



My Dairy Project Record Book

Name: _____ Age: _____

Street Address: _____

City, State, Zip: _____ Phone: _____

Name of 4-H Club: _____

Years in Dairy Project: _____

PROJECT ANIMAL IDENTIFICATION & GENETICS

Name of Animal: _____ Birth Date: _____

Breed: _____ Registration Number: _____

Tag Number: _____ RFID/DHIA Number: _____

Project Start Date: _____

Do you own your animal? Yes _____ No _____

If not, owner's name: _____

FARM INFORMATION

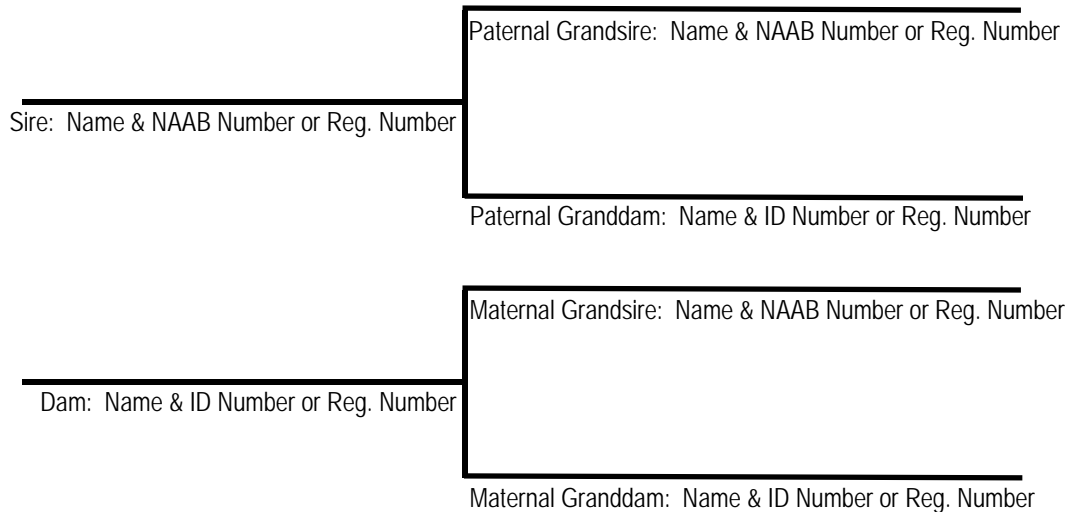
I. How many cows are on the farm where your dairy project lives?

II. What is the total number of calves and heifers on the farm where your dairy project lives?

III. Please list all of the different kinds of production and health records which are kept on your dairy project. How are they used?

IV. How is your animal housed?

PEDIGREE



GROWTH RECORDS

I. Listed below are critical life stages in a calf and heifer's life span. Please indicate the age, weight and/or height which is recommended during each period of your project animal's life.

Life Stage	Age (in months)	Recommended Weight	Recommended Height
Weaning			
Breeding			
Calving			

II. Below is a table to identify the life stage of your dairy project and determine its actual weight and height. *Is your project above or below the suggested weight and height for its age?*

Age (in months)	Weight	Height

BODY CONDITION SCORING

In addition paying attention to the growth of young stock, it is also important to monitor the Body Condition Score (BCS) of heifers and lactating cows. Body condition scoring is a method of evaluating the amount of fat cover on a dairy cow. Using a five-point scale, the BCS can be determined by assigning a score to the amount of fat observed on several skeletal parts of the cows. BCS can be a good indicator of a cow's individual as well as whole herd health and nutrition.

