Chapter 1

A Science of Behavior: Perspective, History,  
and Assumptions

1. \_\_\_\_\_\_\_ is the alteration (or maintenance) of an organism’s behavior due to \_\_\_\_\_\_\_\_.
   1. Behavior; causes
   2. Learning; lifetime events
   3. Culture; social norms
   4. Evolution; genes

Ans: b

1. The experimental analysis of behavior is:
   1. Concerned with controlling and changing factors that affect behavior
   2. A natural-science approach to understanding behavior regulation
   3. Concerned with the principle of reinforcement
   4. All of these

Ans: d

1. A \_\_\_\_\_\_\_ is behavior that is elicited by a biologically relevant stimulus while a/an \_\_\_\_\_\_ is behavior controlled by its consequences.
   1. Reflex; respondent
   2. Reflex; operant
   3. Respondent; voluntary
   4. Operant; respondent

Ans: b

1. Selection by consequences occurs at three levels. What are these?
   1. Artificial selection, culture, and linguistic selection
   2. Natural selection, artificial selection, and cultural selection
   3. Natural selection, behavior selection, and cultural selection
   4. Artificial selection, natural selection, and linguistic selection

Ans: c

1. What does a duckling inherit in terms of imprinting?
   1. The behavior of following its mother
   2. The capacity to be reinforced by reducing the distance between itself and a moving object
   3. The behavior of following a “duck-sized” object
   4. The capacity to follow its mother as she obtains food in an ecological area

Ans: b

1. Skinner stated that behavior (including human behavior) resulted from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Genes
3. Environment
4. Self-determination
5. Both (a) and (b)

Ans: d

1. According to Baer, Wolf, and Risley (1968), what is the difference between basic and applied behavior analysis?
2. Basic research is likely to look at any behavior and any variable, and applied research looks at variables that could improve behavior
3. Basic research is likely to look at any behavior and any variable
4. Applied research looks at variables that could improve behavior
5. None of these

Ans: a

1. Which of the following statements are true of Pavlov and his contributions?
2. He won the Nobel Prize
3. He investigated the salivary reflex
4. All of these
5. He discovered the conditioned or conditional reflex

Ans: c

1. Which of the following statements are true of the new-style behaviorists (behavior analysts) and their views?
2. They adopted the behaviorism of John B. Watson
3. They studied behavior for its own sake
4. They rejected genetic influences
5. All of the above are true

Ans: b

1. How are thinking and feeling treated from a behavioral perspective?
2. More behavior to be explained
3. The cause of overt behavior
4. The relationship between the mental and the physical
5. The mind and its regulation of behavior

Ans: a

1. Learning refers to:
2. The acquisition of behavior
3. The maintenance of behavior
4. The change in behavior as a result of events
5. All of the above

Ans: d

1. The behavior of an organism:
2. Focuses only on overt actions that can be measured by an outsider
3. Is everything an organism does, including thinking and feeling
4. Is everything an organism does, including biological processes such as digestion
5. Includes the behaviors of organisms around the target organism

Ans: b

1. Neural plasticity is:
2. Alterations in the brain that accompany behavior change
3. Changes in the brain due to physical trauma such as a blow to the head
4. Changes in the brain that occur during growth and development
5. The brain becoming hardened as the organism gets older

Ans: a

1. When Whitehead challenged behaviorist B. F. Skinner to address the sentence, “No black scorpion is falling upon this table,” he was making the point of:
2. The predictability of linguistics
3. The dysfunction present in sentence structure
4. The spontaneity of human language that theoretical systems fail to account for
5. The inability of behaviorism to help people suffering from speech disorders

Ans: c

1. The problem with astrology and other primitive accounts of behavior is:
2. They are not objectively verifiable
3. They are not replicable
4. They are not scientifically valid
5. All of the above

Ans: d

1. Behavior theory states that all behavior is due to complex interaction between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ influence and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ experience.
2. Cultural; environmental
3. Genetic; cultural
4. Cultural; environmental
5. Genetic; environmental

Ans: d

1. Analysis of behavior becomes experimental when it involves:
2. The observation of behavior
3. The organism changing its behavior
4. A component of learning
5. The manipulation of a condition to see how behavior is affected

Ans: d

1. Which of the following statements best describes the goals of behavior analysis?
2. To explain the forces that shape human behavior and then to use these explanations to develop behavior management techniques for humans
3. To explain how human thought, feeling, and intention both influence behavior and are influenced by behavior and then to use this understanding to develop technologies to influence how people think and feel.
4. Work with already established principles and rules of behavior, apply them across species, and develop behavior management techniques
5. Describe the principles and rules of behavior, apply them across species, and develop technologies for behavior change

Ans: d

1. The principle of discrimination:
2. States that an organism will respond differently in two situations
3. States that an organism will respond the same in the same situation
4. States that an organism will respond differently in the same situation
5. States that an organism will respond differently with different organisms

Ans: a

1. Which of the following statements is *not* a key assumption of behavior analysis?
2. Behavior is a product of the organism’s biological and evolutionary history
3. Principles of behavior discovered by experimental analyses of behavior are general and apply to all forms of animal life
4. Behavior is a product of the organism’s past and current interactions with its environment
5. Feelings, thoughts, and intentions are possible *causes* of behavior

