TACK: **BIT LAB**

NON-LEVERAGE BITS

Type of Snaffle _____ BIT # _____

1) How many pieces are there in the horse's mouth? ***TOTAL SCORE***

A. 1 to 3 pieces	1 pt	
B. more than 3 pieces	5 pts	_____

2) What kind of texture or shape does the mouthpiece have?

A. Sharp (eg. Triangular or edged)	10 pts	
B. Prickly	10 pts	
C. Rough (eg.Twisted wire or chain)	10 pts	
D. Twisted metal	5 pts	
E. Wrapped with smooth wire	3 pts	
F. Smooth	1 pt	_____

3) What is the ring shape?

A. Round (rings are circles)	1 pt	
B. All other shapes	2 pts	_____

4) How thick are the canons? ***X***

A. 1/2" or more	1 pt			
B. 3/8" but less than 1/2"	3 pts	_____	=	_____
C. less than 3/8"	10 pts			

5) How are the rings attached to the canons?

A. Through holes in the canons 1 pt
(this would be all snaffles except Fulmer aka Australian loose ring)
B. All others including Fulmer 3 pts (_____)
SUBTRACT

6) Are there players, keys or a cricket on the bit?

A. Yes 3 pts
B. No 0 pts (_____)
SUBTRACT

7) Is the mouthpiece rubber, copper, sweet iron, or a flavoured material?

A. Yes 3 pts
B. No 0 pts (_____)
SUBTRACT

TOTAL: _____

Total score of:

1– 5 > Mild 6 – 19 > Moderate 20 or more > Severe

TACK: **BIT LAB**

LEVERAGE BITS

Type of Bit _____ BIT # _____

1) How many pieces are there in the horse's mouth? ***TOTAL SCORE***

A. 1 to 3 pieces 1 pt
B. More than 3 pieces 5 pts _____

2) Is it a gag / elevator bit?

A. Yes 5 pts
B. No 0 pts _____

3) What is the size, height and shape of the port?

A. No port and a broken mouth piece 0 pts
B. High port with steep narrow tongue relief
Port meets the cross piece
squarely (90 degree angle) 10 pts
C. High port with broad tongue relief
Port meets cross piece on a rounded angle 5 pts
D. Medium or low port with broad tongue relief.
Port meets cross piece on a rounded angle 1 pts
E. No port. Unbroken arched cannon 2 pts
F. No port. Straight unbroken cannon 3 pt _____

4) How is the port angled with respect to the shanks?

A. Port slopes back more than the shanks 1 pt
B. Port is parallel to the shanks 2 pts
C. Port slopes forward more than the shanks 10 pts
D. No port. 0 pts _____

5) How does the mouthpiece slope side to side?

A. Broken mouth like a common snaffle
WITH a solid bar connecting the shanks 1 pt
B. Broken mouth like a common snaffle
WITHOUT a solid bar connecting the shanks 10 pts
C. Solid mouth perpendicular to shanks 1 pt
D. Solid mouth slopes down to shanks 10 pts _____

6) How are the shanks bent?

A. They aren't bent 3 pts
B. Backwards toward the horses chest 1 pt
C. Forward 5 pts _____

7) How long are the shanks? (For bits like kimberwicks which don't actually have shanks, measure between the mouthpiece and where the reins attach)

A. 1" or less	1 pt	
B. More than 1" and up to 3"	2 pts	
C. More than 3" and up to 4"	4 pts	
D. More than 4"	7 pts	_____

8) What kind of texture or shape does the mouthpiece have?

A. Sharp (triangular or edged)	10 pts	+
B. Prickly	10 pts	
C. Rough (twisted wire or chain)	10 pts	
D. Twisted metal	5 pts	
E. Wrapped with smooth wire	3 pts	
F. Smooth	1 pt	_____

9) How thick are the cannons?

A. 1⁄2" or more	2 pts	**X**		
B. 3/8" but less than 1⁄2"	3 pts			
C. Less than 3/8"	4 pts	_____	=	_____

10) Where does the curb chain / chin strap attach?