I. Listed below is a chart, please complete the ranges of ideal body condition scores for each stage of lactation.

Stage of Lactation	Score
Dry-Off (60 days prior to calving)	
Pre-Fresh (30 days prior to calving)	
Calving	
30 Days Post-Calving	
Mid-Lactation (50-90 DIM)	
Late-Lactation (>150 DIM)	

II. Below is a table to identify the stage of lactation of your dairy project and determine the BCS. *Is your project above or below the range of ideal BCS?*

Stage of Lactation	Score

FEED RECORDS

CALF & HEIFER

I. Record the amounts of each type of feed your calf has been fed. *It is only necessary to record the types of feed your project has been fed in the past year!*

	Age of Calf in Months												Total Used	Total Cost or Value
	1	2	3	4	5	6	7	8	9	10	11	12		
Month (ie. Jan., Feb., etc.)														
Feed Used														
Whole Milk (lbs.)														
Milk Replacer (Dry Wt. in lbs.)														
Calf Starter (lbs.)														
Grain Mixture (lbs.)														
Hay (lbs.)														
Hay Silage (lbs.)														
Corn Silage (lbs.)														
Minerals/Vitamins (lbs.)														
Other:														
TOTAL COST:	➔													


II. Record the types of feeds your heifer has been fed. *It is only necessary to record the types of feed your project has been fed in the past year!*

	Age of Heifer in Months												Total Used	Total Cost or Value
	13	14	15	16	17	18	19	20	21	22	23	24		
Feed Used														
Hay (lbs.)														
Hay Silage (lbs.)														
Corn Silage (lbs.)														
Grain Mixture (lbs.)														
Check box for months heifer was on pasture														
Other:														
TOTAL COST:	➔													

III. Describe how it is fed?

COW

I. Record the types of feeds your cow has been fed. *It is only necessary to record the types of feed your project has been fed in the past year!*

	Month (ie. Jan., Feb., etc.)														
Feed Used														Total Used	Total Cost or Value
Hay (lbs.)															
Hay Silage (lbs.)															
Corn Silage (lbs.)															
Grain Mixture (lbs.)															
Check box for months cow was on pasture															
Other:															
TOTAL COST:															

II. Describe how it is fed? How many times per day is your cow fed?

BREEDING & CALVING RECORDS

BREEDING RECORD

I. Complete the chart below. Please record any breeding records your project animal may have within the past year. If your animal is a heifer and has not been bred prior to the Youth Show, you do not have to fill out this portion of the record book.

	Date Bred	Date Bred	Date Bred	Date Bred	Breeding Fees*	Service Sire, Name or ID	Date Due
1 st Calving							
2 nd Calving							
3 rd Calving							
4 th Calving							

*In Breeding Fees, include semen costs, technician fees, synchronization expenses, breeding supply expenses, etc.