Ans: d

1. Applied behavior analysis is:
2. Discovering behavior management techniques
3. Defining behavior in an organism
4. Manipulating conditions to produce changes in behavior
5. The use of behavior principles to solve practical problems

Ans: d

1. Respondent conditioning has occurred when a non-functional stimulus is:
2. Paired with a conditioned stimulus
3. Paired with an unconditioned stimulus
4. Paired with a reflex behavior
5. Paired with a desired behavior

Ans: b

1. In operant conditioning, a stimulus that reliably precedes an operant response (SD) is said to:
2. Elicit the response
3. Reinforce the response
4. Set the occasion for the response
5. Punish the response

Ans: c

1. Which of the following is *not* an example of respondent conditioning:
2. A baby smiling at its parent after having been picked up for smiling in the past
3. Feeling anxious any time you hear the music from a scary movie
4. Flinching slightly when the nurse tells you that they are about to give you a shot
5. Feeling excited whenever you smell your significant other’s cologne/perfume

Ans: a

1. Which of the following is *not* an example of operant conditioning:
2. Flinching slightly when the nurse tells you that they are about to give you a shot
3. A baby smiling at its parent after having been picked up for smiling in the past
4. A rat pressing a lever that has produced food in the past
5. Pressing the keys on the joystick in a pattern that produces a “combo” on a video game

Ans: a

1. If you were to ask B. F. Skinner to classify *behavior analysis* as a subfield of another scientific discipline, which of the following would he most likely choose?
2. Psychology
3. Biology
4. Sociology
5. Anthropology

Ans: b

1. Which of the following best describes the findings by neuroscientists who added light-sensitive proteins to the genes of fruit flies (*Drosophila*)?
2. When light stimulation is added, the same behavioral patterns were activated every time the same stimulus and timing were presented, showing that brain pathways are stable
3. When light stimulation is added, the topography of response varied slightly across a small range of different behaviors, depending on differences in the timing of when the light was illuminated
4. When light stimulation was presented, the response topography varied probabilistically even when the identical brain pathway is triggered
5. When light stimulation was presented, the flies did not react to them in any way

Ans: c

1. A researcher who is interested in the effect of serotonin on an individual’s engagement in social behavior would be:
2. Focused on immediate causation
3. Focused on remote causation
4. Focused on cultural selection
5. Focused on selection by operant conditioning

Ans: a

1. The *neural basis of reward* most closely involves:
2. Serotonin; dopamine
3. Dopamine; endogenous opiates
4. Serotonin; endogenous opiates
5. Serotonin; dopamine; endogenous opiates

Ans: b

1. Behavior analysts recognize the importance of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but tend to focus more on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Biology; environment
3. Environment; evolution
4. Biology; evolution
5. Environment; biology

Ans: a

1. Which of the following best describes the behavior analyst position on learning and inheritance?
2. Genes determine physiological structure, while learning determines behavioral structure
3. The capacity for learning is inherited
4. Learning is limited to the behaviors that we inherit
5. Our behavior is an even balance between genetic influence and environmental experience

Ans: b

1. DNA methylation provides an epigenetic marker for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and histone acetylation provides a marker for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Gene activation; gene activation
3. Gene activation; gene silencing
4. Gene silencing; gene activation
5. Gene silencing; gene silencing

Ans: c

1. The *context of behavior* can be defined as:
2. Both the physiological and environmental conditions that surround behavior
3. The physiological conditions that surround a behavior
4. The environmental conditions that surround behavior
5. The environmental conditions independent of the physiological conditions, that surround behavior

Ans: a

1. Skinner’s model of selection by consequences assumes that behavior:
2. Typically occurs the same way each time
3. Naturally varies in form and frequency
4. Varies across species, but is rigid within a species
5. Tends to vary only in frequency, not in form

Ans: b

1. Behavior analysts define culture as:
2. The ideas, values, and behaviors that are passed from generation to generation
3. Traditions passed from one person to another through written or oral communication
4. All the conditions, events, and stimuli arranged by other people that regulate human action
5. Social influences on people that influence how they think, feel, and act

Ans: c

1. Skinner argued that internal events such as feelings, thoughts, and intentions:
2. Are unimportant
3. Should be ignored
4. Are behaviors that need to be explained
5. Are often causes of our behavior

Ans: c

1. Watson’s conditioning of Little Albert used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as a neutral stimulus and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the unconditioned stimulus.
2. A white rabbit; a blast from an air horn
3. A fur coat; an electric shock
4. A white rat; the sound of a hammer hitting a rail
5. A dog; ringing an alarm clock

Ans: c

1. The idea that successful behaviors will increase in likelihood while unsuccessful behaviors will decrease in likelihood was first described in:
2. Skinner’s idea of selection by consequences
3. Watson’s stimulus–response psychology
4. Pavlov’s work on conditional reflexes
5. Thorndike’s law of effect

Ans: d

1. Which of the following is *not* a difference between Skinner and Watson?
2. The rejection of internal events as causes of behavior
3. A rejection of genetics as an influence on behavior
4. The inclusion of operant conditioning in understanding behavior
5. An emphasis on habits in understanding the action of organisms

Ans: a

1. According to a behavior analyst, thinking is:
2. A variable that can directly influence behavior, independent of what is going on in the environment
3. A reflexive response to an external environmental stimulus only
4. Private behavior that can be explained using the same principles as public behavior
5. A special case of behavior that is controlled entirely by stimuli inside the organism

Ans: c