

Both the Berrien County 4-H Youth Program and the Berrien County Youth Fair utilize this project. It is your responsibility, as a 4-H member or fair exhibitor, to conform to the most current version of the guidelines for the organization in which you are entering your notebook for exhibition.

Berrien County 4-H Youth Program Animal Science & Live-Animal Management Notebook Guidelines



Purpose

The purpose of the Animal Science & Live-Animal Management Notebook is to collect information about an animal species, whether you own it, or not. 4-H members enrolled in live-animal projects are encouraged to complete a notebook as winter project. Animal Science notebooks also provide an opportunity to learn about an animal species that you do not own or care for, but wish to learn about. The effort and creativity that goes into your notebook, creates a lasting journal, or reference, if you will, that can be used for several years. Refer to the *Basis of Evaluation* section of the guidelines, to learn the differences in the way the 4-H Youth Program and the Fair evaluate the notebook.

Notebook Requirements

1. Notebooks are to be presented in a 3-ring binder with a clear plastic over-wrap or sleeve on the front into which the Cover page of the Notebook is inserted.
2. The pages in the Notebook are to be put into clear page protectors. This keeps the pages clean, neat, and not torn during the handling they get during exhibition when visitors read them.
3. An exhibitor may complete a Notebook about each species in which he/she is interested. If an exhibitor is not showing a particular species at the Fair during the current year, he/she must interview another exhibitor who is in order to be able to fully complete the Notebook especially the Animal Project Record.
4. Eligible species for Notebooks are beef, dairy, swine, sheep, goats, equine, rabbits, poultry, llamas, dogs, cats, and pocket pets.
5. Exhibitors are to complete the Notebook themselves. Adult help must be minimal. Exhibitors should answer the questions in their own words as much as possible, not just copy the answer from the reference source material. Answers should be in complete sentence form.
6. Answers must be written in dark ink, not pencil. Pencil may only be used to label a diagram. If exhibitors use a computer or typewriter to prepare the Notebook, then there must be a note from their parents, 4-H leader, or animal project leader stating that the Notebook is indeed the exhibitor's own work.
7. There should be one question (re-stated from the Guidelines) with its number and answer with its reference source cited per page. All pages are to be numbered.

8. If two or more members of the same family wish to enter Notebooks about the same animal species in the same year, each member must answer different questions about the species to avoid the appearance of duplication of answers.
9. New questions must be answered each year an exhibitor enters a Notebook. Keep track of which questions were answered by writing the year it was answered on the blank in front of it on the questions pages.
10. The required number of questions to be answered depends on the exhibitor's age as per the organization for which he/she is completing a notebook. This is one item that the member/exhibitor should always check before entering a notebook in either 4-H Spring Achievement or the Berrien County Youth Fair.

Beginning with 2009, 4-H Age & BCYF Age = January 1 of the current year.

<u>Thru age 8</u>	<u>9-11 years</u>	<u>12-14 years</u>	<u>15 and older</u>
3 Questions	5 Questions	7 Questions	9 Questions

Notebook Order & Content Definitions

1. Cover Page – This should state the species discussed in the Notebook and the exhibitor's name and Fair number. The Cover can be colorful and creative. It is to be inserted into the clear plastic front cover of the 3-ring binder.
2. Notebook Spine – The clear cover over the spine of the Notebook should contain a strip of paper with the species covered in the Notebook and the exhibitor's name.
3. Inside Notebook –
 - a. Title page – This should include the same information as the Cover page but it can be decorated differently.
 - b. Guidelines – All the pages of these Guidelines are to follow the Title page. The year each question is answered is to be written on the line before each question.
 - c. Divider – A divider comes next with the year of the current report written on the tab. Put the current year's material in front of the previous year's material.
 - d. Table of Contents – The Table of Contents should list what is in the current year's Notebook such as the page numbers and what is written on each page.
 - e. Animal Project Record – The form for this Report is included with these Guidelines and should follow the Table of Contents in the Notebook. It is to be filled out completely. This includes the costs incurred by the exhibitor to acquire and/or raise animal as well as photos documenting the progress of raising and preparing it for the Fair (or exhibition). It must be written in ink. (See Notebook Requirement #3 above.)

NOTE: 4-H and BCYF use a slightly different form for the required Animal Project Report or Record. This is one of the differences between the two exhibit requirements that exhibitors must pay attention to and update when entering notebooks with both organizations.

