DAIRY CATTLE STUDY GUIDE
Livestock Expo
Madera County 4-H

Level I	Level II	Level III	Level IV
Entry Form (26) (replacement)	Entry Form (28) (registered)	Wholesale cuts (5)	Matching (16) By-products, wholesales and retail cuts
Parts (20)	Parts (25)	Parts (30) Udder (8)	Digestive System (9)
T/F Test (25 questions)	T/F Test (25 questions)	Quiz/Disease & Parasites (25 match, 10 multiple choice)	Quiz/Terms (14), Nutrition & Diseases (16)
Feed ID (5)	Feed ID (10)	Feed ID (15)	
Equipment ID (15)	Equipment ID (20)	Breed ID (5)	Judging (1 Class)
Judging (1 class)	Judging (1 class)	Judging (1 class)	Oral Reasons
Skills and Showmanship	Skills and Showmanship	Management and Clipping Skills	Management and Clipping Skills

SKILLS

Level I and II
- May include tie and untie; into and out of blocking chute; use of neck rope and other basic project skills.
- Member should be knowledgeable about basic fitting of dairy cattle including where to clip and how to work hair.
- Questions may include where and when to use beef/sheep heads in clipping for show.

Level III & IV
- May include basic management skills - using balling gun, giving injections and reading medication labels.
- Hands on clipping will be required in both levels.
- Member should know how to adjust and lubricate both types of clippers (beef/sheep heads).
- Some advanced fitting skills may be requested (e.g. tails)

SHOWMANSHIP

Level I and II
- Basic skills - leading, posing, etc. You are to bring one dairy heifer for every three members in your club. You will not be allowed to use other members animals unless prior arrangements have been made.

ADDITIONAL STUDY MATERIAL

Level III & IV
- Compartments of ruminant stomach - rumen, reticulum, omasum, abomasum (function of each).
- Common Diseases and Parasites - Brucellosis, leptospirosis, pneumonia, shipping fever, blackleg, white muscle, mastitis, IBR.
- Basic nutrition - Vitamin A, B complex, C, D, E, K; Minerals - calcium, phosphorus.
- General management - normal temperature, common injection sites (IM, SubQ, IV), symptoms of common parasites.

REFERENCES: 4-H Dairy Project Manual (4-H 2009) (pages 8, 9, 19-22)

There are feed ID kits available at the 4-H office for you to check out and study.
THE IMPORTANT THING IS TO HAVE FUN AND BE KIND TO YOUR COWS.

DAIRY CATTLE TERMS - LEVEL I & II

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1. **Bloat** - Excessive gas build up in the rumen (stomach).
2. **Brand** - Permanent marking on skin caused by scar tissue.
3. **Bull** - Male of cattle.
4. **Calf** - Young animal of cattle species, under one year of age.
5. **Cow** - Mature female of cattle.
6. **Cull** - Animal taken out of herd because below herd standard.
7. **Dam** - Mother of calf.
8. **Dehorn** - Removing of horns.
9. **Dry cow** - Cow not milking.
10. **Fill** - Amount of water and feed in a animal.
11. **Heifer** - Female of cattle under 3 years of age and has not produced a calf.
12. **Nurse cow** - Cow nursing calves other than its own.
13. **Off feed** - Cattle that stop eating or eat very little.
14. **Ration** - Total feed given during 24 hours.
15. **Scours** - Diarrhea or loose running manure.
16. **Sire** - Father of a calf.
17. **Steer** - Male cattle castrated at an early age.
18. **Polled** - Cattle born without horns.
19. **Castrate** - To remove the testes of male cattle.
20. **Weaner** - Calf just taken away from its mother.
21. **Registered** - Purebred animals whose pedigree is recorded with a breed association registry.
22. **Gestation** - Period cow is with calf (282 days).
23. **Conformation** - Refers to shape and design of body.
24. **Barren** - Not able to produce a calf.
25. **Concentrate** - Feed stuffs (such as grains) that are low in fiber and high in digestible nutrients.
26. **Roughage** - Feeds high in fiber (hays, silage, hulls).

