

What is Behavior? Quiz

Which of the following are behaviors? Mark them with a "B."

(Note to teachers: quoted phrases are from Chapter 1: What is Behavioral Genetics?)

1. _____ rust building on the metal of a car
"things that are not alive do not behave"
2. B a smoker craving a cigarette
"behaviors are holistic responses to stimuli from inside the body"
3. B lichen growing on rock
"all living organisms, not just humans, behave"
4. B a flower closing its petals as darkness falls
"even plants behave"
5. B a man hiccupping
"behavior also can be unconscious, automatic, or instinctual"
6. _____ boulders tumbling down a cliff
"rocks and oceans and planets do not behave"
7. B a new mother falling into post-partum depression
"mood disorders fall into the category of behavior"
8. B a schizophrenic patient experiencing hallucinations
"mental illness falls into the category of behavior..."
9. B a girl and boy flirting on the bus
"mostly we think of behavior as something conscious..."
10. _____ a computer winning a game of chess
Although the computer is reacting to moves by the other player, it is doing so strictly according to its software. To the extent that software is like a genetic code, the computer is simulating behavior. But most scientists would not define this as real behavior.
11. B birds migrating south in the fall
"...behavior also can be ... instinctual"

12. B an old man with Alzheimer's forgetting the name of his son
"physical manifestations of most diseases are behaviors, too"
13. B a bacteria darting across a liquid
"animals behave, insects behave, and single-celled amoebas behave"
14. _____ adult teeth replacing baby teeth
The development of adult teeth is a biological process that is highly regulated by genes. It's affected by environment but in such a minimal way that most scientists would not characterize it as behavior.
15. B a mathematician calculating a formula
"the type of thinking that involves knowing and perceiving is called intelligence or cognition"
16. _____ a middle-aged man experiencing male-pattern baldness
Male-pattern baldness is an inherited trait that is predominantly influenced by genetic inheritance. Environmental influences on this form of baldness are so minimal that most scientists would not characterize it as behavior. Most scientists also would not characterize as behavior the baldness that results from radiation therapy, because it is entirely or almost entirely caused by environmental effects.
17. _____ snow falling
"things that are not alive do not behave"
18. B a teacher who cheerfully greets her students each morning
"personality is behavior"
19. B a student daydreaming during class
"thinking itself is behavior"
20. B a soccer player making a goal
"behavior are the actions a creature makes, as a whole, in response to the world around it"

Student Sheet, Chapter 2

1. chromosomes G, IV
2. genome D, III
3. genotype A, II
4. natural selection E, V
5. phenotype B, VII
6. protein C, VI
7. quantitative genetic trait F, I

Student Sheet, Chapter 3

1. developmental noise F, VII
2. environmentability E, VI
3. gene/environment interaction A, II
4. heritability D, IV
5. negative gene/environment correlation H, VIII
6. positive gene/environment correlation G, I
7. shared environment C, III
8. unshared environment B, V