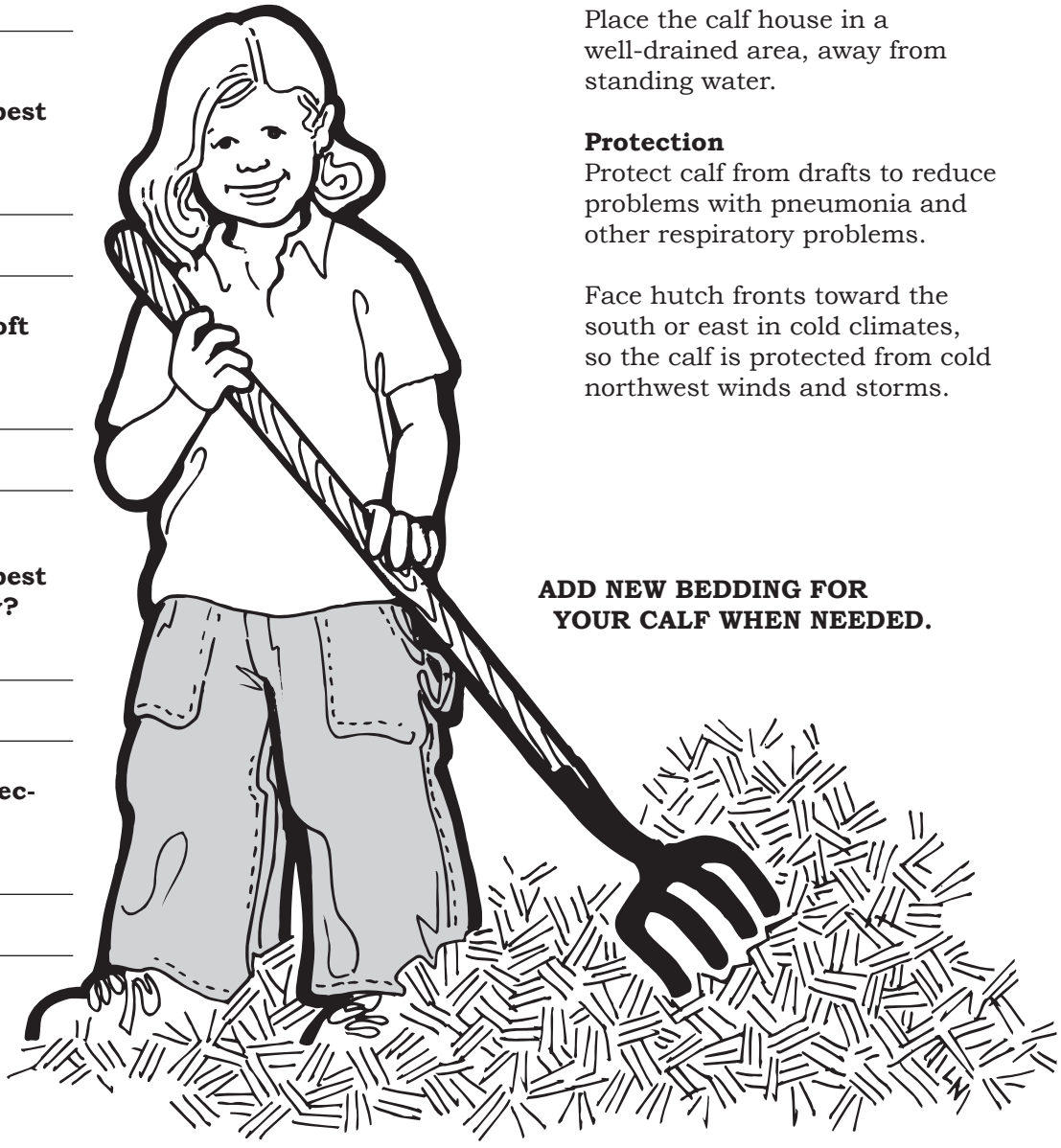
Add new bedding when bedding becomes wet or soiled.

Place the calf house in a well-drained area, away from standing water.

Protection

Protect calf from drafts to reduce problems with pneumonia and other respiratory problems.

Face hutch fronts toward the south or east in cold climates, so the calf is protected from cold northwest winds and storms.



ADD NEW BEDDING FOR YOUR CALF WHEN NEEDED.

Group housing (3 to 5 months)

After your calf is on all dry feed, it can be housed with a few other calves. This will help each calf adjust from a single pen to a group setting with minimal stress. If you only have one calf, it would be fine to house the calf by itself.

Group four to eight calves together.

Calves should be close to the same age and size.

Make 25 to 30 square feet of bedded area available for each calf.

Apply Learned Information

Think about the calf housing guidelines, and then consider the resources (space, materials, money, time, etc.) that are available to you. Create a place for your calf to live that includes adequate space and that is dry, clean, and free from drafts. Sketch your calf's housing on the top, at right. (Or attach a photograph).

If you could have unlimited resources (space, materials, money, and time), what would ideal housing for a calf look like? Sketch your idea on the bottom at right.

My Calf's House

Ideal Housing

Additional Challenges

Challenge #1

Ask your parents how they chose the house in which you are living. What criteria were important in that selection process? Write a paragraph about your parents' house-selection decisions.

