

6. Pheasants do not feed their chicks. Immediately after hatching, a pheasant chick starts pecking at seeds and insects on the ground. How might a behavioral ecologist explain the ultimate cause of this behavior?

A or B

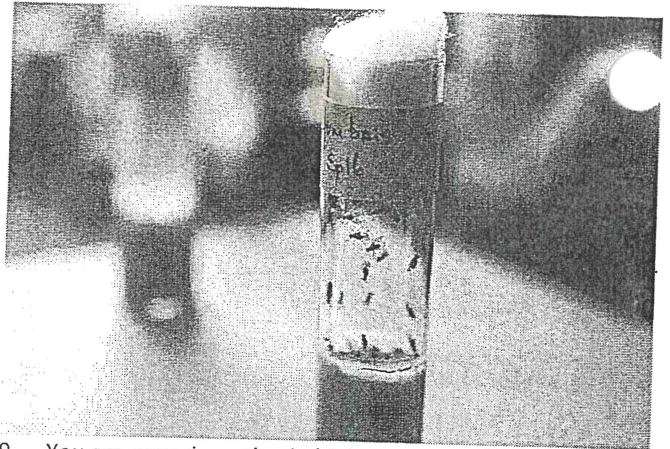
- (A) Pecking is a fixed action pattern.
- (B) Pheasants that pecked survived and reproduced fast.
- (C) Pheasants learned to peck and their offspring inherited this behavior.
- (D) Pecking is the result of imprinting during a critical period.

7. You are a graduate student in a biology lab. Every morning when you arrive to conduct your research before class, you turn on the lights and feed the fish in the tanks. One morning you briefly stop by the lab to pick something up but do not have time to feed the fish. You turn on the lights and notice that the fish immediately begin to swim to the surface of the tanks to feed. Why are the fish behaving in this manner?

- (A) The fish are imprinted on you, so they swim to the surface when you are near.
- (B) The fish have been classically conditioned to respond to the light when it is turned on.
- (C) The fish are exhibiting a positive phototaxis behavior in response to the light.
- (D) The fishes' instinct is driving them to swim to the surface when humans are near.

8. One way to determine whether or not food preferences have a genetic basis would be to

- (A) Compare the food preferences of two different wild populations.
- (B) Give animals from two different populations the exact same food and see if they eat it.
- (C) Rear the offspring of animals from two different populations with different food preferences under the same conditions in the lab and see whether or not their food preferences reflect parental ones.
- (D) Bring animals from two populations into the lab and observe whether they have different food preferences.



9. You are experimenting in biology lab with a vial of fruit flies to investigate their food preferences. You notice that they fly toward the cotton plug inserted into the vial (which is unscented) instead of toward the nutrient culture medium in the bottom of the vial, which has a strong banana scent. Which of the following choices below describes what behavior the flies are engaging in?

- (A) Positive chemotaxis, because they are moving toward the cotton.
- (B) Negative chemotaxis, because they are moving away from the scented culture medium.
- (C) Kinesis, because the flies do not seem like they are moving in any certain direction.
- (D) Kinesis, because they are moving away from the culture medium toward the cotton plug.

Short Answer: Use complete sentences.

10. When an animal engages in agonistic behavior, it often puffs up to appear larger and more menacing to other animals.
- (a) What is the adaptive value of this behavior?

Better able to intimidate
ivals, survive/reproduce more

