

Animal Behaviors - Learned vs. Inherited

Lesson Overview

In this lesson, students will distinguish between learned and inherited behaviors and will be able to write a rule to explain the difference in these behaviors. The specific goals for the lesson outlined in the video was for students to develop a one sentence rule to explain the difference between learned and inherited behaviors that they could then apply to any list of behaviors in order to classify if the behavior was learned or inherited. When given the focus question, “What is the difference between learned and inherited behaviors?,” students should be able to respond with, the understanding that “inherited behaviors are the ones you are born knowing how to do and learned behaviors are the ones you are not born with but have to learn through experiences or observations.”

Standards Addressed

SC 2005 6-3.7 Compare learned to inherited behaviors in animals.

SC 2014 6.L.4B.4 Obtain and communicate information to compare and classify innate and learned behaviors in animals.

Disciplinary Literacy Best Practices

Think Ink Pair Share (TIPS) (Pair with Elbow Partner)

Give Me Five

Popsicle Sticks

Card Sort

Line of Learning (LOL)

Most Important Point (MIP)

Lesson Plan

Time Required – One 60 minute class

Disciplinary Vocabulary – learned behavior, inherited behavior

Materials Needed:

- (1) Pencil per student
- (1) Science Notebook per student (or other recording device)
- (1) Set of Index Cards per student group (instructions for cards to follow)

Suggested behaviors:

- Fish swims
- Fish swims to top of bowl when you approach
- Dog shakes paw with you
- Dog hears bell and comes for food
- Colt (baby horse) wears saddle and bridle to allow rider
- Protecting young
- Hibernation
- Spider spins web
- Cold (baby horse) stands/walks after it is born
- Migration
- Birds build nest in safe place
- Bird builds nest
- Birds avoid viceroy butterflies
- Touch hot object = pain

Assessment:

- Sorted cards into the two categories (recorded in notebook)
- Line of Learning - the “rule” written to explain how they decided into which category they would place the specific behavior
- Exit Ticket - Most Important Point from the lesson (this may or may not be their “rule”) written in science notebook (or other appropriate place)

Engage

- Students THINK and INK (record) an answer to the focus question: “What is the difference between learned and inherited behaviors?” in their science notebooks.
- Ask students to PAIR with their elbow partner and SHARE their response to the focus question.
- To gauge thoughts around the room, use the “give me five” strategy to call on five students to share their responses whole group. For random selection, use popsicle sticks with student names.

Explore

- Provide each group with the prepared index cards. Explain that they will be doing a Card Sort. As a group, they are to dialogue about each behavior and determine whether it is a learned behavior or inherited behavior. They are only allowed to use each other for information in order to sort the cards into the two groups. If they cannot come to an agreement on which type of behavior, they may create a third group and call it undecided so that they can move on and come back to those later.
- Groups should record their card sort in their notebooks.
- Facilitate group dialogue and assist as needed with sorting the behaviors. During this process, the best question to ask students is “what are some reasons you placed ____ card in this category”? Ask why and justify!

Explain

- After the behaviors are placed into the categories, students should revisit their response to the focus question from the beginning of class, draw a Line of Learning in their notebooks (underneath their original response) and write a one sentence “rule” that determined where or how each of the behaviors were placed.
- Also, engage in whole-class dialogue with the groups to talk about which behaviors were placed into which category and why they chose that category. This might also be a good time for student to share out their Line of Learning. Give Me Five may be used again.
- What were their challenges throughout the card sort? Which cards were confusing for them?

Lesson Assessment: As an exit ticket, students write the Most Important Point of what they took away from the lesson that day. They should write this in their notebooks or on a notecard or post-it.

Teacher Reflections and Biographical Information

The behaviors provided on the index cards were purposefully planned so that students would have to think and dialogue with their groups. There were a few that caused confusion and debate. For example, “birds avoid the viceroy butterfly,” provided great dialogue about mimicry and a debate among group members. Also “birds build a nest” as compared to “birds build a nest in a safe place,” created collaborative dialogue as they decided how to categorize these cards. After I reviewed the MIP in their notebooks, I could have extended the lesson the next day by asking students to apply this knowledge to their own behaviors. The focus question could be to name one learned behavior and one inherited behavior they have and explain the difference.

Lesson Author:

DeDee Quinn, 6th and 7th Grade Science Teacher, Middle School of Pacolet, Spartanburg County School District 3.