A. To the same ring as the bridle cheeks 0 pts
B. Separate ring below the ring for the cheeks 2 pts
C. Separate ring behind the ring for the cheeks 5 pts
(_____)

SUBTRACT

11) How are the shanks attached to the cannons?

A. Through holes in the cannons (like most Pelhams) 1 pt
B. All others including welded solid 3 pts
(_____)

SUBTRACT

12) Are there players, keys or a cricket on the bit?

A. Yes 3 pts
B. No 0 pt
(_____)

SUBTRACT

13) Is the mouthpiece copper, sweet iron, or a flavoured material?

A. Yes 3 pts
B. No 0 pts
(_____)

SUBTRACT

TOTAL: _____

Total score of:

1– 5 > Mild 6 – 19 > Moderate 20 or more > Severe

HEALTH: **PARASITES**

Parasite Presentation

What is a Parasite? It is an animal that lives off of another animal (the host). It uses the host to provide it with a home and food. It may eat the same food as the host or it might use the fluid from the host's body (often blood). Ensure the members know the difference between an external parasite and an internal parasite. Damage done to the inside of the horse can be permanent. There are over 12 different kinds of worms and they can produce 1000's of eggs a day.

Some of the signs that would indicate internal parasites are listed on page 109 in the manual. Review these signs with the members.

Discuss some of the ways we can protect our horses from parasite damage: dewormers, insecticides, bug masks and fly sheets, etc.

This is a very fun way to learn about icky parasites! You will find a sheet of parasites (internal and external) attached. Select enough parasites as you have members. Cut them out and place them in a paper bag. Allow the members to reach in and draw out one parasite. Each child will research their parasite (refer to pages 108 – 114) and prepare a brief description. They should include 1-3 main points, whether it is an internal parasite or an external parasite and how to get rid of it!

The Performance

The parasites are all decked out in sunglasses and ball caps on backwards (lookin' real bad…) standing beside each other. One at a time they take a step forward, introduce themselves and tell a few facts. If you have more than one child playing the same parasite, they can say it in unison or share the lines. It is better if they memorize the lines so encourage them to keep it brief!

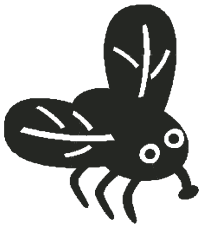
Here is an example:

"Hi, I am Louie the Lice! I lay eggs in your horse's hair. I make your horse really itchy! You have to use a special chemical mix to get rid of me!!"

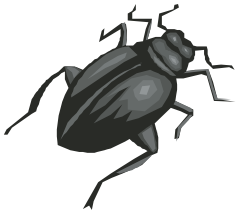
Get together prior to the performance (we just do it at a meeting) for a bit of a practice. Keep things "light". Let the kids plan what they are going to say but if it sounds too long they might appreciate you suggesting they cut some of it out. You might need to prompt them to speak up louder and sound tougher like only a parasite can!

Maria the mosquito

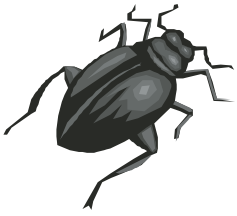
Bert the bot fly



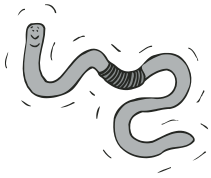
Frankie the fly



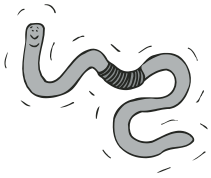
Louie the lice



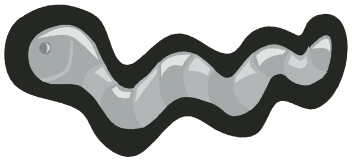
Mike the mite



Petey the pinworm

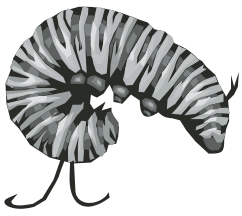


Ralph the roundworm (ascarid)



Tom the tapeworm

Butch the bloodworm (strongyle)



