

# Objective

**Students will describe the Law of Effect and explain the principles of operant conditioning .**

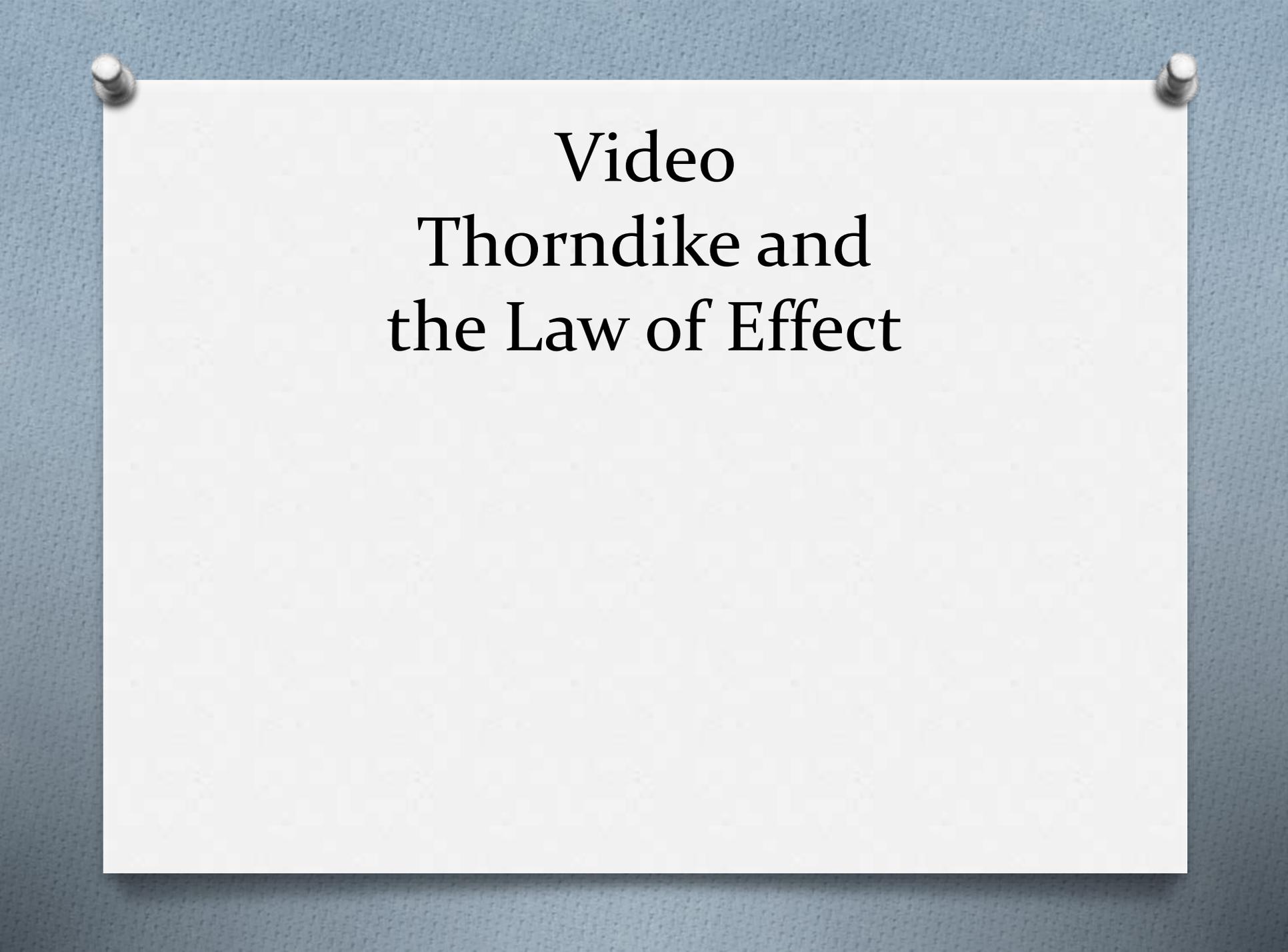
# Warm Up

- o Identify the components of operant conditioning in the Big Bang video.