- f. Questions and Answers – Next are the Questions selected by the exhibitor to answer. The reference source is to be listed after each answer. (See Notebook Requirements #5, 6, 7 above.)
- g. References – The final page lists the sources from which the exhibitor got his/her answers. Sources can be 4-H materials/ leaders, veterinarians, experienced exhibitors, books, reputable internet sites such as colleges, the government, breed associations, club/fancier sites. List all the information necessary for someone else to find the source themselves.

Basis for Evaluation

4-H Spring Achievement – The member and their notebook are expected to attend 4-H Spring Achievement and participate in a project evaluation with an adult evaluator, just as if this were a craft, electrical, or horticulture project. Notebooks should have been reviewed in detail by your project leader prior to Spring Achievement. The evaluator will spot check the notebook for completeness and accuracy in addition to getting to know the member, what was learned, what was enjoyable, what were the challenges, what could be done differently. Process and the learning experience, is the focus. Completion ribbons are given to all Spring Achievement projects and notebooks are eligible to be considered for Outstanding Workmanship, Presentation and Originality awards.

BCYF Exhibit Entry – If the notebook has been completed and entered as a fair exhibit, the notebook is then judged. The Animal Science Notebooks will be evaluated on the following bases:

<u>Category</u>	<u>Points</u>
1. Animal Project Report (Scored as follows) Exhibitor information -2 Project Plan -2 Animal Care -12 Costs -6 Photos -4 Project Experiences -12 Project Review and Comments -2	40
2. Question and Answers Scored on correctness of information and format as well as completeness and appropriateness of answers. Examples: For a Poultry Notebook, do not answer a question that pertains only to mammals such pregnancy length, or lactation. For non-meat animals, do not select questions related to meat production.	40
3. Neatness and proper order of contents	10
4. Attractiveness and creativeness of Notebook	<u>10</u>
Total points:	100

(BCYF judging of notebooks con't...)

A award ribbon	90-100 total points
B award ribbon	80-89 total points
C award ribbon	<80 total points

Judge's score sheet and comments will be placed in the inner front pocket of the Notebook so the exhibitor can see the reasons for the scoring.

Previous years' Notebook information will not be evaluated, only that of the current year.

Do You Have Questions?

4-H: Questions or comments about the 4-H notebook project should be referred to the Berrien County MSUE Office, 4-H Youth Program Staff, 1737 Hillandale Road, Benton Harbor, MI 49022-9630, Phone: 269-944-4126, Fax: 269-982-8666, E-mail: berrien@msue.msu.edu.

BCYF: Questions regarding notebooks to be entered at the Berrien County Youth Fair, should be referred to the Berrien County Youth Fair, P.O. Box 7, Berrien Springs, MI 49103, 269-473-4251, bcyf.org.

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Notebook questions begin on page 5.

Questions for Berrien County 4-H Animal Science Notebooks

Questions 1 – 85 can be answered for all animal species as indicated.

Questions 100 – 172 can be answered additionally for equines.

Questions 200 – 257 can be answered additionally for dogs.

Year
Answered

Anatomy and Physiology

- _____ 1. Label a thorough diagram of the external parts of your animal.
- _____ 2. What is good conformation for your animal species?
- _____ 3. Describe common conformation defects of your species.
- _____ 4. Label a diagram of the digestive tract of your species and state one function of each part.
- _____ 5. Label a diagram of the circulatory tract of your species and state one function of each part.
- _____ 6. Label a diagram of the male or female reproductive tract of your species and state one function of each part.

Nutrition

- _____ 10. What are the 6 classes of nutrients required by your animal? What are good sources of each in your animal's diet?
- _____ 11. What is meant by "free choice" feeding? Explain why it is or is not a good method of feeding for your species.
- _____ 12. What is colostrum, and why is it so important that new born animals get an adequate amount of it?
- _____ 13. Discuss the tasks performed by water in your animal's body.
- _____ 14. What are the fat-soluble and the water-soluble vitamins required by your animal? What do they do in the animal's body?
- _____ 15. What are the macro-minerals and the micro-minerals required by your animal? What do they do in the animal's body?

Reproduction and Lactation

- _____ 20. Define puberty. What are the ages at which the male and female of your animal species reaches puberty.