Talk It Over

Write answers to the following questions in the space provided. Then discuss your answers with your partner.

What resources did you use to create housing for your calf?

How did you create a house that was free from drafts?

What are important things to consider when creating housing for a new (0 to 3 month) calf?

Why is it important to house older (3 to 5 month) calves with only a few other calves?

What is another situation where you apply guidelines to your life?

Why will it be easier to remember information if you use that information to create something?

Challenge #2

Visit several farms that house young calves. Notice how a variety of resources are used to create places that are dry, clean, draft-free, and that provide adequate space. Make a list of three unique ideas you see at each farm.

Farm A

1. _____
2. _____
3. _____

Farm B

1. _____
2. _____
3. _____

Partner Pointers

When youth create housing for their calves, they will be using learned information in new situations or to solve problems. This is a key aspect of the learning to learn life skill. Youth will continue to apply learned information throughout their lives in a variety of situations.

Your involvement in this process might include:

• helping youth understand the calf housing guidelines.

• assisting youth as they locate possible calf housing resources.

• discussing what was learned when they applied information about housing to their own situation.

• helping youth learn the importance of looking at alternatives.

Nutrition

Life Skill: learning to learn—breaking information into parts and creating a sequence of steps.

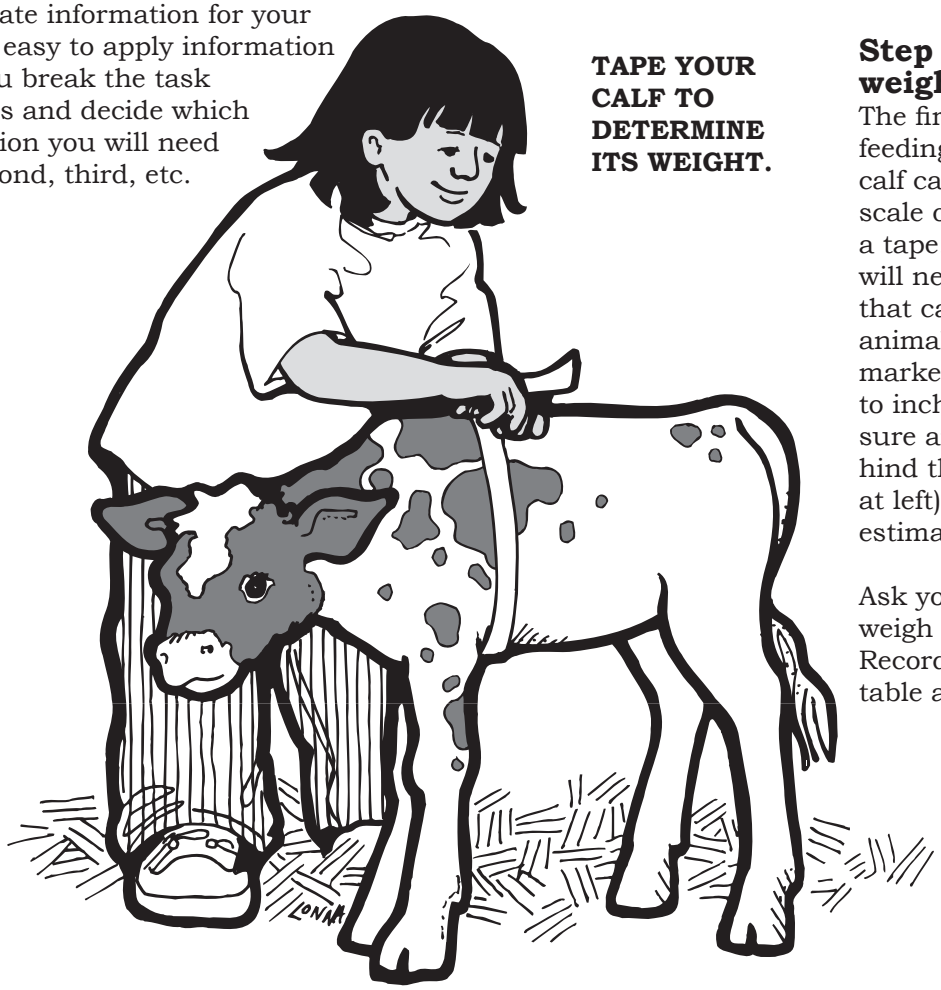
Project Skill: developing a plan for providing adequate nutrition for a calf.

People often have a BIG problem when they are trying to learn something new—there is too much information! One way to make learning easier is by organizing a lot of information into smaller pieces or steps.

Researchers have collected a lot of information about feeding calves. How can you find and use the appropriate information for your calf? It's easy to apply information when you break the task into parts and decide which information you will need first, second, third, etc.

Calf Weight Table

	Date	Weight
Birth		
Day 1		
Day 4		
2 Months		
4 Months		



TAPE YOUR CALF TO DETERMINE ITS WEIGHT.

Plan Each Step

Step one—weighing your calf

The first step in accurate calf feeding is weighing your calf. A calf can be weighed on a feed scale or it can be measured with a tape. If you choose to tape, you will need a special tape measure that can be obtained at a feed or animal supply store. This tape is marked off in pounds in addition to inches. Wrap this tape measure around your calf's body, behind the front legs (see diagram at left). Carefully read the tape to estimate your calf's weight.