# The Law of Effect



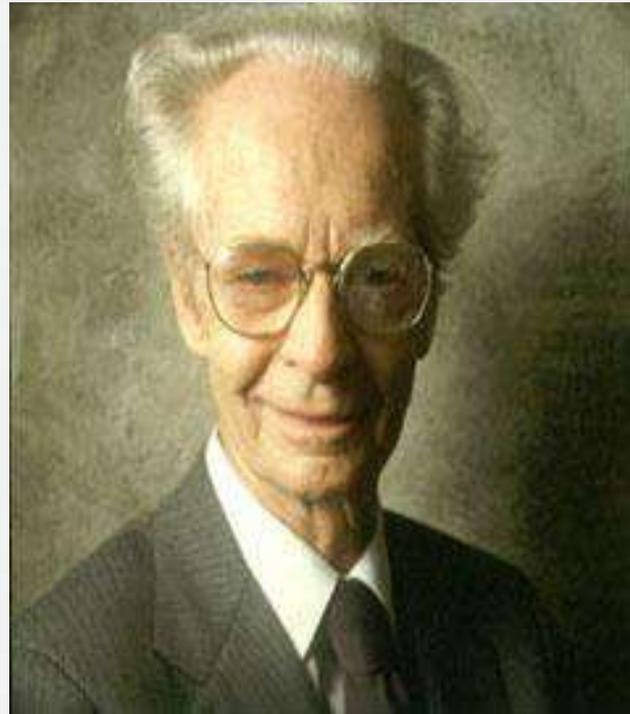
- o Edward Thorndike
- o behavior changes because of its consequences
- o rewards strengthen behavior
- o unpleasant outcomes lessen behavior



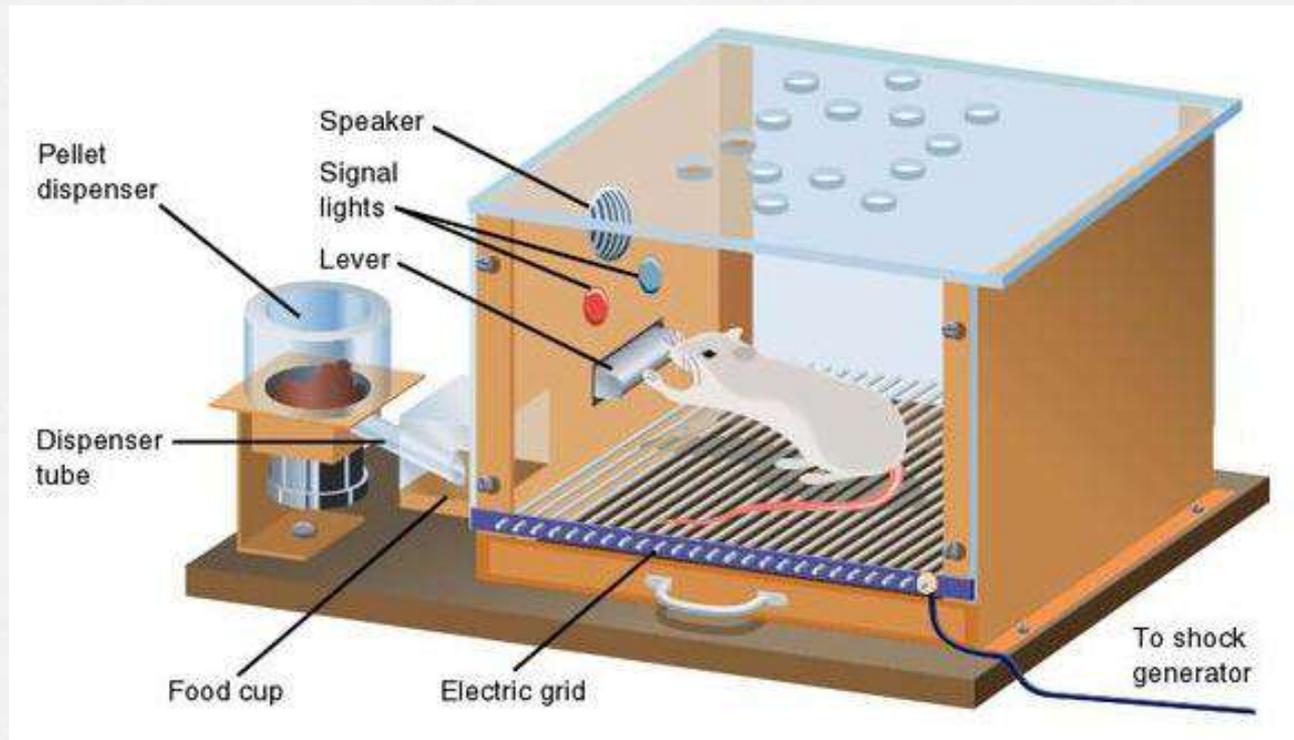
Video  
Thorndike and  
the Law of Effect

