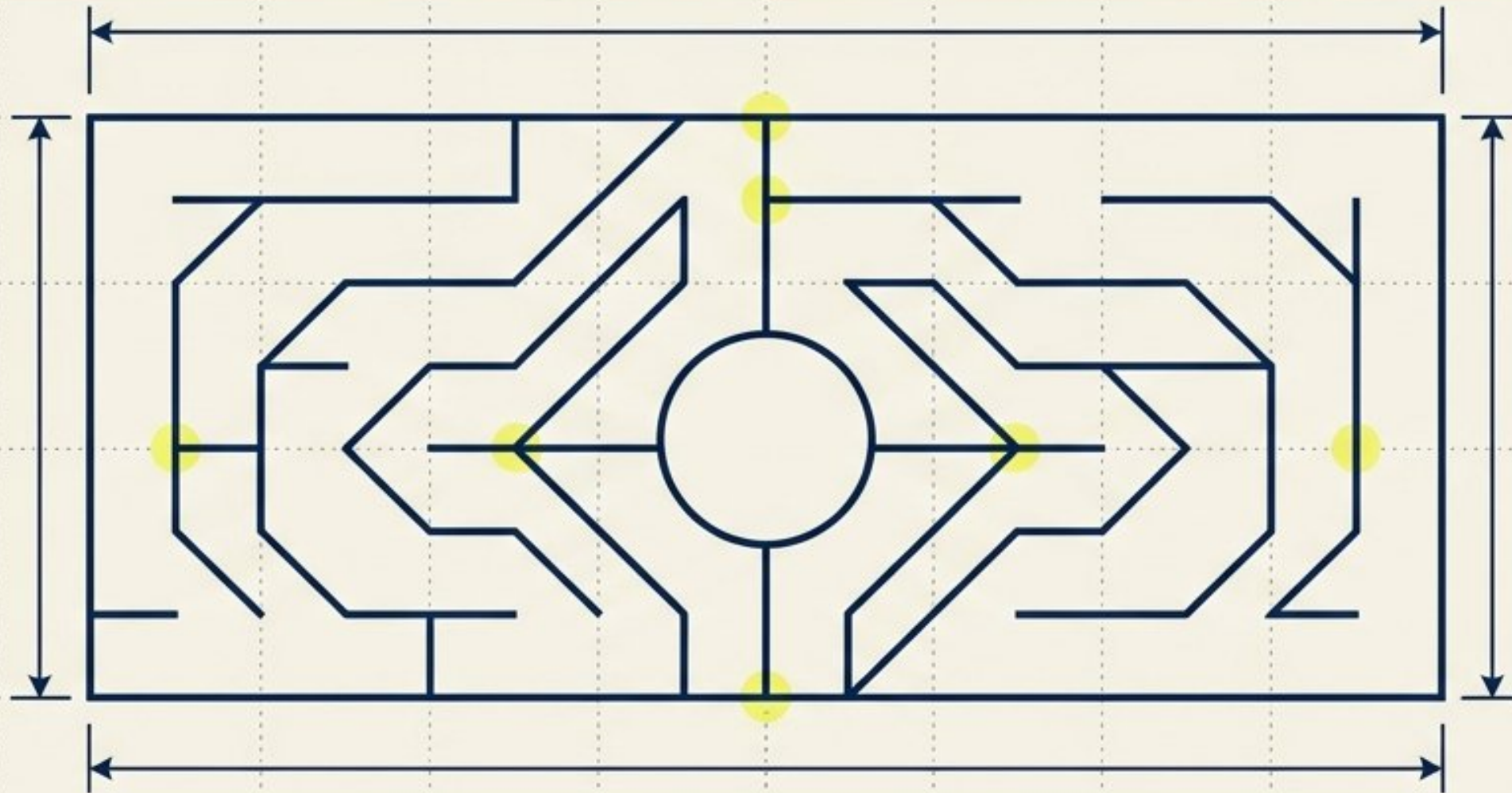




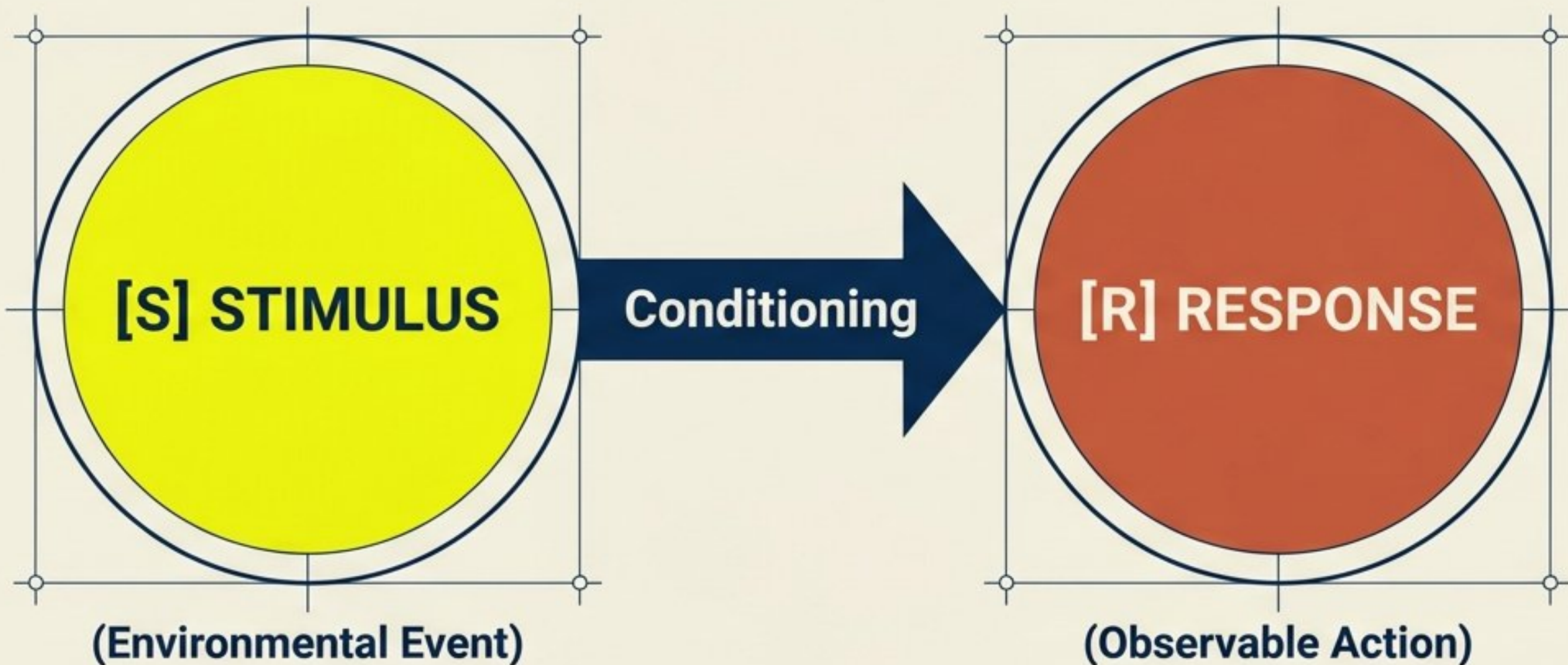
Architects of Behavior

From Laboratory to Classroom: A Pre-Service Teacher's Guide to Behaviorism

Foundations of Facilitating Learning

The Core of Behaviorism

Learning is defined strictly as a change in observable behavior caused by environmental stimuli, rather than internal mental states.