Ask your partner to help you weigh or measure your calf. Record your calf's weight on the table above as your calf grows.

Step two—feeding your newborn calf the day it is born

Learning from research
Colostrum is the first milk produced by a cow after calving. It provides nutrition and antibodies to protect calves from disease. Calves should receive colostrum within 10 to 15 minutes after birth. Calves should be offered 4 to 8 pounds (2 to 4 quarts) of colostrum from a very clean nipple bottle or nipple pail. Force-feeding from a nipple bottle or pail is better than letting a calf nurse because the amount of milk a calf drinks can be accurately determined.

Your feeding plan
After carefully reading the research about how newborn calves should be fed, use this information to plan how you will feed your calf.

Supplies you will need_____

_____

_____

_____

Your calf's weight_____

What you will feed_____

_____

_____

_____

_____

When you will feed_____

_____

Did You Know?

A calf doubles its weight in 8 to 10 weeks.

Step three—feeding your 1- to 3-day-old calf

Learning from research
Fresh, lukewarm colostrum from your calf's mother should be fed for at least 3 days (six feedings). Your calf should be fed twice each day. Do not overfeed your calf! Six percent of your calf's weight is enough.

After you determine your calf's weight, use this formula to figure the amount of milk needed.

Calf's weight x 6% =
Pounds of Milk Needed Each Day

Example: An 80-pound calf needs 5 pounds of milk each day.

80 pounds x .06 =
5 pounds of milk

Your feeding plan
After carefully reading the research about how to feed 1- to 3-day-old calves, use this information to plan how you will feed your calf.

Supplies you will need_____

_____

_____

_____

Your calf's weight_____

What you will feed_____

_____

_____

_____

When you will feed_____

_____

Step four—feeding your calf after 3 days

Learning from research

Feed calves for the best growth at the least cost. Excess colostrum and waste milk are the cheapest feeds for your calf. Whole milk from a dairy herd is excellent feed, but a calf milk replacer may be less expensive. (Your partner can help you choose a quality milk replacer and show you how to prepare the powder by mixing it with water.) Feed milk or milk replacer at 8 percent of the calf's body weight:

Calf's weight x 8% = Pounds of Milk Needed Each Day

Example: A 100-pound calf needs 8 pounds of milk each day.

100 pounds x .08 = 8 pounds of milk

Your feeding plan

After carefully reading the research about how to feed between 3 days and 1 month, use this information to plan how you will feed your calf.

Supplies you will need_____

_____

_____

_____

Your calf's weight_____

What you will feed_____

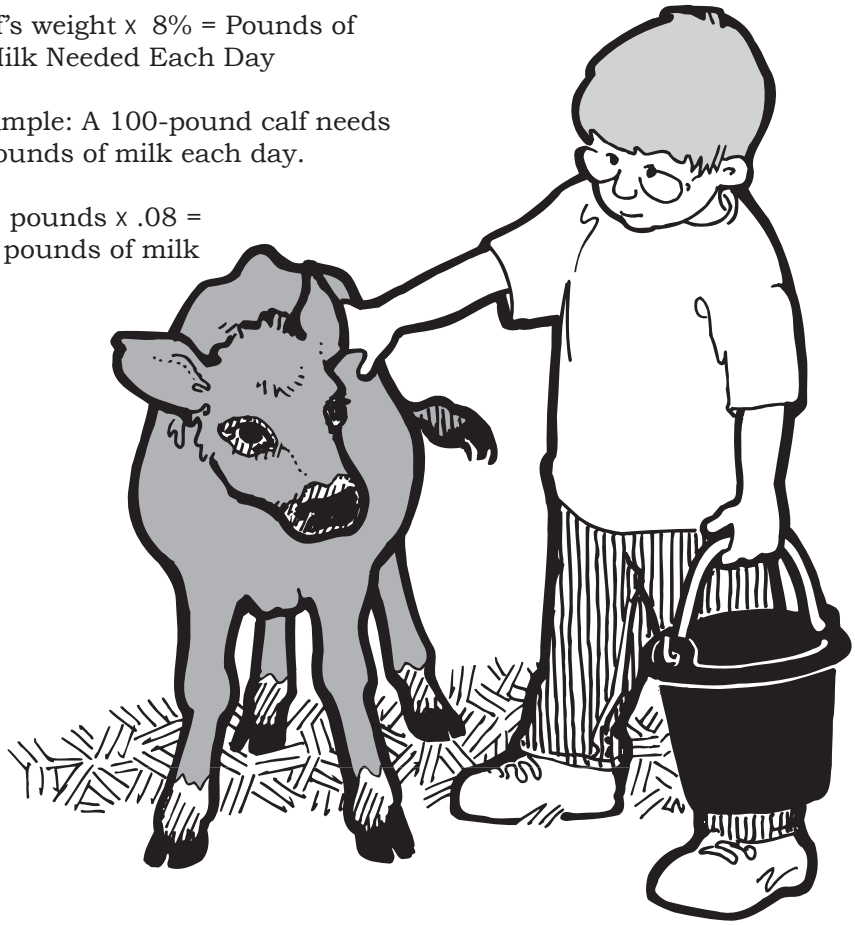
_____

_____

_____

When you will feed_____

_____



USE A QUALITY CALF STARTER TO WEAN YOUR CALF.

