Preparing You For Your Education Session: Animal Learning & Intelligence

Location: Schools’ Education Centre
Duration: Approx. 45 minutes

Syllabus links
AS/A2 Psychology, Biology and Physical Education
The nature of simple learning (classical and operant conditioning) and its role in behaviour.
Evidence for intelligence in non-human animals.

Session content
Students will explore & discuss how animals learn new behaviours, and find out how we apply this knowledge for their welfare in the zoo.

Using zoo case studies, we will focus on how knowledge of classical and operant conditioning is used when training animals for veterinary procedures and management.

During the session pupils will:
- Listen, ask and answer questions
- Discuss their ideas
- Work in small groups

Using the Zoo to support this session

Whilst in the zoo, you may wish to:

- See the Animals in Action show in the Amphitheatre to see several animals which are trained to show off their natural behaviours to visitors. Try to spot the signals and methods the trainers use to communicate with and reward the animals. Write a list of the animals seen and which behaviours they were trained to show.

- Visit Gorilla Kingdom and the Parrot aviaries (near Penguin Beach) and observe. These are considered by many to be “intelligent” animals. What evidence can you see to support or refute this?

- Observe the many species living together in Rainforest Life. Keepers may sometimes need to feed one animal by itself to give medication. How could they use conditioning and positive reinforcement to make this easier?

Suggested classroom activity (for before or after your visit)
Ask students to work in groups and brainstorm the different ways that using rewards (positive reinforcement) could help you look after a zoo animal. Ask students to plan a route to take around the Zoo that allows them to see the animals and exhibits that they would like to focus on.