What Happens Next?

How consequences shape behavior at a school radio station

SS24.P.11b "Explain the law of effect, and differentiate between reinforcement and punishment, positive and negative reinforcement, and various schedules of reinforcement."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB In the final paragraph, underline each consequence and circle each behavior change that follows it. Number the four snack rules from 1 to 4 so you can compare when each snack is earned.

Shifts at the Radio Station

1. At the school radio station, volunteers decide whether to return for early shifts. Psychologist Edward Thorndike's law of effect predicts that behavior followed by a satisfying result becomes more likely, while behavior followed by an unpleasant result becomes less likely. In operant learning, reinforcement increases a behavior; punishment decreases it. Positive means something is added after a behavior, and negative means something is removed. Neither word means good or bad. For example, adding a perk can reinforce showing up, while removing an unwanted duty can also reinforce it. Removing a perk could instead punish missing a shift.

2. A schedule of reinforcement tells when a behavior earns a consequence. In a fixed-ratio schedule, reinforcement follows a set number of responses, such as every fifth poster printed. In a variable-ratio schedule, the number changes unpredictably around an average, as when a mystery prize comes after different numbers of completed puzzles. A fixed-interval schedule makes reinforcement available for the first response after a set amount of time has passed. A variable-interval schedule does the same after changing, unpredictable amounts of time. Intervals depend on elapsed time, but ratios depend on how many responses occur.

3. At the radio station, Leila completes a broadcast checklist and receives a song choice; she completes checklists more often. Mateo checks the sound board and has his cable-wrapping duty canceled; he checks more often. Nia interrupts interviews, loses microphone privileges, and interrupts less often. One volunteer earns a snack after every fourth shift accepted. Another earns a snack after an unpredictable number of shifts. A third earns a snack for the first shift accepted after each weekly Friday meeting. A fourth earns a snack for the first shift accepted after surprise check-ins held at unpredictable times.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does the law of effect explain the changes in Leila's and Nia's behavior?

2. Which example shows positive reinforcement, Leila's or Mateo's? Which shows negative reinforcement? Explain why both are reinforcement.

3. Why is Nia's loss of microphone privileges punishment rather than negative reinforcement?

4. Name the reinforcement schedule for each of the four snack rules, in order. What tells you whether each rule depends on responses or time?

3 YOUR TURN

Your own words

Invent a plan for a school bike repair club. Describe one positive reinforcement, one negative reinforcement, and one punishment, including how each changes a behavior; then write one ratio rule and one interval rule for earning a reward, precise enough to name each schedule as fixed or variable.

What Happens Next?

PART 1 · READ AND MARK

In the final paragraph, underline each consequence and circle each behavior change that follows it. Number the four snack rules from 1 to 4 so you can compare when each snack is earned. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does the law of effect explain the changes in Leila's and Nia's behavior?	**Leila completes checklists more often after receiving a song choice, a satisfying result. Nia interrupts less often after losing microphone privileges, an unpleasant result.**
2	Which example shows positive reinforcement, Leila's or Mateo's? Which shows negative reinforcement? Explain why both are reinforcement.	**Leila's is positive reinforcement because a song choice is added. Mateo's is negative reinforcement because a duty is removed. Both behaviors become more frequent.**
3	Why is Nia's loss of microphone privileges punishment rather than negative reinforcement?	**Her interruptions decrease. Negative reinforcement would increase a behavior after something is removed.**
4	Name the reinforcement schedule for each of the four snack rules, in order. What tells you whether each rule depends on responses or time?	**Fixed ratio: every fourth shift. Variable ratio: an unpredictable number of shifts. Fixed interval: the first shift after each weekly Friday meeting. Variable interval: the first shift after check-ins at unpredictable times. The first two count shifts; the last two depend on time passing.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Giving a volunteer a tool badge after they clean a workbench is positive reinforcement if cleaning becomes more frequent. Canceling a volunteer's inventory chore after they sort spare parts is negative reinforcement if sorting becomes more frequent. Taking away music privileges after a volunteer leaves tools on the floor is punishment if that behavior becomes less frequent. For a fixed-ratio schedule, give a sticker after every three bikes repaired. For a variable-interval schedule, offer a sticker for the first bike repaired after each surprise check-in, with check-ins held at unpredictable times.

Accept different club examples if adding or removing a consequence has the stated effect on behavior. Ratio rules must depend on a number of responses; interval rules must make a reward available for the first response after time has passed.