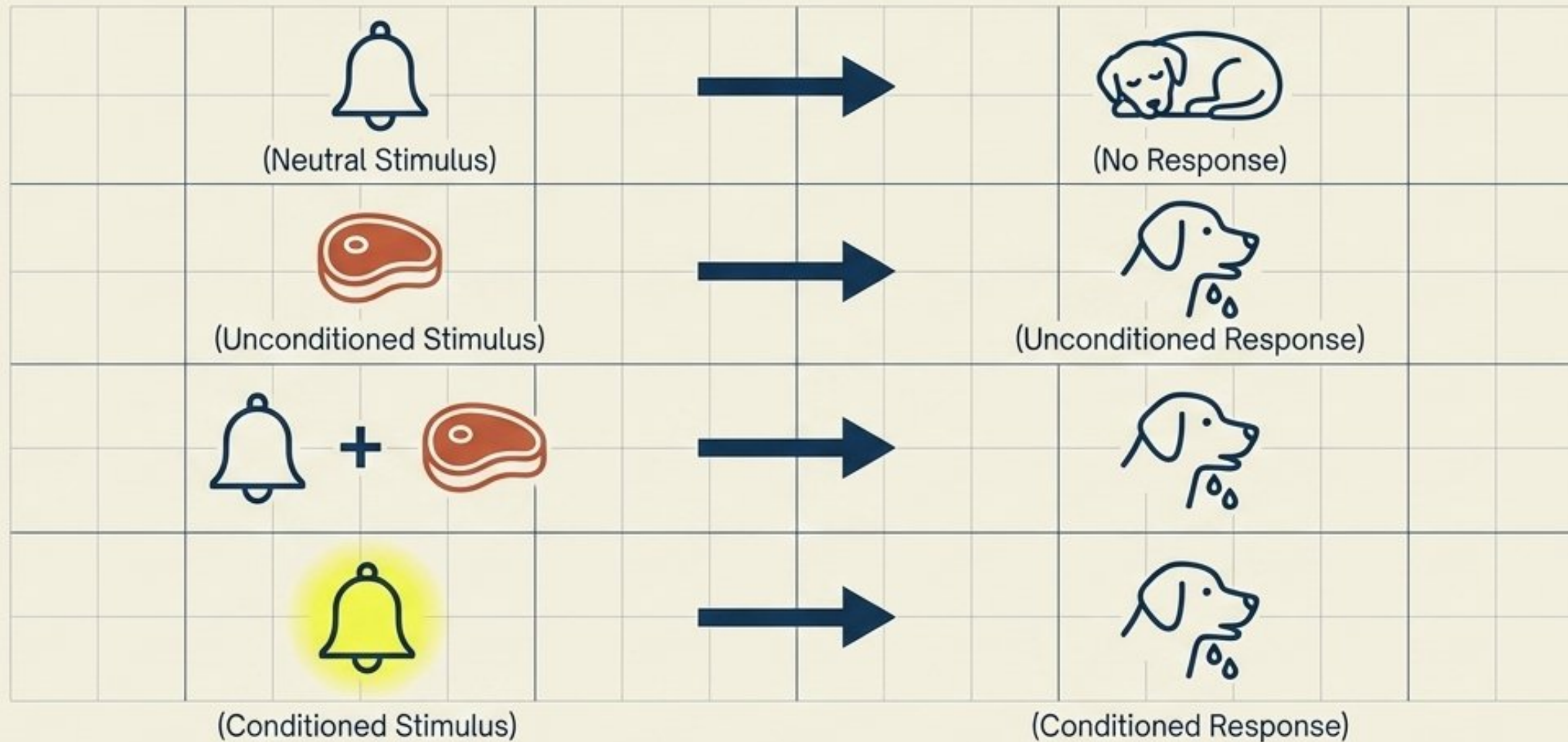


The Teacher's Lens

As a teacher, you are the architect of the classroom environment (the Stimuli) designed to elicit specific student learning outcomes (the Responses).

Ivan Pavlov: Classical Conditioning

Pairing an involuntary biological reflex with a previously neutral stimulus.



