



The Pony Club Achievement Badges



Worm Control Workbook



Use the words provided to complete each of the sentences below.

Endoparasite

Roundworm

Parasite

Worm

Tapeworm

A helminth is commonly known as a _____

A micro-organism that feeds from living creatures is called a _____

An internal parasite is correctly called an _____

A cestode is commonly known as a _____

A nematode is commonly known as a _____

Match each of the worms to the correct picture.

Tapeworm



Roundworm



Bots



Match each of the roundworms to the correct picture.

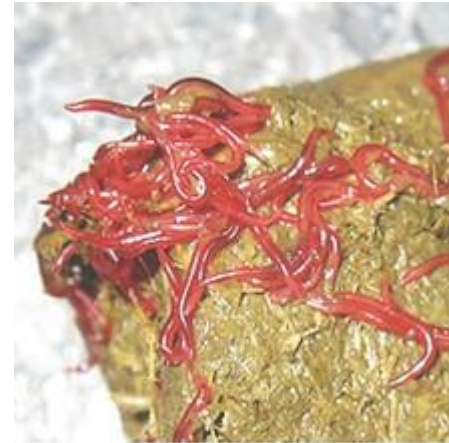
Large roundworm /Ascarids

Small redworm (cyathostomins)

Pinworm

Threadworm

Large redworm



Circle the clinical symptoms that you might expect to see if a horse has a significant worm burden.