DAIRY CATTLE TERMS - LEVEL III & IV (May include Level I & II terms)
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1. **Bred** - Animal that is pregnant.
2. **Carcass** - Dressed body of a meat animal, with the insides (offal) removed.
3. **Cod** - Scrotum of steer that contains fat.
4. **Colostrum** - Thick yellow milk (first milk) produced by a cow after calving.
5. **Cow hocked** - Hocks turn in toward each other when standing or walking.
6. **Crossbreeding** - Mating of purebred cattle but of different breeds.
7. **Cud** - Regurgitated feed or bolus from stomach.
8. **Dressing %** - $\frac{\text{Dressed weight}}{\text{Live weight}} \times 100 = \text{Dressing \%}$
9. **Dual purpose** - Cattle breeds used for beef and milk production.
10. **Estrus** - Period of heat, able to conceive (18 hours)
11. **Estrous cycle** - Period of time between heats (estrus). Usually 17-21 days.
12. **Lactation** - Period of producing milk.
13. **Pedigre**e - Written statement giving the record of an animal's ancestry (family tree).
14. **Post legged** - Too straight in hind legs.
15. **Replacement** - Animal selected to keep in a breeding herd.

DAIRY CATTLE EQUIPMENT/SUPPLY I.D.
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	flexible ear tag		ear tag applicator		hog rings
	metal curry comb		scotch com		hog ringer
	mane/tail comb		trimming scissors		tail ties
	wooden show stick		aluminum show stick		soft brush
	fiberglass show stick		beef show halter		spray bottle
	vinyl massage comb		dairy show halter		spray adhesive
	washer massage comb		rope halter		mineral oil
	rice root brush		nylon rope halter		alcohol
	neck rope		Johnson halter		sweat collar
	Electric clipmaster clippers		Electric shearmaster clippers		wire hoof brush
	top clipper blade		bottom clipper blade		nose lead (bull)
	hair dressing		quick shed'n blade		eye patch
	tattoo pliers		tattoo ink		tattoo number
	cattle magnet		elastrator		scalpel
	calf drencher		animal marker chalk		emasculator
	metal balling gun		plastic balling gun		Burdizzo
	inseminating sleeve		electric dehorner		horn weights
	A.I. pipette		disposable syringe		calf snare
	manual dehorner		disposable needle		hoof nipper
	automatic syringe		obstetrical chain		hoof/horn rasp
	electric branding iron		obstetrical chain handle		branding iron
	paint branding iron		emery cloth		feed pan
	Circuiteer hot air blower				

DAIRY CATTLE SKILLS AND SHOWMANSHIP - LEVEL I
LIVESTOCK EXPO - Madera County 4-H

SKILLS DEMONSTRATION	Possible Points	Score	Comments
Safely Enter Stall & Untie	5		
Proper Tie (Quick release knot)	5		
Trimming Stand Use (In and Out Safely)	10		
Fitting Question (1)	5		
TOTAL	25		
SHOWMANSHIP - Leading Cattle			
Entering & Leaving Ring	5		
Walk and Stop	5		
Turn	5		
Set Up/Posing	10		
TOTAL	25		

DAIRY CATTLE SKILLS AND SHOWMANSHIP - LEVEL II
LIVESTOCK EXPO - Madera County 4-H

SKILLS DEMONSTRATION	Possible Points	Score	Comments
Safely Enter Stall & Untie	5		
Proper Tie (Quick release knot)	5		
Trimming Stand Use (In and Out Safely)	10		
Fitting Questions (2)	10		
TOTAL	30		
SHOWMANSHIP - Lead at Halter			
Entering & Leaving Ring	5		
Walk and Stop	5		
Turn	5		
Set Up/Posing	10		
Back Up & Use of Hands	5		
TOTAL	30		

DAIRY CATTLE SKILLS - LEVEL III
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SKILLS DEMONSTRATION	Possible Points	Score	Comments
Safely restrain animal	5		
Demonstrate use of balling gun	5		
Fill Syringe with 5 cc. Penicillin	5		
Where will injection be given	5		
Read the Label: Give Expiration Date	5		
Read the Label: Give Withdrawal Time	5		
Show indications that this heifer is Brucellosis vaccinated: Orange ear tag	5		
Permanent tattoo	5		
Explain what the letters and numbers of the tattoo means	10		
TOTAL	50		

DAIRY CATTLE SKILLS - LEVEL IV
LIVESTOCK EXPO - Madera County 4-H

SKILLS DEMONSTRATION	Possible Points	Score	Comments
Attach and adjust clipper blades (Beef heads only)	10		
Explain care and maintenance of clippers: Cleaning	5		
Lubrication	5		
Clip one side of dairy heifer: Tail	5		
Neck	5		
Head	5		
Finer Points	5		
Explain and demonstrate final grooming for show: Shedding blade	2		
Tail Switch	2		
Use of Spray Oil	2		
Use of cosmetics	2		
How to obtain proper fill	2		
TOTAL	50		