Step five—feeding your 1- to 3-month-old calf

Learning from research

A calf is ready to be weaned when it is eating 1½ or more pounds of calf starter daily. This change should be made slowly, gradually reducing the amount of milk. Fresh, clean water; fresh calf starter; and fresh hay should be available every day.

A calf should be fed 2 to 4 pounds of calf starter each day. A quality calf starter provides energy, protein, minerals, and vitamins. A calf can have as much fresh water and good quality hay as it wants.

Your feeding plan

After carefully reading the research about how to feed 1- to 3-month-old calves, use this information to plan how you will feed your calf.

Supplies you will need_____

_____

_____

_____

Your calf's weight_____

What you will feed_____

_____

_____

_____

When you will feed_____

_____

Did You Know?

A calf drinks about 30 gallons of milk in the first month.

Step six—feeding your 4-month-old calf

Learning from research

A calf should be growing well and eating plenty of hay and hay silage. If a calf is put on pasture or fed corn silage, it also will need grain to keep it growing properly. (Your partner can help you decide what is best for your calf.)

Your feeding plan
After carefully reading the research about how to feed calves older than 4 months, use this information to plan how you will feed your calf.

Supplies you will need_____

Your calf's weight_____

What you will feed_____

When you will feed_____

Words to Know

Calf milk replacer—a dry milk that is added to water before being fed to calves.

Nutrient—an ingredient that promotes growth.

Taping—a method of estimating a calf's weight by using a special measuring tape.

Talk It Over

Write answers to the following questions in the space provided. Then discuss your answers with your partner.

What did you feed your newborn calf?_____

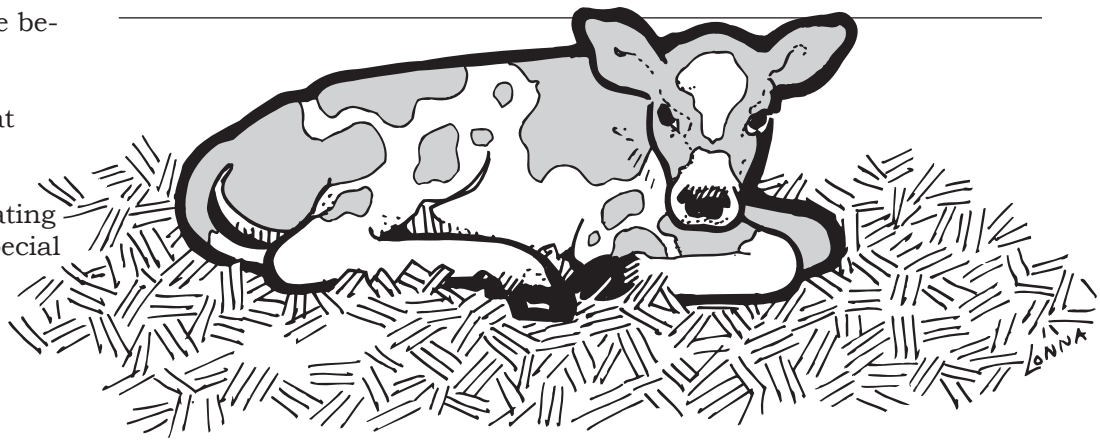
How did you know when to wean your calf?_____

Why is colostrum important?_____

Why is it important to know your calf's weight?_____

How does it help to break a task into steps?

What school assignment would have been easier if it would have been divided into small parts?



Additional Challenges

Challenge #1

Colostrum is created by all mammal mothers to help nourish their young. Talk with a pediatrician, a nurse, or a new mother about the benefits infants receive from drinking colostrum—the mother's first milk. Write down three ways drinking the mother's colostrum benefits a human infant or a calf.

1._____

_____

2._____

_____

3._____

_____

Partner Pointers

When youth develop a nutrition plan for their calves, they will be breaking information into parts and creating a sequence of steps. This is an important part of the learning to learn life skill. This skill is used in a variety of situations, like explaining to someone how to assemble a bicycle or locating information on the World Wide Web.

Your involvement in this process might include:

• helping youth understand the nutrition guidelines.

• assisting youth as they develop sequential plans for feeding their calves.

• discussing with youth the benefits of breaking information into steps.

Health

Life Skill: learning to learn—observing to gain new information.

Project Skill: carefully observing a calf and calf management practices to make sure the calf's health is maintained.

One of your main responsibilities in the Bottle/Bucket Calf project is keeping your animal healthy. Careful observation of the way your calf looks, acts, and is treated will help identify problems early—when they are easiest to solve.

Observation is an important part of the learning to learn life skill. You can learn a lot of new information by using your five senses:

1. touch can help you identify a piece of silk fabric.

2. sight can help you learn the characteristic markings of a monarch butterfly.

3. smell can help you determine if your lawn mower is using too much oil.

4. hearing can help you identify the melody in a jazz performance.

5. taste can help you know if the white grains in your kitchen canister are salt or sugar.

OBSERVE YOUR CALF.