Bernie the bot larvae

HEALTH: **DEWORMING**

Deworming Programs

- Frequency of deworming will depend upon a lot of factors. Here are several things to take into consideration: climate & season, number of horses, age, health, feeding situations (pasture vs dry lot), manure management practices, pasture rotation, exposure to other livestock.
- Recommended frequency is every two to six months.
- There will always be internal parasites in the body of the horse. Good deworming practices will help to control the amount.
- Damage done to internal organs (lungs, liver, arteries and intestines) can be permanent.
- Young horses (birth to 2 years) are at greater risk because they tend to eat manure and dirt. They also have smaller intestines so a blockage is more likely. They should be treated for tapeworms in midwinter.
- Older horses are more susceptible to worm infestations. They should also be treated for tapeworms in midwinter.
- Review the signs (refer to Manual - page 109): rough, dull coat / sheds out later than others / thin with a potbelly / thin, even though they are fed well / frequent colic and diarrhea / worms or eggs in manure / rubbing their tail
- There are over 12 kinds of worms and they can produce 100's of 1000's of eggs a day!
- Five main types:
    - Strongyles (blood worms, palisade worms)
    - Ascarids (intestinal worms also called round worms)
    - Pinworms
    - Bots
    - Tapeworms
- Bots – treatment in the fall / Tapeworms – treatment in midwinter
- Dewormers: 5 different forms – paste, gel, powder, granules and liquid
- To prevent parasites from becoming immune to one particular class, a rotation between classes of dewormers is recommended. Check the chemical content of dewormers, not just the brand name as many brands contain the same drugs.
- Three classes of dewormers: Avermectins, Benzimidazoles, Tetrahydropyrimidines.

In preparation for this exercise members should read pages 108 – 114. Leaders will need to prepare by collecting empty paste deworming boxes with their paper inserts. It is important to find boxes from the three different classes available (see above) as the members will have to research to find the active ingredient. In this activity members will design five deworming programs. Members should work with a partner with guidance provided by the leader as required.

The first step is to determine the active ingredient in the pastes. The members will need to read the info provided with each dewormer to find the active ingredient. They will write the brand name and active ingredient in the appropriate space on their worksheet. They may be surprised to discover the brands they have been using are all in the same class! Once that task has been completed they can go ahead and design the five programs keeping in mind the points mentioned above and referring to the instruction / information sheets provided with each deworming product. While we have provided some general guidelines for the leaders regarding the deworming programs, there are no right or wrong answers to this activity. It is intended to give the 4-H members a deeper understanding of internal parasites, the different types of paste available and when to use them. As long as they have considered the facts and made an effort to apply their knowledge to each of the following situations, they have succeeded! Always recommend they discuss their personal situations with their Vet. The second step is to design the programs.

Design a Deworming Program for the following horses:

A. 10 horses / 1000 acres pasture / horses are free to roam and graze

B. 20 horses / kept in small pens, (as in a boarding facility) 2-3 horses per paddock / fed hay twice a day on the ground

C. 2 horses / 4 acres divided into 2 paddocks

D. 12 young horses (yearlings / 2 year olds) kept in large paddocks on a breeding farm

E. 15 horses ranging in age from 19 – 34 living on a retirement ranch that specializes in the care of seniors

Record the letter corresponding to each class under the month you would recommend using it.

Eg.	Jan	Mar
	"A"	"T"

Leaders info:

Here are a few commonly used dewormers as examples. Feel free to add more brands that are available in your area.

Class	Brand Name	Active Ingredient
Avermectins	Panomec	ivermectin
	Quest Gel	moxidectin
Benzimidazoles	Safe-Guard	fenbendazole
Tetrahydropyrimidines	Strongid P	pyrantel pamoate
	Exodus	pyrantel pamoate

The members should show an obvious rotation of classes. Look for a Bot treatment in the late fall or early winter months. Look for a Tapeworm treatment in midwinter for the young horses and the seniors. The recommended frequency is 2-6 months. For horses in smaller confined spaces, young horses and seniors look for deworming frequency closer to the 2 month end of the scale while horses kept in larger areas could be closer to the 6 month end. Allow the members to make their own assumptions for each situation. For example, pasture rotation, manure management practices, etc.