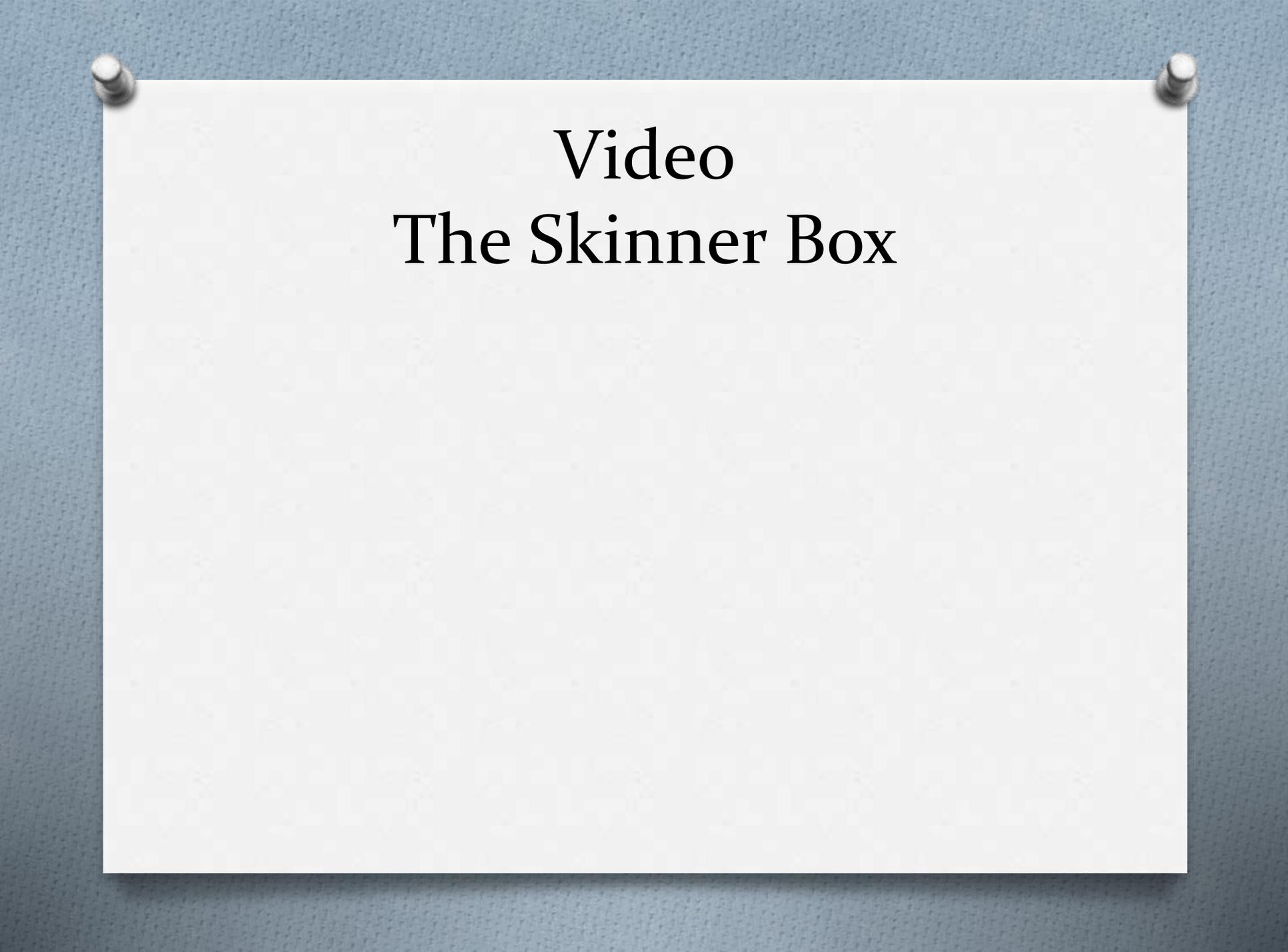
# B.F. Skinner

- o The Egg McMuffin of operant conditioning
- o Mr. Nurture
- o Skinner's experiments extend Thorndike's thinking, especially his Law of Effect.



# The Skinner Box





Video  
The Skinner Box

# Reinforcers

- o anything that **INCREASES** a behavior

# Positive Reinforcement

- o The **addition** of something **pleasant** after a desired behavior.
- o The addition of the pleasant stimulus increases the frequency of the response.

# Positive reinforcement comes in many different forms.

1. A **concrete reinforcer** is something tangible that can be seen.



# Positive Reinforcers

2. A **social reinforcer** is a gesture from another person in response to a behavior.



# Positive Reinforcers



- o 3. An **activity reinforcer** is an opportunity to engage in a fun activity. People will do something they don't enjoy for a chance to do something that they do enjoy.

# Positive Reinforcers

4. **Primary reinforcers** serve a biological need and are in themselves rewarding.



# Positive Reinforcers



5. **Secondary reinforcers** gain their power through their association with a primary reinforcer.

# Token Economies

- o Every time a desired behavior is performed, a token is given.
- o They can trade tokens in for a variety of prizes (reinforcers).
- o Used in homes, prisons, mental institutions, and schools.

# Negative Reinforcers

- o The removal of something unpleasant after a desired response.
- o Removing the unpleasant thing **INCREASES** the desired behavior.