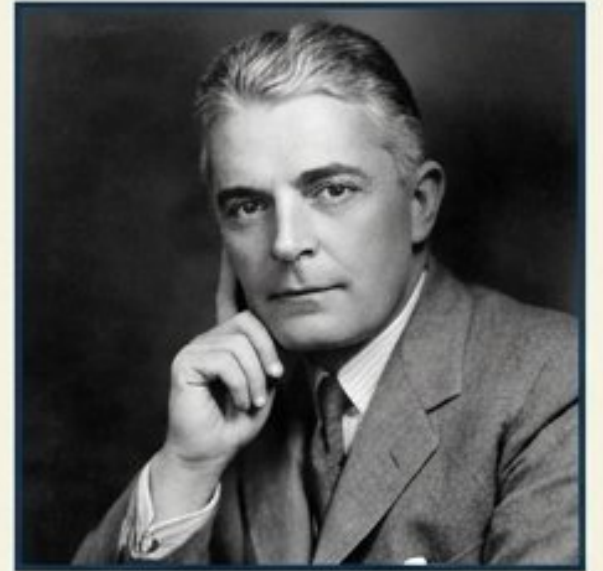
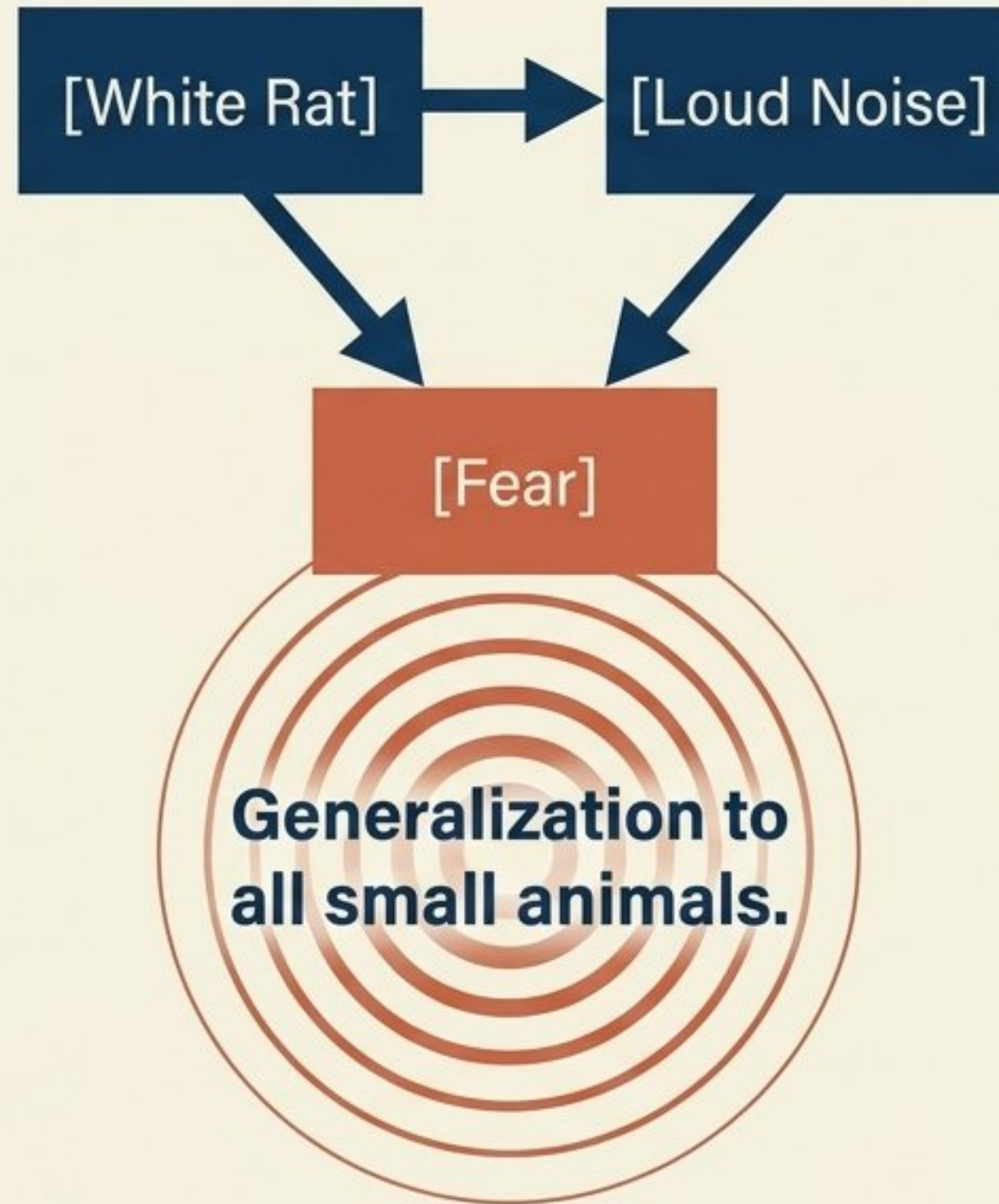
The Teacher's Lens