- _____ 21. Mammals: How often does the female of your species come into estrus (heat), and how long does each estrus period last?
- _____ 22. Poultry: How often does the female of your species lay an egg (oviposition)? How long is it between ovipositions?
- _____ 23. Define artificial insemination, and explain how it is performed in your animal species.
- _____ 24. Define: inbreeding, outbreeding, crossbreeding, and linebreeding (if applicable to your species).
- _____ 25. Mammals: Describe the reason for and the process of embryo transfer.
- _____ 26. Mammals: Define gestation. What is the gestation length of your animal species?
- _____ 27. Poultry: Define incubation. What is the incubation length of your species?
- _____ 28. Poultry: Describe the factors necessary for a successful incubation and good hatching rate.
- _____ 29. Mammals: Define parturition. What is the proper parturition position for the fetal animal?
- _____ 30. Mammals: Explain lactation. What is the average lactation period for your species?
- _____ 31. Mammals: Describe mastitis. How can this be prevented?
- _____ 32. Mammals: Define weaning. What is the usual age at which your species is weaned?

Health and Disease

- _____ 40. What are the normal body temperature, pulse rate and respiration rate of your animal? How is each of these measurements taken?
- _____ 41. Name three infectious diseases that affect your species and list the symptoms, treatment and prevention of each.
- _____ 42. What vaccinations are required for your animal to show at the Fair?
- _____ 43. What is ketosis, and how can it be prevented?
- _____ 44. What is the difference between biologicals and pharmaceuticals?
- _____ 45. Explain how an animal's skin and coat reflect its state of health.

- _____ 46. Name five types of stressors and how they can affect your animal.
- _____ 47. What are the internal parasites that affect your species?
- _____ 48. What are the external parasites that affect your species?
- _____ 49. Describe the life cycle of two internal parasites that affect your species.
- _____ 50. Describe the life cycle of two external parasites that affect your species.
- _____ 51. Explain how internal parasites can be controlled in your animal.
- _____ 52. Explain how external parasites can be controlled in your animal.
- _____ 53. List seven items that should be checked on the package label before applying or giving pesticide products to an animal.
- _____ 54. Name four problems caused by external parasites.
- _____ 55. In what ways do flies affect animals?
- _____ 56. Define coccidiosis and describe its symptoms, treatment and prevention.
- _____ 57. If your species is susceptible to it, describe foot/h hoof rot, its symptoms, treatment and prevention.

Meat Production

- _____ 60. What is the ideal market weight for your animal? How long are they usually fed before going to market? What is an expected average daily rate of gain?
- _____ 61. Explain feed efficiency and how it is important to the economics of meat production.
- _____ 62. Label the wholesale cuts on a diagram of the carcass of your species.
- _____ 63. Label the retail cuts on a diagram of the carcass of your species.
- _____ 64. Name and explain the different grades of meat for your species.
- _____ 65. Name five meat by-products produced by your species.

Breeds and Registration

- _____ 70. Name and describe five breeds of your animal species.
- _____ 71. For your species what are the names for: a young male, young female, castrated male, mature male, and mature female?
- _____ 72. What is a purebred animal?
- _____ 73. Name a state, national, and international breed organization for your species.
- _____ 74. Explain the processes of marking your animal of identification (leg bands, ear tags, tattoos, etc.)
- _____ 75. Discuss the registration requirements and the process of registering an animal of your species.

Showing

- _____ 80. What are the different classes in which animals of your species can be shown?
- _____ 81. Describe in detail how to fit and groom your animal for the show ring.
- _____ 82. What special equipment do you use to show your animal?
- _____ 83. Describe proper show ring etiquette and good showmanship.
- _____ 84. Describe the techniques used to show your animal that differs from other species.
- _____ 85. Describe the proper attire to wear when showing your animal.

Cultural Study

- _____ 90. Explore uses of your species (ie goat, llama, dog, etc.) in cultures other than your own.

Independent Study

- _____ 95. An essay related to your species may be approved by the MSU 4-H Extension Educator as an alternative to questions for your content. All other format requirements apply. Essay must have a minimum of 500 words.

Don't forget your Animal Project Report/Record!

