



# **LEARNING THEORY**

Advanced Achievement Badge

## **Learning Objectives**

To understand what learning theory is and how it can be used to train horses and ponies.

## **Syllabus**

- Understand what learning theory is.
- 2 Know why it is important to understand learning theory.
- **3** Name some of the most important principles of learning theory and understand what they mean.
- 4 Understand that ponies learn by trial-and-error.
- 5 Understand that timing is important.

## **Teaching Ideas and Resources**

- **1** Explain that:
  - ▶ Learning theory is the understanding of how ponies learn
  - ▶ It recognizes that ponies learn things differently from people.
- 2 Point out that:
  - ► It is important to understand how ponies learn because this helps us to to communicate with them
  - ▶ It is not helpful to expect ponies to think and react the way that people do
  - ▶ Ponies learn from what we do all the time, not just when we think we are training them.
- **3** Explain that 3 of the most important principles of learning theory are:
  - Negative reinforcement
    - When the pony does what you want, you take away something he doesn't like (e.g., pressure from your legs).

- Positive reinforcement
  - When the pony does what you want, you give him something he likes (e.g., a treat).
- Desensitisation
  - When a pony is scared of something, you get him used to it gradually.

Give an example of each of these techniques. Examples you could use are:

- Negative reinforcement: If you want your pony to walk forwards you squeeze his sides with your legs (which he doesn't like). As soon as he starts to walk, you stop squeezing. It is nicer for him when he isn't being squeezed, so he learns that he did the right thing.
- Positive reinforcement: Every time your pony lets you pick up his foot, you give him a treat. He likes this so he learns that he did the right thing.
- Desensitisation: You help your pony get used to clippers in small steps: you turn the clippers on far away from him, closer to him, on him, then clip a little section, etc. At each step, you stop before he becomes uncomfortable. It also helps if you give him a treat when he stands still. In this way, he learns that clippers are not scary.
- **4** Explain that ponies don't know what you want them to do. They learn by trial-and-error. They keep trying things until they find the one that you want. To demonstrate this:

Ask the members to get into pairs. One member of each pair has to decide (without telling anybody else) what they want the other person to do when they tap them lightly on the leg. Examples include: i) step forwards; ii) step backwards; iii) step sideways; iv) lift the leg. They should keep tapping lightly on the person's leg until the person does what they want. When the person does what they want, they must stop tapping straight away. If the person does something that they don't want, they must keep tapping. This way, the person being tapped learns what they are being asked to do, because the annoying tapping stops when they do the right thing. This is an example of negative reinforcement. The person being tapped will probably learn even faster if they are also given a treat (e.g., a sweet) every time they do the right thing.

Imagine this process happening whenever you ask your pony for something new – he has to try lots of different things before he finds the one you want. The faster you stop the annoying thing after he

- finds the right answer, the faster he will learn what to do. He is even more likely to learn what you want if you also give him a treat when he does the right thing.
- **5** Explain that, when using positive and negative reinforcement, your timing is important. The faster you take away the annoying thing or give the treat after the pony has done what you want, the more likely he is to learn that this was correct

Members may notice this during the game described in section 4 – if the tapping stops 5 seconds after they have done the right thing, it is harder to figure out what was the correct action.

### Questions

- 1 Ask what learning theory is.
- 2 Ask the candidate:
  - a. Do ponies think and learn in the same way that we do?
  - b. Why do we need to understand how ponies think and learn?
- **3** Ask the candidate to give an example of:
  - Negative reinforcement
  - Positive reinforcement.
  - Desensitisation
- 4 Ask the candidate to explain how they would teach a pony to do something new, ridden or unridden. Useful examples include stepping backwards or sideways, with the candidate on the ground.
- **5** Ask the candidate how long after the pony has done the correct action they should take away the annoying thing or give a treat as soon as possible, or after 10 seconds?

#### **Answers**

- 1 'Learning theory' describes how horses and ponies learn.
- **2** a. No.
  - b. It makes it easier for us to train ponies and helps them to understand what we mean.
- **3** The examples should include the following ideas:
  - Negative reinforcement
    - ► The person does something that the pony finds slightly annoying (e.g., gentle pressure). As soon as the pony does what the person wants, the annoying thing is taken away.

- Positive reinforcement:
  - As soon as the pony does what the person wants, he gets something nice (e.g., a treat or a wither scratch).
- Desensitisation:
  - The pony is gradually introduced to something he doesn't like by breaking the process down into small steps that he can cope with.
- 4 The answer should include a clear explanation of how they would remove something annoying (negative reinforcement) and/or do something the pony likes (positive reinforcement) when the pony does what they want.
- **5** As soon as possible, because this makes it easier for the pony to learn that he did the right thing.