Associative learning happens daily. If a teacher always claps three times before announcing a fun activity, students will eventually feel involuntary excitement just hearing the claps.

John B. Watson: Conditioning Humanity

Concept: Humans are born with only a few basic reflexes and emotions (love, rage). All other behaviors and fears are learned through conditioning.

Quote: *Given a dozen healthy infants, Watson claimed he could condition them into any specialist (doctor, thief) purely through S-R associations.*



The Teacher's Lens

Math Anxiety is rarely innate. A student's fear of math is often a conditioned response to past negative experiences. As Watson proved by later "unlearning" fear without the noise, teachers can systematically extinguish these academic phobias.

Pavlov's Principles



Stimulus Generalization

Responding to stimuli similar to the original (e.g., salivating at a different bell tone).



Discrimination

Responding only to the specific conditioned stimulus, ignoring similar ones.



Extinction

Ringling the bell repeatedly without food until the conditioned salivation stops.



Spontaneous Recovery

The sudden return of the conditioned response after a long pause, even without food.



High-Order Conditioning

Pairing a new neutral stimulus (a light) with the conditioned stimulus (the bell) to trigger the response.

The Teacher's Lens

Recognize Generalization: A student punished harshly by one male teacher might generalize that fear to all male teachers.

Edward Thorndike: Connectionism

Intelligence is a function of the number of connections learned.

Law of **Readiness**



The learner must be primed. Forcing a response when a student isn't ready causes frustration.

Law of **Effect**



Connections are strengthened when followed by rewards (satisfaction).

Law of **Exercise**



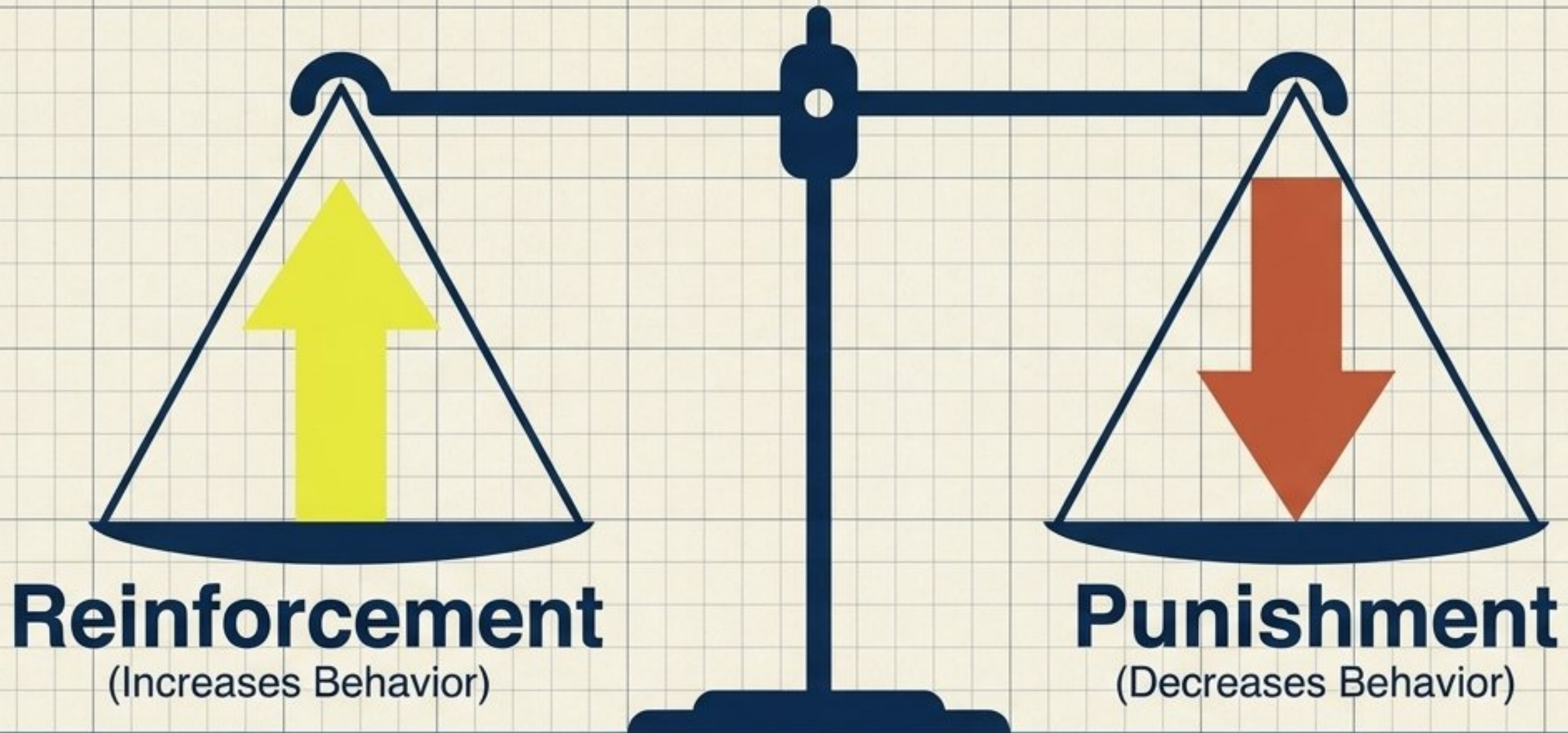
Learning requires consistent practice to strengthen the S-R bond.