You will need to use three of your senses when you observe your calf and calf management practices. By looking, listening, and touching, you can determine if your calf appears healthy. If you notice a problem, you may need to contact a veterinarian. Your partner can help you determine when a veterinarian's help is needed.

What could you learn about your calf's health by listening?

What could you learn about your calf's health by looking?

What could you learn about your calf's health by touching?

There are many ways you can observe a healthy calf and calf management practices.

Observing a Healthy Calf

Ears—Look at your calf's ears. They should stand up and not appear droopy.

Eyes—Look at your calf's eyes. Healthy calves have eyes that are alert and bright.

Nose—Touch your calf's nose to make sure it is moist and warm.

Coat—Touch and look at your calf's coat. It should appear smooth and shiny.

Breathing—Listen to the way your calf breathes. You should hear your calf taking breaths in a regular, comfortable rhythm. Your calf should not be coughing or taking labored breaths.

Temperature—Look at your calf's temperature on a rectal thermometer. A normal temperature is 101.5°, but this varies from calf to calf and at different times of the day.

Bowel movements—Look at your calf's fecal material. They should be solid, with no signs of diarrhea.

Eating and drinking habits—Look to see what your calf eats and drinks each day. Healthy calves have a good appetite and do not drink too much water. (It depends on size of calf, weather, etc.) Your adult helper can help you decide what is right for your calf.

Observing Healthy Calf Management Techniques

Housing—A calf's house should have clean, fresh bedding, with no accumulated wastes or standing water. Good ventilation also is necessary.

Feeding—Fresh food and water should be available every day. The same person should feed a calf at the same times every day to lessen stress.

Horns—A calf's horns should be removed when horn buttons form at about 2 weeks. An adult should use a dehorning iron for this task.

Teats—An adult should use sharp scissors to snip off extra teats.

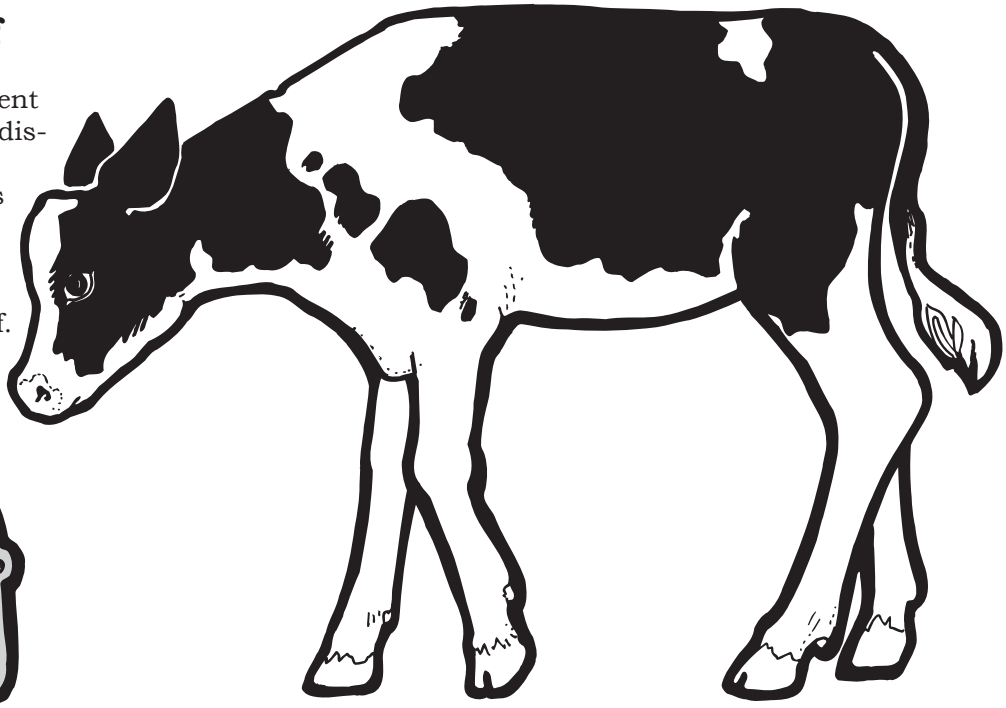
Flies and insects—Try to limit the number of flies and insects in your calf's house. Your adult partner can help you determine the best method of pest control.

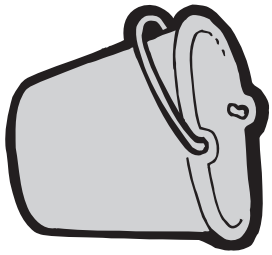
Vaccinations—Calves need to be vaccinated for brucellosis between 3 and 6 months.

Hoofs—A calf's hoofs should be trimmed by an adult before the calf is turned out on pasture. An untrimmed hoof forces the calf to walk on its heels.

Observe Your Calf

Observe your calf at least two times each day. Frequent observation helps in early disease diagnosis, and treatment of any disease is more successful when diagnosed and treated early. Practice using your senses to observe your calf. Use the calf observation chart on page 17 to record your observations.





Calf Observation Chart*

When you observe a sign of a healthy calf, place an X in the appropriate box. If you observe a problem, work with your partner to correct it.

