Oxbow Meadows “I See, I Wonder” Teacher Notes

Learned versus Instinctual Behaviors

*Standards:*

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| **Grade** | **Standard/Element** |
| 5 | S5L2 - Obtain, evaluate, and communicate information showing that some characteristics of organisms are inherited and other characteristics are acquired. a. Ask questions to compare and contrast instincts and learned behaviors. b. Ask questions to compare and contrast inherited and acquired physical traits. |
| 7 | S7L3b - Ask questions to gather and synthesize information about the ways humans influence the inheritance of desired traits in organisms through selective breeding. |

*Main Ideas:*

* Traits
* Inherited Traits/Behaviors
* Learned Traits/Behaviors

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| A | Bees | **Instinct.** The drive to get pollen and nectar is encoded in the genes. |
| B | Alligators | **Learned**. Alligators are trained to come to colored disks, a different color for each alligator, and to not come up on the shore. The clicking sound you hear in the background is Oxbow staff training them to respond both to the color and the sound. This increases safety when dealing with alligators. |
| C | Snapping Turtle | **Instinct.** The Alligator Snapping Turtle does not chase its prey put sits on the bottom with its mouth open. If you look closely you can see it move its worm-like tongue, sort of like a fishing lure. This attracts prey and when close enough, the turtle snaps shut. |
| D | Alligators | **Instinct.** You can hear the alligators bellowing. They make this sound to attract mates and to defend a territory. |
| E | Dolphin | **Learned.** While swimming is an instinct for this animal, balancing and tossing a ball is a learned behavior. |
| F | Beaver Dam | **Instinct.** Beavers cut down trees and make dams to make a place where they can live. Inside the flooded areas beavers make piles of sticks into dens. |
| G | Dog | **Learned.** Dogs learn tricks and responses by a practice of rewarding the behavior the owner wants. |
| H | Birds | **Learned.** This one is a little tricky, but most birds are initially feed by their parents in the nest. They regurgitate food that is easy for the young bird to digest. If you watch at bird feeders in the spring you can often find a parent bird pecking seed from the feeder and then feeding the young bird also at the feeder. The parent is modeling how to get food from the feeder. Birds learn by experience where they can find food and if you put up a bird feeder and keep it stocked, birds will find it and return. |
| I | Spider | **Instinct.** The building of a web by a spider is instinctual or innate. |
| J | Fish | **Instinct.** Here you see fish schooling. Schooling is instinctual and is a survival mechanism. A large school of fish moving together appears to be a much bigger animal. If a predator does attack the school it often becomes confused as the fish briefly scatter and then collect back in the school. |
| K | Bird | **Intinct….mostly.** This is another tricky one as the need and expertise to build a nest is instinctual. However, birds can learn and will use different materials for the nest depending upon what is available. |
| L | Bear | **Learned.** Bears are taught how to catch food, and while in this video the bear is trying to catch fish, most brown and black bears are omnivores and eat a lot of berries. |
| M | Sheep | **Learned.** Here a sheep is scratching an itch. Clearly something it learned how to do. |
| N | Snake | **Instinct.** The way a snake moves and uses its tongue to sense the environment instinctually. |
| O | Otter | **Learned.** Young otters are taught how to swim and catch food. |
| P | Praying Mantis | **Instinct.** You don’t get to see the whole process here but this praying mantis is molting. They are invertebrates with hard outer coatings. In order to grow they have to shed the outer covering and grow a new larger one. The movements here are in an effort to help get out of the old otter covering. You can actually see part of the new green outer covering on the body starting to show. |
| Q | Birds | **Learned**. Birds are taught how to fly by observing their parents and trial and error. Young birds are not nearly as skilled as older birds in take offs and landings. |