Weight loss

Diarrhoea

Anorexia

Depression

Weight gain

Increased energy

Fever

Cough

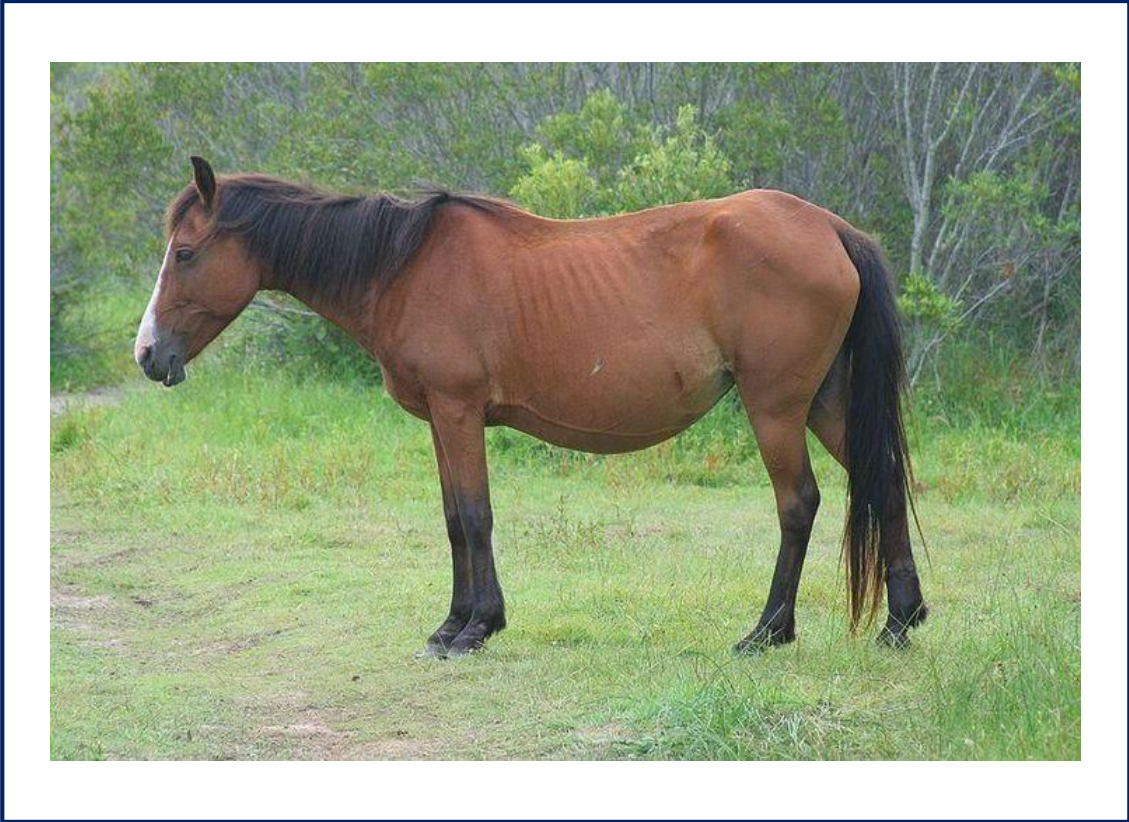
Irritation

Lameness

Colic

Loss of performance

Look at the picture of the horse below



Why might you be worried about this horse?

Answer: _____

Match each of the worms to the correct information.

Tapeworm

These are potentially the most dangerous of the equine internal parasites. Adult worms eat the lining of the gut wall, causing significant bleeding and damage. Immature worms (larvae) cause substantial damage as they burrow through the gut wall into the bloodstream and migrate around the body. Blood clots and weakening of the blood vessel walls can cause arteries to burst under increased pressure, and this is fatal to the horse.

Large roundworm / Ascarids

These can cause severe damage to the gut, leading to weight loss, diarrhoea and colic. These burrow into the gut wall, where they remain during the winter months before re-emerging in the spring. The emergence of large numbers can cause serious damage to the gut wall and may prove fatal.

Small redworm (cyathostomins)

These are especially dangerous to foals and young horses. The larvae can cause lung and liver damage as well as permanent harm to the digestive system. Worm numbers can build up rapidly, and may result in a blockage or rupture of the gut, leading to death.

Pinworm

These can cause damage to the large intestine and cause severe itching around the tail. The horse can become distressed and rubbing of the tail can cause open sores which are liable to infection.

Threadworm

These intestinal worms are often dormant in adult horses but can transfer to a new-born foal via a mare's milk, leaving the foal weak and affecting its growth.

Large redworm

These cause less direct internal damage to a horse's intestine but large numbers can cause a fatal blockage, particularly as they tend to congregate at the narrow site where the small and large intestines join (the ileocaecal junction). They may also cause digestive disturbances and colic.

Bots

These are larvae of horse bot flies. Horse bot flies lay their eggs in the horse's coat and, as the horse grooms itself, the eggs are ingested. The eggs hatch into larvae which then migrate to the stomach. If left untreated the horse can suffer from mouth and throat inflammation, as well as ulceration of the stomach. Heavy burdens of this parasite can cause colic or even perforation of the stomach.

Worm Control and Management - What do you know?

Are the following statements TRUE or FALSE?

TRUE FALSE

- Good pasture management can significantly reduce the risk of worm burdens in horses.

- Good pasture management includes picking up muck, resting the pasture, and rotating the animals grazing between horses, sheep and cattle.

TRUE FALSE

- If there are lots of horses grazing together then there is no benefit of picking up the muck in the field unless they have less than five acres of grazing.

TRUE FALSE

- The recommended method for preventing a significant worm burden is to use a protocol that includes carrying out a faecal worm egg count (FWEC), a saliva / cheek swab, good pasture management, and the administration of a horse wormer only when required.

TRUE FALSE

Worm Risk Assessment

Identify whether each of the following case studies are at low, medium, or high risk of having a significant worm burden.

Case Study A

Betsy is a 6 year old Thoroughbred mare. She lives at a livery yard where she is turned out in the day and comes in to a stable at night. Betsy shares a two acre field with one other horse.

Low Risk	Medium Risk	High Risk

Case Study B

Thunder is an 18 month old Irish Draught x Thoroughbred gelding. He lives out full time in a twenty acre field with twelve other young horses.

Low Risk	Medium Risk	High Risk

Case Study C

Freckles is a 10 year old Welsh Section D gelding. He lives out full time in a five acre field with six other horses. The owner is very good at picking up the muck in the field and ensures that she does this on a daily basis.

Low Risk	Medium Risk	High Risk

Detecting Worms - What do you know?

Are the following statements TRUE or FALSE?