The Teacher's Lens

Law of Readiness in Action: If you say, "We will now watch the movie," and the power goes off, students feel annoyed because they were primed but prevented from responding. Always ask a question first, wait a few seconds to build readiness, and then call on a student.

B.F. Skinner: Operant Conditioning

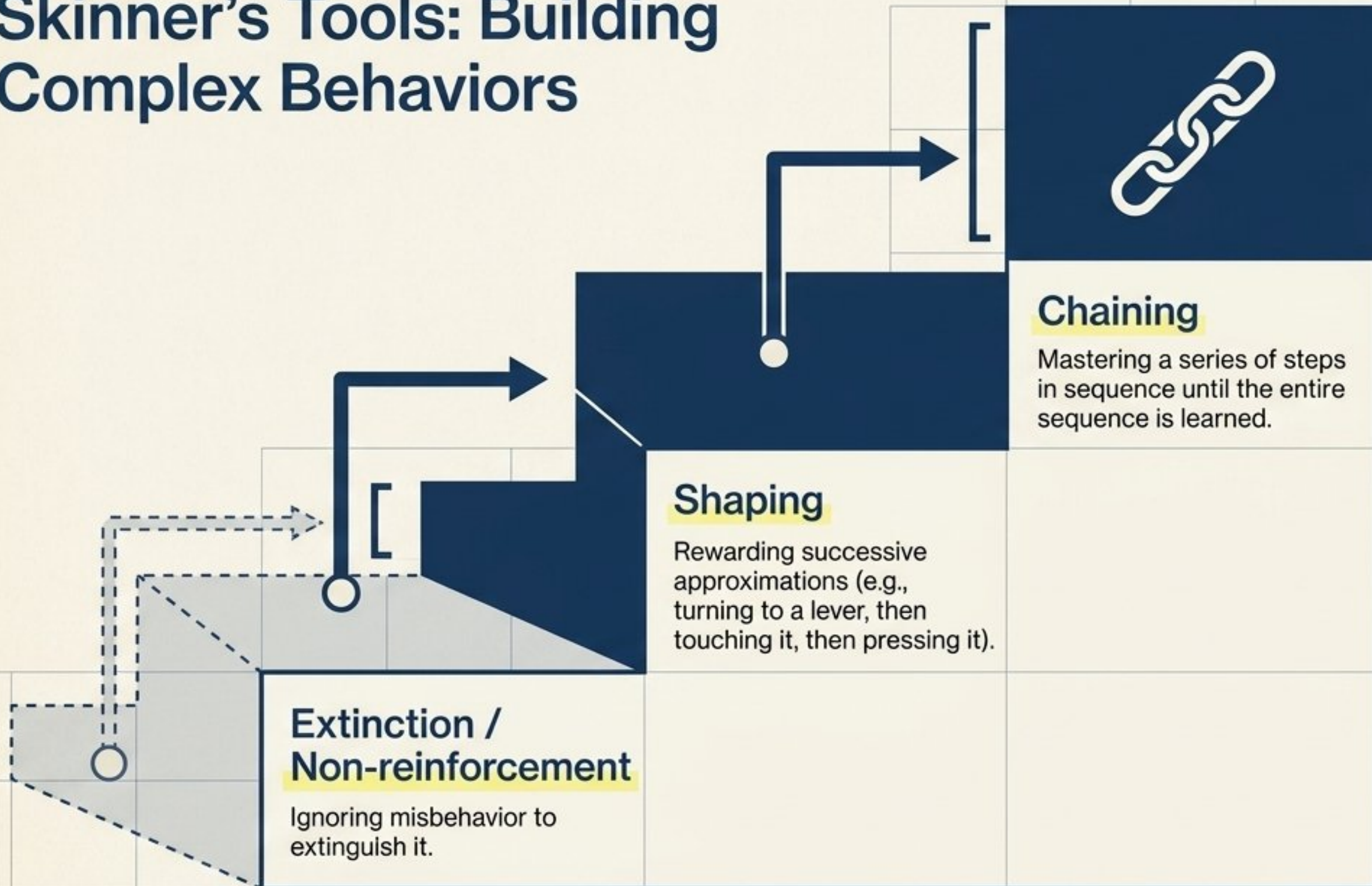
Behavior is controlled by its consequences. Voluntary responses that are positively reinforced will reoccur.



The Teacher's Lens

Be precise with terms. Giving extra recess for good work is Reinforcement. Losing points for arriving late to class is Punishment (designed specifically to reduce the response of coming late).

Skinner's Tools: Building Complex Behaviors



The Teacher's Lens

Chaining in early childhood:
Teaching a child to tie a shoelace requires rewarding each mastered step in sequence until the entire process is linked together.