Berrien County 4-H Animal Science Notebooks
Additional Equine Questions

Year
Answered

Conformation and Breeds

- _____ 100. Discuss/describe in detail the muscle structure of the horse.
- _____ 101. Discuss and describe in detail the bone structure of the horse including the importance of joint angles.
- _____ 102. Select five of the following light horse breeds and describe the ideal conformation, foundation sires and/or history, colors, size, and uses of each:
- | | | |
|--------------|---------------|--------------|
| Arabian | Lipizzaner | Morgan |
| Mustang | Quarter Horse | Standardbred |
| Thoroughbred | | |
- _____ 103. Describe the ideal conformation, foundation sires and/or history, colors, size, and uses of the following draft breeds:
- | | | |
|----------------|---------|------------|
| American Cream | Belgian | Clydesdale |
| Percheron | Shire | |
- _____ 104. Describe the ideal conformation, foundation sires and/or history, colors, size, and uses of the following color breeds:
- | | | |
|-----------|----------|-------|
| Appaloosa | Buckskin | Paint |
| Palomino | Pinto | |
- _____ 105. Describe the ideal conformation, foundation sires and/or history, colors, size, and uses of the following pony breeds:
- | | | |
|--------------|-----------|-----------------------|
| Chincoteague | Connemara | Pony of America (POA) |
| Shetland | Welsh | |
- _____ 106. Describe the ideal conformation, foundation sires and/or history, colors, size, and uses of the following gaited breeds:
- | | | |
|---------------------|------------------|-----------|
| American Saddlebred | Icelandic | Paso Fino |
| Rocky Mountain | Tennessee Walker | |
- _____ 107. Describe ten horse and/or pony coat and mane/tail colors.
- _____ 108. Describe five face and five leg markings on horses.
- _____ 109. Diagram and describe the appearance of a horse's teeth at:
- | | | | |
|----------|----------|-----------|---------|
| Birth | 6 months | 1 year | 5 years |
| 12 years | 15 years | >20 years | |
- _____ 110. Label a complete diagram of the hoof from the sole and side.

Grooming

- _____ 120. Basic grooming – Include a diagram and explain how each of the following are used:
Curry comb Dandy brush Body brush
Hoof pick
- _____ 121. Describe the proper trimming and shoeing of a horse hoof.
- _____ 122. Show grooming – Include a diagram and describe how and why each of the following are used:
Rub rag Scissors Clippers Sponge
Mane/tail comb Sweat scraper Hoof dressing

Health and Disease

- _____ 123. Describe cause, symptoms, prevention and treatment for:
Colic Heat stroke Thrush Founder
- _____ 124. Discuss the care of the following wounds:
Punctures Bruises Cuts Saddle sores
- _____ 125. Describe cause, symptoms, prevention and treatment for:
Poll evil Fistulous withers Side bone Heaves
- _____ 126. Describe cause, symptoms, prevention and treatment for:
Splints Shoe boil Bog spavin Wind puffs
- _____ 127. Describe cause, symptoms, prevention and treatment for:
Bone spavin Bowed tendons Quarter crack
Navicular disease
- _____ 128. Describe cause, symptoms, prevention and treatment for:
Tetanus Strangles Influenza
Equine Infectious Anemia
- _____ 129. Describe cause, symptoms, prevention and treatment for:
Sleeping sickness Equine Protozoal Myeloencephalitis
West Nile Virus Rhinopneumanitis
- _____ 130. Describe the proper care of a horse's teeth throughout life.

Handling and Safety

- _____ 140. Describe how a horse sees the world including eye placement, color vision, depth perception, field of vision.

- _____ 141. Describe the proper way to catch, lead, and release a horse.
- _____ 142. Discuss the psychology of a horse, why it behaves the way it does, in three different situations of your choice.
- _____ 143. Discuss three safety rules for each of the following:
 Grooming Trailer Trail riding
- _____ 144. Discuss the cause, treatment and prevention of these vices:
 Barn sour Cribbing Rearing Striking Shying
- _____ 145. Discuss the cause, treatment and prevention of these vices:
 Herd-bound Bucking Balking Biting
 Halter pulling
- _____ 146. Show picture/diagrams and explain the bowline knot and the manger tie.

Training

- _____ 150. Discuss in general terms the handling, care and training of a foal from birth to 3 years old.
- _____ 151. Discuss the type (size, personality, training) of horse suitable for beginners, small children and/or handicapped riders.
- _____ 152. Describe the use of the following natural aids:
 Hands Heels Legs Weight Rider position
- _____ 153. Describe use of the longe line in training and exercising.
- _____ 154. Describe these four natural gaits including the number of beats or footfalls, and how the legs move in each:
 Walk Trot Canter Gallop
- _____ 155. Describe these four gaits including the number of beats or footfalls, and how the legs move in each:
 Stepping pace Running walk Pace Rack
- _____ 156. Explain the training of an over-fences horse/pony.
- _____ 157. Explain ground tying, hobbling and picketing a horse/pony.
- _____ 158. Discuss the method and reasons for 'cooling out' a horse.