Parasite Control Worksheet

Class	Brand	Active Ingredient
Avermectins		
Benzimidazoles		
Tetrahydropyrimidines		

Situation	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
A 10 horses / 1000 acres												
B 20 horses / small pens												
C 2 horses /4 acres												
D 12 young horses / paddocks												
E 15 seniors												

A – Avermectin **B** – Benzimidazole **T** – Tetrahydropyrimidine

HEALTH: **THE DIGESTIVE SYSTEM**

This activity is intended to educate our older members about the digestive system of the horse in a fun interactive way.

In preparation for this activity members in levels 4-7 can read pages 96 – 99 in their manuals.

Leaders need to cut out the digestive parts and their descriptions. There should be 21 cards all together in no particular order. The Anus card has it's description already on it. Whoever draws this card is dubbed Team Captain. They will be the keeper of the name cards. Have 3 small prizes available.

- Step 1 - Distribute descriptions by turning them upside down on a flat surface and let the members pick one. If you have a small group, have each member draw 2 or 3 cards each.
- Members must use their manuals to figure out which part is being described on their card.
- Once they have found it, they report to their team Captain who will check to make sure they are correct. Then their Captain will give them the corresponding name card.
- Once everyone receives their name card they can begin step 2.
- Step 2 – Put the 10 parts in order on a table with the descriptions below each name or if you have a real active group, have them put themselves in order according to the card they hold.
- Present the Captain with a prize for being such a great sport (Captain Anus) and helping with the game.

Bonus questions – Tell everyone to close their manuals. Have a couple of prizes on hand for these questions.

What is the total length of the digestive system? (27 metres or 90 feet)

What is the total capacity of the digestive system? (227 litres or 50 gallons)

TEETH

TONGUE

PHARYNX

ESOPHAGUS

STOMACH

CECUM

SMALL INTESTINE

LARGE COLON

SMALL COLON

RECTUM

ANUS

- feces passed out here

• the incisors pull or pick up the feed • the molars grind it as it is being mixed with saliva	• it is mixed with saliva and moved to the back of the mouth
• very strong muscles • forces the food down	• muscles move in wave-like motions in one direction only • this movement prevents vomiting
• glands secrete gastric juices that mix with the saliva-soaked food • gastric juices are a mixture of water, hydrochloric acid and enzymes (pepsin) • the enzymes break down vegetable fats and changes proteins into a form that can be absorbed by the body	• the mesentery membrane keeps this attached to the backbone • enzymes from the liver and pancreas are secreted here • food breaks down into small molecules that are absorbed through hair-like “villa”
• a.k.a. “water gut” • holds 36 litres (8 gallons) • reservoir for storing water • digests roughage and absorbs nutrients	• 3 to 4 metres long (10-12 feet) • Holds 91 litres (20 gallons) • Uses friendly bacteria to breakdown fibrous portions of food and release carbohydrates
• fluid content is re-absorbed into the horse’s body	• horse droppings are molded here • they should consist of 25% solids and 75% water

SAFETY: **SIGHT**

Eye Sight and Blind Spots

Prior to the session draw the picture from page 179, of the Reference Manual, on a board or flip chart. Do not label.

Tell the members to focus on something in the room. Ask them to cover one eye and ask if they can still see it. (yes)