Partial Reinforcement Schedules

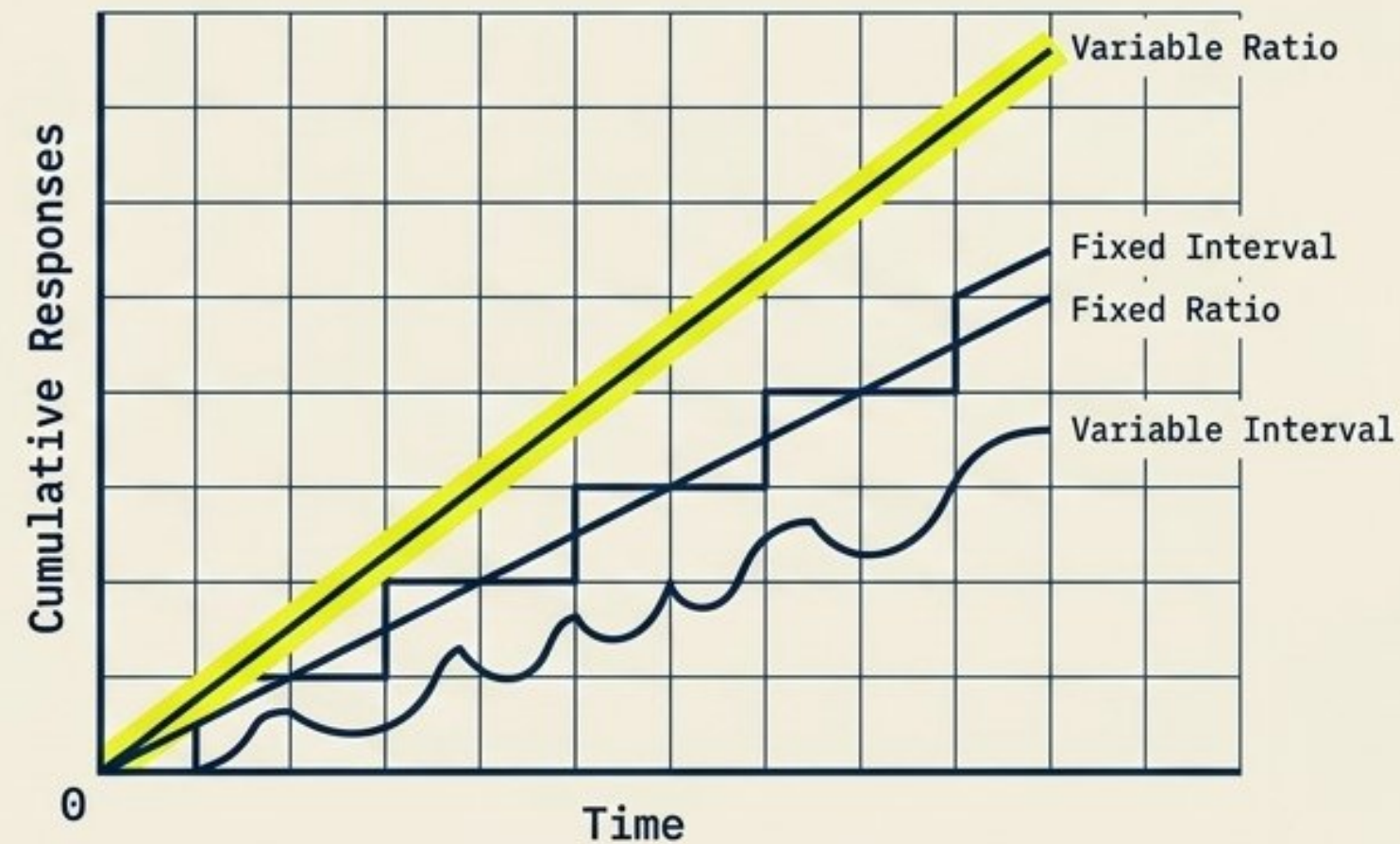
Basis (Interval/Time vs. Ratio/Repetitions)	
Predictability (Fixed vs. Variable)	Fixed Interval Reward after a set time (e.g., food every 10 mins).
	Fixed Ratio Reward after a set number of actions (e.g., food every 5 presses).
	Variable Interval Reward after random times (e.g., food at unpredictable minute marks).
	Variable Ratio Reward after a random number of actions (e.g., food after 3, then 10, then 4 presses).

The Power of Unpredictability

Concept: Variable Interval and Variable Ratio schedules produce steadier, more persistent rates of response.

The Mechanism: Learners cannot predict when the reinforcement will come, but they know they will eventually succeed, so they repeat the behavior continuously.

Cumulative Responses Over Time



The Teacher's Lens

The Lotto Ticket Effect

People buy lotto tickets because the reinforcement (winning) is on a Variable Ratio.

In class, intermittent, unpredictable praise is far more powerful for maintaining good behavior than expected, constant praise.

Synapse Strengtheners: The Grand Synthesis

A comparative map of behavioral architecture.

Dimension	Classical Conditioning	Operant Conditioning
Theorists	Pavlov, Watson	Thorndike, Skinner
Type of Behavior	Involuntary (Reflexes, Emotions)	Voluntary (Choices, Actions)
Mechanism Order	Stimulus comes BEFORE the response	Consequence comes AFTER the response
Learner's Role	Passive (Reacting)	Active (Operating on environment)

The Teacher's Lens

Remember: Use **Classical** conditioning to manage the emotional climate of your room (anxiety, excitement). Use **Operant** conditioning to manage the academic and social behaviors (homework completion, raising hands).