Total Breeding Fees: _____

II. How and/or why did you choose the bull that you bred your heifer/cow to?

CALVING RECORD

I. Complete the chart below. Please record any calving records your project animal may have.

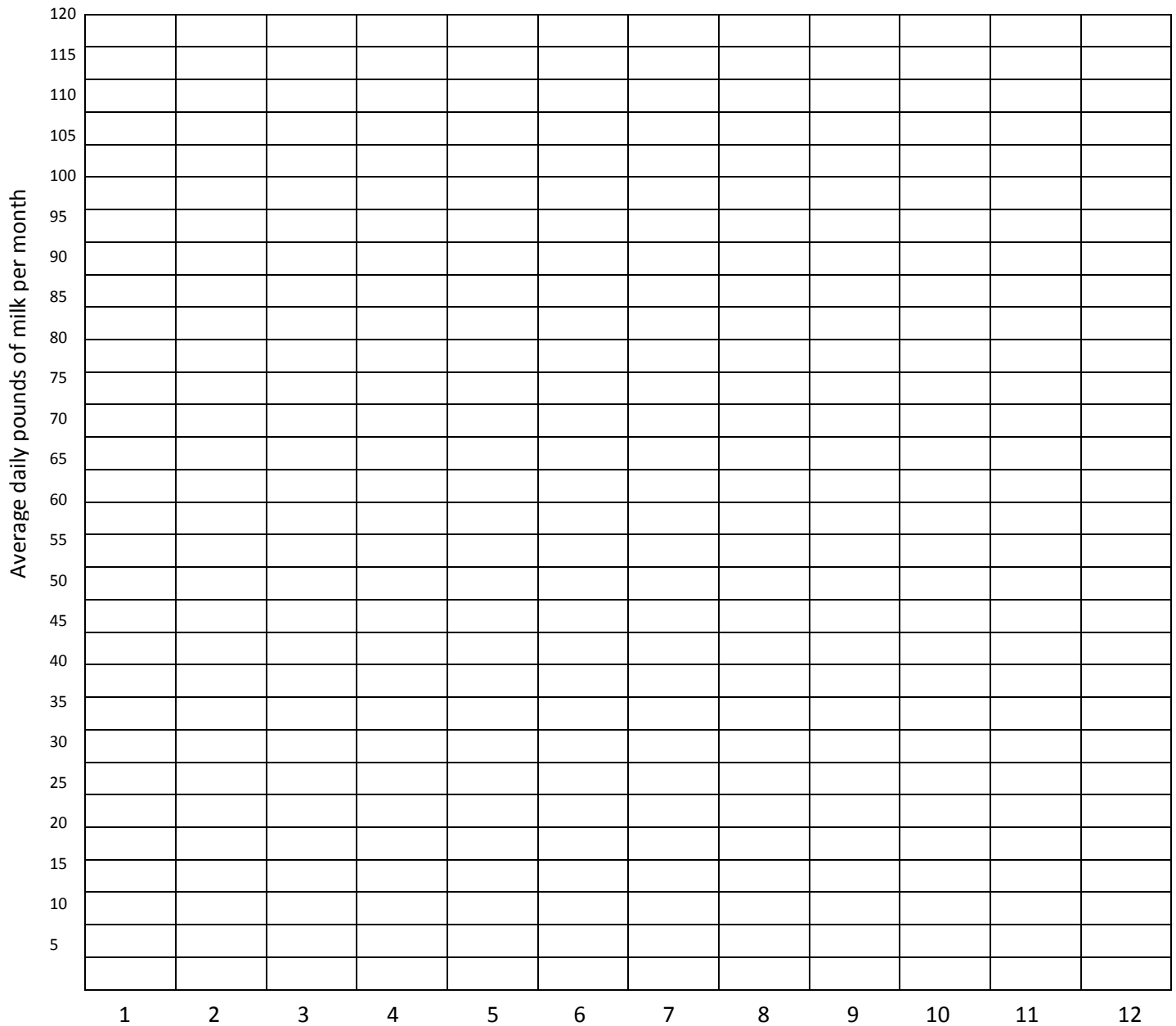
	Date of Calving	Male or Female Calf	Calf ID	Comments (calf sold, calving difficulties, calf description, etc.)
1 st Calving				
2 nd Calving				
3 rd Calving				
4 th Calving				

MILK PRODUCTION SUMMARY

I. Complete the production information, using the most recent completed production record during the project year. Please include a completed copy of the "Dairy Production Class" document.

LACTATION CURVE

I. In the graph below, plot the average daily pounds of milk produced each month. For cows that have greater than one lactation, plot the most recently completed lactation with triangles, plus the current record in progress with circles.