Tack

- _____ 160. Describe the driving horse/pony, harness and suitable vehicles for:
Pleasure Fine harness Roadster Pulling
- _____ 161. Label the parts of a Western saddle on a complete diagram.
- _____ 162. Label the parts of an English saddle on a complete diagram.
- _____ 163. Name and label the parts of 4 Western bits on a diagram of each.
- _____ 164. Name and label the parts of 4 English bits on a diagram of each.
- _____ 165. Describe the care, cleaning and maintenance of the metal, leather, and cloth parts of your tack.
- _____ 166. Describe the forward, balance, and saddle seats, and their correct tack.
- _____ 167. Describe the correct tack for Western trail classes, gymkhana, and for reining classes.

Showing

- _____ 170. Discuss the do's and don'ts of Western Horsemanship.
- _____ 171. Discuss the do's and don'ts of English Equitation.
- _____ 172. Discuss the appropriate mane and tail styling for showing in hunt seat, dressage, saddle seat and western classes.

Don't forget your Animal Project Report/Record!

Berrien County 4-H Animal Science Notebooks
Additional Dog Science Questions

Year
Answered

Conformation and Breeds

- _____ 200. Name the seven groups of dogs as classified by the AKC and state the general purpose of each.
- _____ 201. Paste or draw a picture of one breed of dog from each of the 7 AKC groups and discuss the characteristics of each breed pictured.
- _____ 202. Paste or draw a picture of one breed of dog from each of the 7 AKC groups and discuss the history and development of each breed.
- _____ 203. List all the breeds in the Hound Group and state whether they are sight or scent hounds.
- _____ 204. List all the breeds in the Working Group and state the purpose for which each breed was developed.
- _____ 205. List all the breeds in the Sporting Group and tell if they are flushers, retrievers, and/or pointers.
- _____ 206. Explain what the Miscellaneous group is and its importance.
- _____ 207. Discuss the breed standard and faults for your breed, or a breed you'd like to own.
- _____ 208. Define the following terms:
- | | | |
|-----------------|---------------|------------|
| Angulation | Fiddle front | Splay foot |
| Close-coupled | Sway back | Cow hocked |
| Down in pastern | Out at elbows | |
- _____ 209. Define the following terms:
- | | | |
|-----------|-----------|------------|
| Bat ear | Rose ear | Apple head |
| Dish face | Ring tail | Screw tail |
| Undershot | Overshot | |

Genetics and Nutrition

- _____ 210. Discuss and explain line-breeding, out-breeding and inbreeding.
- _____ 211. Discuss three inherited problems that are found in dogs.
- _____ 212. Discuss the problems that can be caused by lack of proper nutrition.

Health and Disease

- _____ 220. Explain and diagram the life cycle of the heartworm.
- _____ 221. Explain the procedure for the prevention of heartworm disease.
- _____ 222. What problems can extreme summer heat cause a dog and how can they be prevented?
- _____ 223. Explain what is needed to properly house a dog kept outside.
- _____ 224. Discuss how to give your dog medication orally and in the eyes.
- _____ 225. Discuss dog population problems, the lack of owner responsibility for dogs, and what can be done to correct these problems.

Training

- _____ 230. Discuss the importance of obedience training for the family dog.
- _____ 231. Discuss the crate and how and when it should be used.
- _____ 232. Describe the difference between compulsive and inductive training.
- _____ 233. Explain what important things a dog should be taught before six months old.
- _____ 234. Discuss five jobs for which dogs are trained.
- _____ 235. Name the three kinds of collars and explain their uses.

Grooming

- _____ 240. Describe all the steps needed to properly groom a dog.
- _____ 241. Explain how to trim and care for a dog's nails and include a labeled diagram of the nail.
- _____ 242. Discuss and explain how and where the following tools are used:
Slicker brush Nail clippers Pin brush
Steel comb Mat splitter Soft brush
- _____ 243. Describe what is meant by 'stripping' and the breeds on which it is primarily used.

Showing

- _____ 250. Discuss the fundamentals of Junior Showmanship.
- _____ 251. Explain the differences between Junior Showmanship, Conformation and Obedience classes at a dog show.
- _____ 252. Explain and diagram the three different gaiting patterns used in Junior Showmanship
- _____ 253. Explain how a dog is 'stacked.'
- _____ 254. Diagram and explain the classes through which a dog must advance to become 'Best in Show.'
- _____ 255. Explain what a dog must do to earn an OTCH and a CH.
- _____ 256. Name the exercises in the Novice, Open and Utility Obedience classes.
- _____ 257. Explain what each of the following abbreviations stand for:
- | | | | | |
|-----|-----|------|----|-----|
| BOB | BOS | BOW | CH | CD |
| CDX | CGC | OTCH | TD | TDX |
| UD | UDX | WB | WD | |

Don't forget your Animal Project Report/Record!

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