# Example of Negative Reinforcers

- o Car companies want you to wear your seat belt. They want to INCREASE seatbelt usage.
- o When you do not wear your seat belt, there is an annoying beeping sound.
- o When you wear your seat belt, the annoying sound disappears.
- o Removal of the unpleasant sound INCREASES the desired behavior (wearing the seat belt).

# Example of Negative Reinforcers

- o A child wants his father to read him a bedtime story, but the father wants to watch football.
- o The child whines and cries.
- o The father finally gives in and reads a bedtime story.
- o The whining stops.
- o The unpleasant stimulus (crying) is removed when the desired behavior (reading) increases.

**o Shaping: : gradually molding or training an organism to perform a specific response (behavior) by reinforcing any responses that are similar to the desired response.**

- o For example, a researcher can use shaping to train a rat to press a lever during an experiment (since rats are not born with the instinct to press a lever in a cage during an experiment). To start, the researcher may reward the rat when it makes any movement at all in the direction of the lever. Then, the rat has to actually take a step toward the lever to get rewarded. Then, it has to go over to the lever to get rewarded (remember, it will not receive any reward for doing the earlier behaviors now...it must make a more advanced move by going over to the lever), and so on until only pressing the lever will produce reward. The rat's behavior was "shaped" to get it to press the lever.

# Exit Ticket

- o Think of two primary reinforcers.
- o Think of two secondary reinforcers.