Breed_____

Age_____

Sex_____

Calf Identification or Name

_____

Date: For the week of_____ **to**_____

	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6		Day 7	
Ears														
Eyes														
Nose														
Coat														
Breathing														
Weight														
Temperature														
Bowel movements														
Eating/drinking habits														

*Make a copy of this page for each week of your Bottle/Bucket Calf project.

Calf Management Techniques

Write a brief statement (see examples) of how you managed your calf.

Housing
(Added bedding daily.)

Teats
(Mr. Hansen removed two extra teats Feb. 3.)

Vaccinations
(Dr. Norris gave brucellosis shot May 20.)

Feeding
(Followed feeding guidelines.)

Flies and Insects
(Sprayed Fly-Be-Gone weekly.)

Hoofs
(Trimmed June 8.)

Horns
(Mr. Hansen removed on March 15.)

CALVES CAN BE HOUSED TOGETHER AF-TER THEYARE ON DRY FEED.

Talk It Over

Write answers to the following questions in the space provided. Then discuss your answers with your partner.

What three senses did you use to observe your calf?

What do ears look like on a healthy calf?

Why is it important to observe your calf often?

Why should you listen to your calf's breathing?

Healthy plants also can be identified by observation. How might a plant look if it has not been treated properly?

What is another situation where you can use your senses to identify problems?

Additional Challenges

Challenge #1

Cover your eyes with a blindfold and have a friend walk you carefully around your house, barn, or yard. List five things you noticed with your remaining senses.

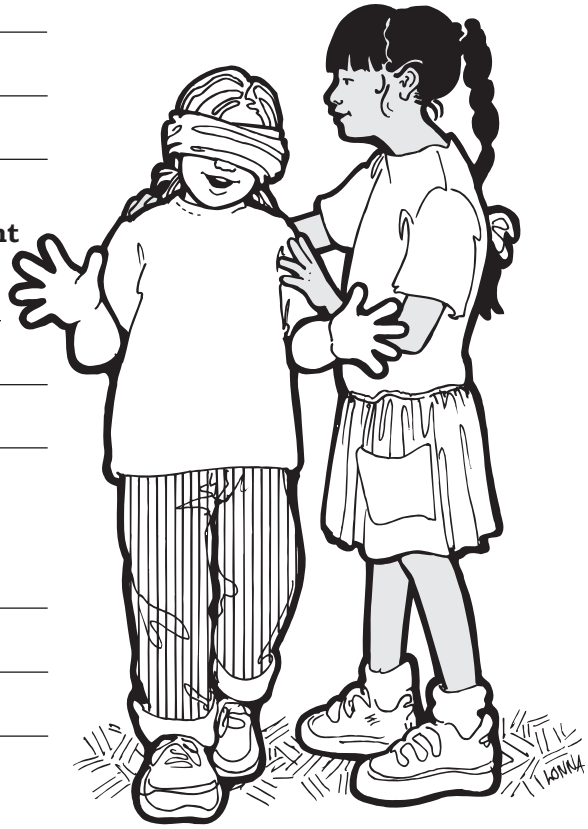
1. _____

2. _____

3. _____

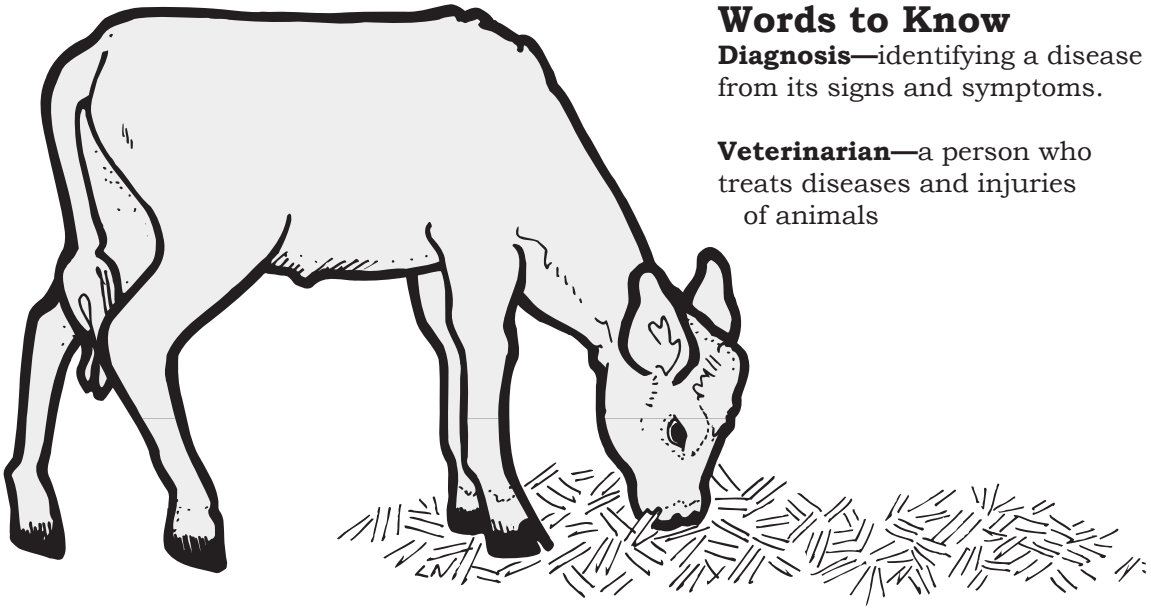
4. _____

5. _____



Calf Temperature Record

	Date	Time	Temperature
1 day			
2 days			
3 days			
4 days			
5 days			
1 week			
2 weeks			
3 weeks			
4 weeks			
2 months			
3 months			
4 months			
5 months			
6 months			



Words to Know

Diagnosis—identifying a disease from its signs and symptoms.