Month: _____

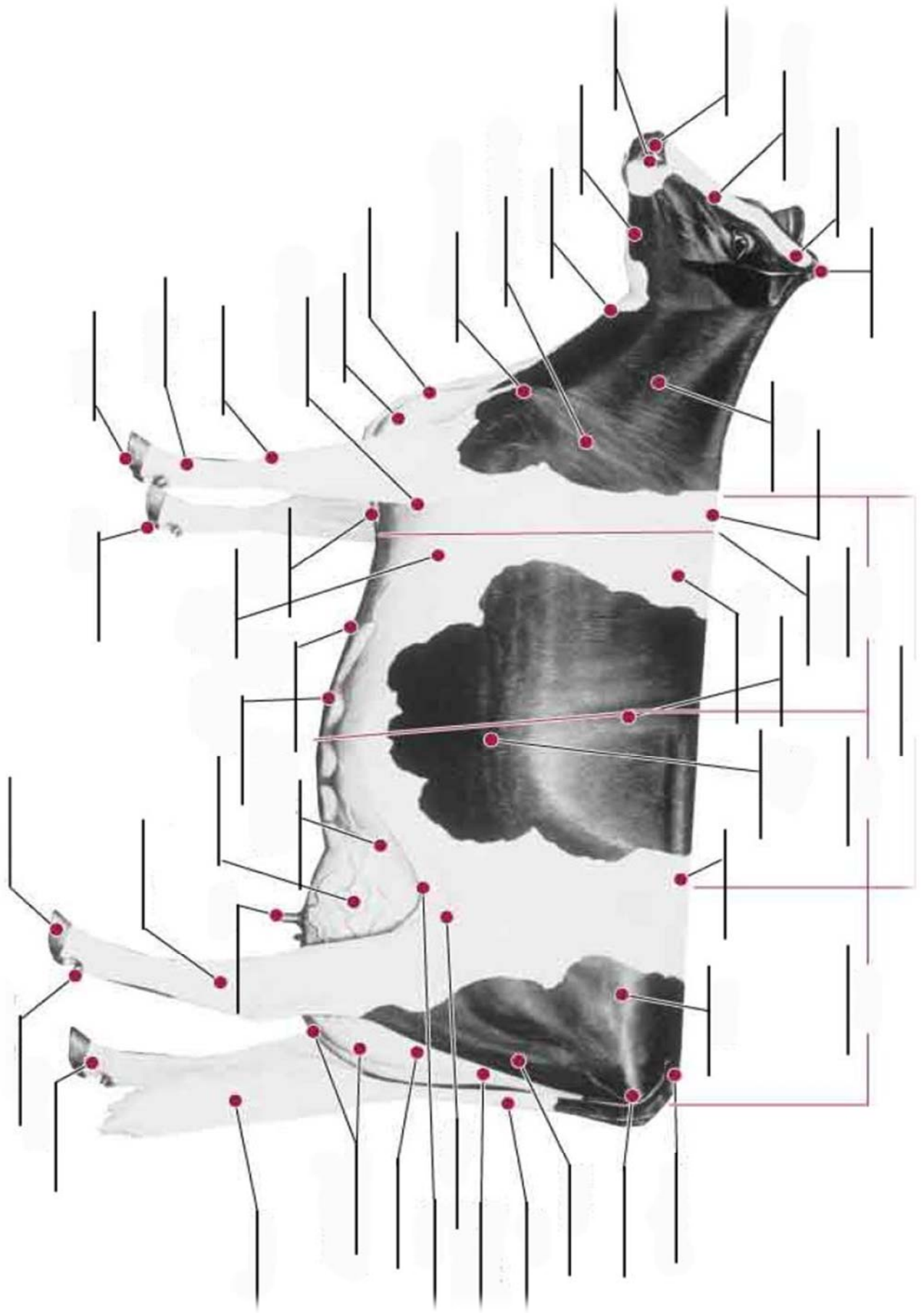
II. During what month was the *peak*?

TEST YOUR KNOWLEDGE

Cow Parts

Using the word bank below, identify the cow parts indicated in the picture. *Complete the designated cow parts for the appropriate age division: Beginners, Juniors and Seniors.*

Beginners, Juniors & Seniors	Juniors & Seniors	Seniors
Barrel	Back	Bridge of Nose
Crops	Brisket	Flank
Fore Udder	Chest Floor	Fore Ribs
Fore Udder Attachment	Chine	Hoof
Hip Bone	Dew Claw	Jaw
Hock	Dewlap	Knee
Loin	Forehead	Mammary Veins
Pin Bone	Heart Girth	Milk Wells
Point of Shoulder	Heel	Muzzle
Poll	Pastern	Neck
Rear Udder	Point of Elbow	Nostril
Rear Udder Attachment	Tail	Rear Ribs
Rump	Teat	Shank
Tail Head	Thigh	Shoulder Blade
Withers	Thurl	Sole
		Stifle
		Suspensory Ligament
		Switch
		Throat