- All horses should be regularly checked to see if they have a significant worm burden. TRUE FALSE
- Ideally, horses should only be administered with a worming product if they actually have a significant worm burden. TRUE FALSE
- A faecal worm egg count (FWEC) can be used to detect if a horse has a significant **roundworm** burden and requires dosing with a horse wormer. TRUE FALSE
- A saliva / cheek swab, or a blood test can both be used to detect if a horse has a significant tapeworm burden and requires dosing with a horse wormer. TRUE FALSE
- You can usually tell just by looking whether or not a horse requires dosing with a horse wormer. TRUE FALSE

Worming - What do you know?

Are the following statements TRUE or FALSE?

- It is recommended that all horse owners follow a suitable worming programme. TRUE FALSE
- Chemical products used to worm horses are known as anthelmintics. TRUE FALSE
- Administering horse wormers too frequently can cause problems with worms building up a resistance to the worming product, and this can result in the product no longer being effective. TRUE FALSE
- It is vital that you administer the correct amount of horse wormer to reduce the risk of under-dosing because this can also lead to resistance problems. TRUE FALSE
- It is vital that you administer the correct amount of horse wormer to reduce the risk of over-dosing because this can cause harmful side effects. TRUE FALSE

Accurate Dosing

How can you try to ensure that you are administering your horse with the correct amount of wormer?

Answer: _____

Which of the following is the best method of gaining an accurate body weight?



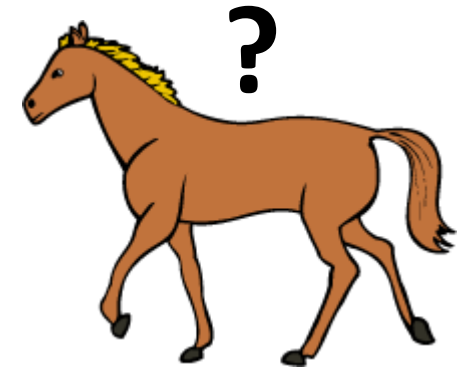
Weigh bridge



Weight estimation formulae



Weigh tape



Visual estimation

Accurate dosing

This is Jet and she weighs 550kgs.



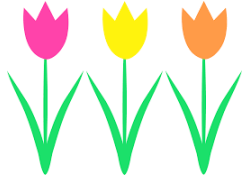
Place a mark on the picture of the wormer where you would turn the dial too in order to prepare for administering the wormer to this horse.



When to Worm – what do you know?

Match each of the seasons to the worms that need to be targeted at this time.

Spring (March)



Routine roundworms and tapeworms



Summer

Routine roundworms

Autumn (October)



Routine roundworms and tapeworms



Winter

Routine roundworms, bots and encysted small redworms

Recap Task 1 - Identify which of the following statements are correct.

- Regularly picking up muck from the field can help to prevent your horse from getting worms. Yes No
- A blood sample can be used to detect if a horse has a **tapeworm** burden. Yes No
- A saliva / cheek swab can be used to detect if a horse has a **tapeworm** burden. Yes No
- Horses should be given a wormer every month. Yes No
- A faecal worm egg count can be used to detect if a horse has a **roundworm** burden. Yes No
- A horse is less likely to get worms if they are grazed with lots of other horses. Yes No

Recap Task 2 - Which of the following can help to reduce the risk of worms?