Veterinarian—a person who treats diseases and injuries of animals

Challenge #2

Daily recording of a calf's rectal temperature is one good method of detecting diseases early. Take the rectal temperature of your calf and record your findings on the record chart on page 20. Any variations (high or low readings) may indicate a problem or disease.

Hints: Attach a long string to the thermometer so that it is not lost in the rectum or dropped on the floor.

Try to take the temperature at the same time each day.

Partner Pointers

When youth examine their calf and the calf's environment, they are observing with their senses. Observation is an essential part of the learning to learn life skill. The only way we can take in new information is by observing with our eyes, ears, mouth, nose, or skin.

Your involvement in this process might include:

• helping youth understand the characteristics of a healthy calf and healthy calf management techniques.

• assisting youth as they carefully observe their calf and the calf's environment to identify problems.

• discussing how new information is gained through observation.

Challenge #3

Observe your veterinarian as he/she works with a sick calf. Ask questions to find the answers to the following questions.

How did the calf's owner know there was a problem?

_____

_____

What did the veterinarian diagnose as the problem?

_____

_____

Could this problem have been prevented? How?

_____

_____

_____

List other questions you would like to have answered.

_____

_____

_____

A Look Back

Think about all the experiences you had with your Bottle/Bucket Calf project. Write answers to the following questions, then share your answers with your partner.

What were your goals for the Bottle/Bucket Calf project?

How did you accomplish these goals?

What was the most important thing you learned about bottle/bucket calves?

What was the most important thing you learned about yourself?

What is the biggest problem you had with your Bottle/Bucket Calf project?

What might you do differently next time?

Financial Summary

	Date	Item	Amount	
Cost of New Calf				◂ Subtotal
Cost of Housing				
				◂ Subtotal
Cost of Nutrition				
				◂ Subtotal
Cost of Health Care				
				◂ Subtotal
Other Expenses				
				◂ Subtotal
	Add all subtotals together. **Total Expense =**			

Alternatives for Using Bottle/Bucket Calf Materials

Individual learning

The Bottle/Bucket Calf project is ideal for an individualized learning experience. However, we know youth learn best when given help and encouragement by a caring adult. Youth work with an adult partner's assistance to complete each activity. Youth set their own goals, raise their own calf, and explore their own challenges.

Home school

A meaningful educational experience could be developed using the bottle/bucket calf materials. Some benefits specifically related to homeschooling include:

Science: observing, keeping records, sequencing.

Math: figuring percentages, measuring feed.

Nutrition: following guidelines for human and calf nutrition.

Career exploration: interaction with cattle producers, feed salespeople, veterinarians.

Project club

The bottle/bucket calf materials could easily be used in a 4-H project club. Each meeting could focus on a single topic with individual members responsible for part of the information.

Example: At the "calf nutrition" meeting, one member could demonstrate how to tape a calf and another could bring examples of calf feed.

One alternative for a project club would be to house all of the calves at one location with each youth responsible for a specific calf.

Showing calves

An opportunity to show calves at the fair could be created as an outgrowth of the Bottle/Bucket Calf project. Youth would need instructions on preparing a calf for the fair and on how to show a calf.

Judging would be primarily based on what a member has learned about a calf and calf management as well as the member's overall knowledge of his/her project. In most shows, the confirmation style, breed character, or other physical features of the actual calf are not judged. Judging could be broken down into categories (written records, oral interview, and showmanship), with the points combined at the end.

Written records—Are all records complete, including figures and written responses?

Based on written records, did the member learn from the Bottle/Bucket Calf project?

Did the member set goals and then evaluate those accomplishments?

Oral interview—Scored by response to each interview question.