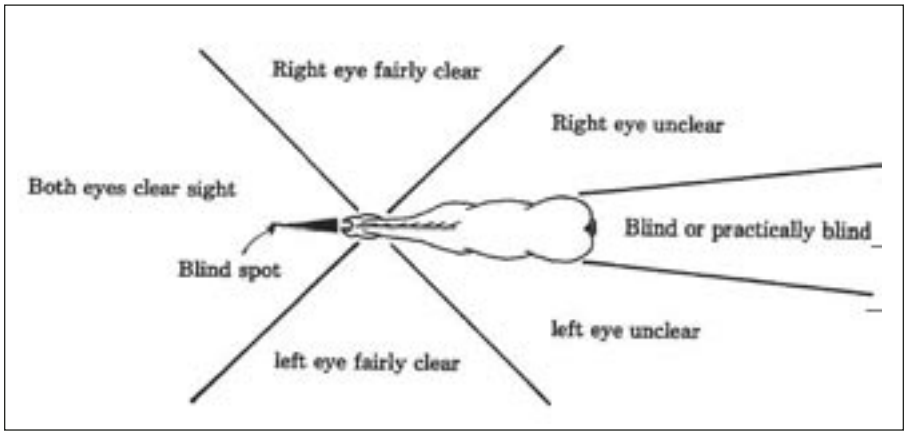
Uncover that eye and cover the other eye and ask again. (yes) Explain that our eyes are on the front of our head and they work together to focus on the same thing.

Horses have eyes on the side of their heads. They see two distinctly different pictures at the same time. If I were a horse….what would happen if I covered up one of my eyes? What would I see? (Everything on that side of the room)

Have the members refer to their manuals, page 179. Refer to the diagram you drew on the board. Ask the members what a "blind spot" is. Where are the blind spots for a horse. (there are 3)

Ask for only one at a time and invite the member who gave you the answer to come up to the board and draw/label it on the diagram.

Ask the members why this it is important to know and what we can do to be safe while working / passing through a horse's blind spot. (speak to your horse)



SAFETY: **TYING**

Tying your Horse Safely

For this session members will need a partner and a ruler. If some of your members don't know each other, encourage them to choose a partner they may not know very well. This is a great opportunity for members to get to know each other better and make new members feel welcome.

Ask the members:

What shouldn't you tie your horse to?

(The kids are great at this once they get rolling!)

- wire fence, cross rails on a wood fence, flimsy trees, doors, gates, anything that moves. Never tie with the reins. Why?

What should you tie your horse to?

- strong post in the ground, hitching rail, strong tree trunk, etc.
- Always use a halter and lead rope to tie your horse.

It is important not to tie your horse too low. Why? (could get a leg over the rope, etc)

The best height to tie your horse is always wither height. If you can't find something at this height (or can't reach!) then your second choice would be to tie at least 1 metre from the ground. (3 times the length of the ruler they brought)

Have the members partner up – They will measure 1 metre up from the floor on the side of their partner. This is the level they should never tie their horse below. First choice: wither height; second choice: 1 metre.

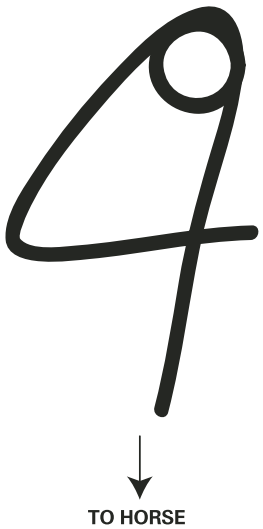
It is easier for kids to remember how high 1 metre is if they have a reference (their armpit!).

Safety Knots

(figure "4" method)

Members can stay with the same partners. One will be the "human" and the other will be the "post".

Demonstrate the figure "4" method.



- Humans need their leadropes and halters.
- Posts should take the leadrope in their left hand and hold it up and out as if it were attached to a horse.
- Humans should then pass the rope from left to right behind the post. (Around their partner's waist) Now tie the safety knot. Allow for about 2' of leadrope from the post to your horse's halter. Check all knots. Show them how to check to knot – the line from the halter will go directly to the post / pull on the end and the knot should release.
- Change positions (post / human) and repeat the exercise.
- Mention that when tying to horizontal rails or bull rings – go from top to bottom as shown on page 2 of the manual.

Discuss the extra measure for "Houdini" horses that can untie knots. (tail through loop) Caution members never to use this method when tying in a horse trailer. Ask members to describe cross-tying.

AGRICULTURE, FOOD AND
RURAL DEVELOPMENT
4-H Branch

2004