Yes No



Yes No



Yes No



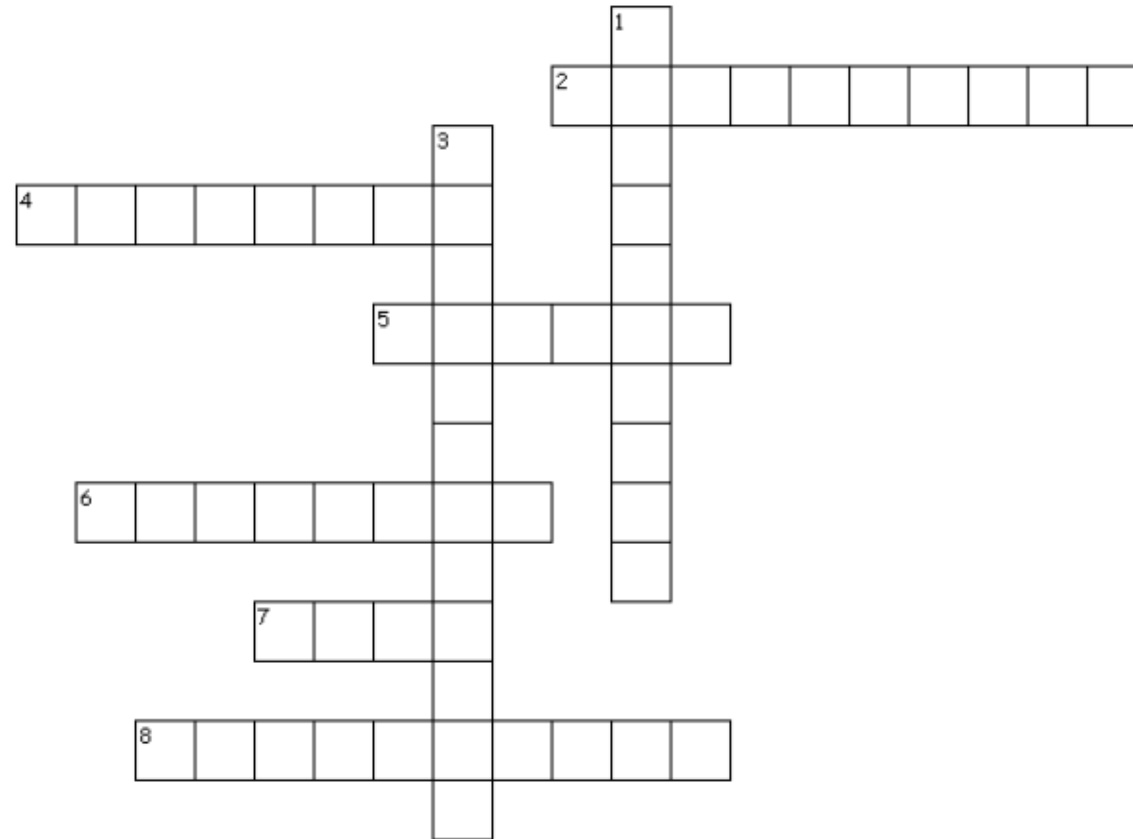
Yes No

Yes No



Yes No

Recap Task 3 - Complete the crossword



Across

2. The most common type of worms found in horses.
4. Using sheep and cattle to help to reduce the worm egg content on the pasture.
5. The common name for an anthelmintic.
6. The presence of this worm is detected by using a saliva/cheek swab, or a blood test.
7. These like to live in the horse's stomach.
8. Worms that are subjected to an under dose of worming products can develop this.

Down

1. It is vital to know this accurately before worming a horse.
3. The correct name given to a parasite that lives inside the body.

Recap Task 4 – Complete the word search

Find the words below in the word search.

Helminth

Roundworm

Tapeworm

Parasite

Anthelmintic

Resistance

Well done!



H	B	A	H	S	T	P	I	P	E
E	U	N	G	D	A	R	Y	H	E
L	O	T	F	A	P	E	E	A	D
M	U	H	A	N	E	A	E	W	G
I	G	E	Y	D	W	E	G	T	E
N	A	L	K	Y	O	C	G	R	K
T	T	M	L	W	R	O	N	S	O
H	P	I	G	R	M	T	I	T	G
N	O	N	G	U	F	R	O	O	A
P	A	T	O	M	I	N	O	O	I
S	O	I	S	H	H	E	B	U	E
Q	R	C	D	E	J	E	M	C	G
U	S	F	B	A	D	G	N	R	R
T	E	F	O	N	O	A	C	V	E
H	B	L	A	Z	T	U	Y	D	Y
P	A	R	A	S	I	T	E	R	A
E	S	F	I	T	P	O	R	G	R
L	E	S	R	T	D	E	E	R	T
F	E	L	S	E	P	E	C	J	J
R	O	U	N	D	W	O	R	M	U