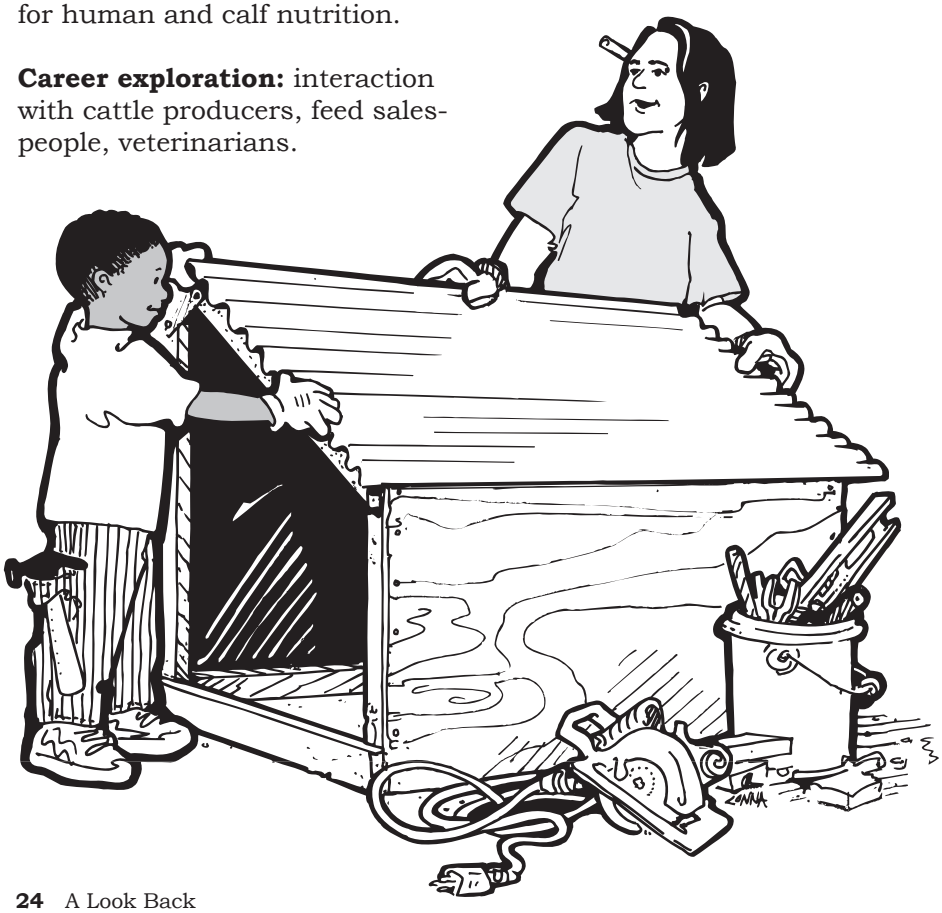
General health, condition, and management of calf AND youth's knowledge about what and how much the calf eats, etc.

What the youth has learned about care and raising of the calf AND what the youth knows about actual calf (weight, birthdate, etc.).

Showmanship—Grooming and cleanliness of calf upon entering the show ring.

Partner and Youth Together

Youth will learn about themselves and calves using any of the above alternatives. The key to a successful Bottle/Bucket Calf project is a youth-adult partnership that focuses on what the youth is learning.



PARTNERS AND YOUTH WORK TOGETHER ON THE BOTTLE/BUCKET CALF PROJECT.

Youth Learning Characteristics

Characteristics of Youth, Grades 4 to 6	Implications and Applications
Have a lot of energy	Provide active learning experences
Like to belong to groups	Provide group learning experences
Want to be with others of the same sex	Encourage same-sex activities
Have rapidly changing interests	Provide a variety of short learning experiences
Learn best when work is divided into smaller tasks	Give simple and short directions
Need guidance and encouragement from adults	Work with learners and give support
Look to older youth as role models	Provide opportunity for cross-age teaching
Don't see the value of record keeping	Give assistance and encouragement
Are enthusiastic and enjoy trying new things	Present a variety of challenging opportunities
Are curious and often ask, "Why?"	Help them learn how to find answers for their own questions
Enjoy cooperation and social learning	Plan opportunities for youth to work together
Want to be independent and sometimes demonstrate rebelliousness	Allow independence when appropriate; involve them in making decisions; give individual attention
Need recognition and praise for doing good work	Give public recognition but help youth feel personal reward and satisfaction
Feel competent and self-confident	Provide activities that allow youth to be successful
Dislike comparisons with others	Recognize personal growth and development in a noncompetitive environment
Want to direct their own learning process	Allow exploration of interests, give support and direction
Want to be involved in the decision-making process	Help generate positive alterntives, allow them to make choices and learn from the choices they make

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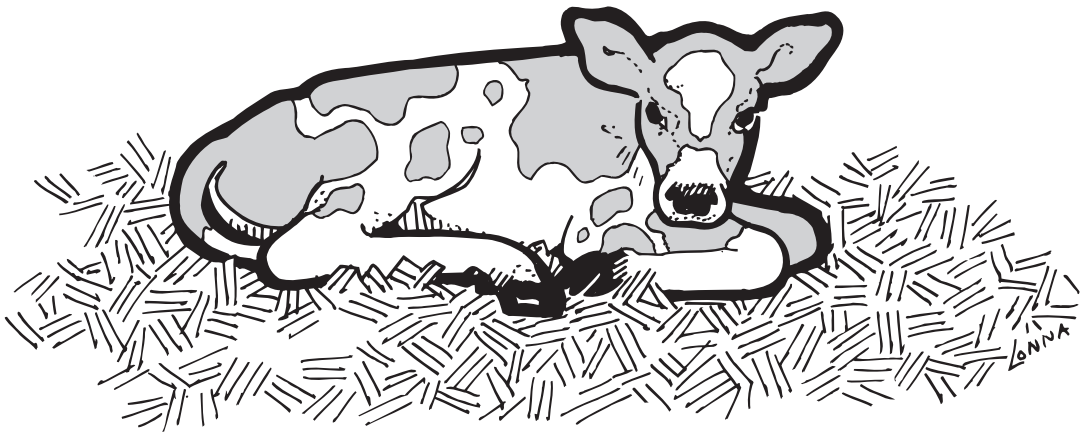

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