



**University of California**

Agriculture and Natural Resources ■ 4-H Youth Development Program

**4-H Members Name:** \_\_\_\_\_ **Club:** \_\_\_\_\_

## DAIRY - Level 1

**The Explorer level is the most basic of all levels. The youth begins to explore the boundaries of the project area, touching on many skills and knowledge areas that will be expanded later.**

**Date Initial**

- \_\_\_ \_\_\_ 1. Name at six breeds of Dairy Cattle.
- \_\_\_ \_\_\_ 2. List and describe the four main criteria used to judge a Dairy Cow or Heifer.
- \_\_\_ \_\_\_ 3. Explain colostrum and its function.
- \_\_\_ \_\_\_ 5. Explain the difference between the terms "registered" and "grade."
- \_\_\_ \_\_\_ 6. Name three different ways that you can mark your Dairy Heifer or cow.
- \_\_\_ \_\_\_ 7. Participate in showmanship.
- \_\_\_ \_\_\_ 8. Describe the basic housing and equipment that a beginner needs for the health care, and safety of your animal.
- \_\_\_ \_\_\_ 9. Be able to identify the basic animal parts.
- \_\_\_ \_\_\_ 10. Know how to tie a quick release knot.
- \_\_\_ \_\_\_ 11. Cattle are called ruminants. How many stomachs compartments do ruminants have?
- \_\_\_ \_\_\_ 12. Please name each stomach compartment and its function in the cow.

Project Leader's Signature of Completion: \_\_\_\_\_ Date: \_\_\_\_\_

4-H Program Representative Approval: \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
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## DAIRY - Level 2

The Producer level builds and expands on the knowledge and skills learned in level 1- Explorer.

**Date Initial**

- \_\_\_\_ \_\_\_\_ 1. The most important showing period of a Dairy Heifer's life is usually her first two years. To grow properly and to be safe, a heifer needs to be immunized against disease and medicated to remove parasites. Please answer these questions about disease and parasite control in the first 2 years of a Dairy Heifer's life:
  - a. At 2 months of age your dairy calf should receive her first inoculations. What are they and explain briefly each of the diseases they prevent.
  - b. What is brucellosis and when and why should a calf be vaccinated for it by your vet?
  - c. Discuss de-worming and when it should be done. With what? Why?
- \_\_\_\_ \_\_\_\_ 4. The mammary system is the most important characteristic of the dairy cow. It is the one element that makes the cow so different and valuable compared to other bovine. Please discuss in detail what happens during the milking process that allows that milk to come from the cow.
- \_\_\_\_ \_\_\_\_ 5. Give a demonstration on a related topic at County Presentation Day.
- \_\_\_\_ \_\_\_\_ 6. Properly administer oral medicine.
- \_\_\_\_ \_\_\_\_ 7. Be a Junior Leader of assist a younger 4-Her master showmanship.
- \_\_\_\_ \_\_\_\_ 8. Know how to properly read DHIA records.

Project Leader's Signature of Completion: \_\_\_\_\_ Date: \_\_\_\_\_

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### DAIRY - Level 3

The Consumer level takes the member beyond the immediate project, out into the community, as they explore the project area in depth.

**Date Initial**

- \_\_\_ \_\_\_ 1. Lactation relies heavily on the reproductive cycle of the dairy cow. What is the period of receptivity to breeding called?
- \_\_\_ \_\_\_ 2. How often does it occur?
- \_\_\_ \_\_\_ 3. There are distinct stages to a cow or heifer's heat cycle. Describe them.
- \_\_\_ \_\_\_ 4. How long does this period last?
- \_\_\_ \_\_\_ 5. What are some secondary signs that a cow is in heat?
- \_\_\_ \_\_\_ 6. When is the egg released?
- \_\_\_ \_\_\_ 7. When is the best time to breed a cow during its heat cycle?
- \_\_\_ \_\_\_ 8. What is the function of the cow or heifer's ovaries?
- \_\_\_ \_\_\_ 9. What separates the uterus from the vagina?
- \_\_\_ \_\_\_ 10. To avoid disease transfer, which type of breeding technique is preferred?
  - a. natural breeding by a bull
  - b. artificial insemination
- \_\_\_ \_\_\_ 11. Name some advantages and disadvantages of artificial insemination for dairy cows and heifers.
- \_\_\_ \_\_\_ 12. Name some advantages and disadvantages of natural breeding for dairy cows and heifers.
- \_\_\_ \_\_\_ 13. Properly administer intramuscular and subcutaneous injections.
- \_\_\_ \_\_\_ 14. Own your own breeding project.
- \_\_\_ \_\_\_ 15. Visit a Grade A dairy processing plant, and give a report on what you see or do not see.

Project Leader's Signature of Completion: \_\_\_\_\_ Date: \_\_\_\_\_

4-H Program Representative Approval: \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

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