Milk Marketing

I. In your own words, define each milk classification. *Must be completed by Beginners, Juniors and Seniors.*

Class I

Class II

Class III

Class IV

II. Below is a listing of processed dairy products. Please indicate which milk classification they belong to. *Must be completed by Beginners, Juniors and Seniors.*

Butter
Buttermilk
Chocolate Milk
Cottage Cheese
Cream Cheese
Dry Whey
Greek Yogurt
Half and Half
Heavy Whipping Cream
Ice Cream
Mozzarella Cheese
Nonfat Dry Milk
Skim Milk
Sour Cream
Whipped Cream
Whole Milk
Yogurt

<u>CLASS I</u>	<u>CLASS II</u>	<u>CLASS III</u>	<u>CLASS IV</u>

III. What was the class the Class III price at 3.5% butterfat in May of the current year? Please indicate the source of your answer. *Must be completed by Juniors and Seniors.*

IV. Give a brief definition of the mailbox milk price. *Must be completed by Seniors.*

V. Farmer Fred is a member of a cooperative that compensates its producers using multiple component pricing (MCP). Basically, the value of the milk is determined not only by the volume but additionally by the components and quality. Therefore, if a producer has desirable butterfat, protein and/or Somatic Cell Count (SCC) figures they will see a favorable adjustment to their check. Using the information provided, determine how much Farmer Fred received on his latest milk check by completing the detailed sample milk check stub. *Must be completed by Seniors.*

Grade A Pounds: 100,000 lbs.
 Butterfat (BF): 3.6%
 Protein (P): 3.1%
 Other Solids (OS): 5.7%
 Average Monthly SCC: 120,000
 Raw Bacteria Count: 2,000
 Pre-Incubated Count: 10,000

Producer Price Differential: \$1.50/cwt.
 BF Price/lb.: \$2.51
 P Price/lb.: \$1.36
 OS Price/lb.: \$0.04
 Milk Hauling: \$0.50/cwt.
 Milk Promotion: \$0.10/cwt.

Total Component Value = $[(\% \text{ BF} \times \text{BF}) + (\% \text{ P} \times \text{P}) + (\% \text{ OS} \times \text{OS})]$

SCC	Adjustment
50,000 or <	+ \$.55/cwt.
51,000 – 75,000	+ \$.50/cwt.
76,000 – 100,000	+ \$.45/cwt.
101,000 – 125,000	+ \$.40/cwt.
126,000 – 150,000	+ \$.35/cwt.
151,000 – 175,000	+ \$.30/cwt.
176,000 – 200,000	+ \$.25/cwt.
201,000 – 225,000	+ \$.20/cwt.
226,000 – 250,000	+ \$.15/cwt.
251,000 – 300,000	0
301,000 – 400,000	- \$.30/cwt.
401,000 – 500,000	- \$1.00/cwt.
501,000 – 600,000	- \$1.50/cwt.
601,000 and >	- \$2.00/cwt.
Raw Bacteria Count	Adjustment
10,000 or <	+ \$.05/cwt.
> 100,000	- \$.10/cwt.
Pre-Incubated Count	Adjustment
20,000 or <	+ \$.05/cwt.

Farmer Fred Dairy

	Lbs	Rate	Price	Desc.	Total
Grade A Pounds				lbs.	
Grade A Butterfat				lbs.	
Grade A Protein				lbs.	
Grade A Other Solids				lbs.	
<i>Total Component Value</i>				\$/cwt.	
Premiums:					
Producer Price Differential				\$/cwt.	
Milk Quality Premiums (SCC, Raw and PI)				\$/cwt.	
<i>Gross Amount</i>				\$/cwt.	
Deductions:					
Milk Hauling				\$/cwt.	
Milk Promotion				\$/cwt.	
<i>Total Deductions</i>					
Net Mailbox Pay Price				\$/cwt.	
Net Payment on Milk Check					