መረጃዎችን በፍጥነት ለማግኘት የዩቲዩብ ፣ የቴሌግራም ፣ የፊስቡክ እና የትዊተር ገፃ

ችንን ሰብስክራይብ ያድርጉ!

You Tube: https://www.youtube.com/watch?v=TWkBGoeYCNQ
Telegram ፡ https://t.me/wwwAddisAbabaeducationbureau
Twitter ፡ https://twitter.com/aacaebc
Facebook :
https://www.facebook.com/aacityeducationcommunication

እንራራቅ፣ እንታጠብ እንዲሁም አንጨባበጥ

BIOLOGY GRADE 12 LESSON 8

UNIT FIVE SUMMARY

LEARNED(AQUIRED) BEBAVIOR

BY: ADDIS ABABA EDUCATION BUREAU

MAY 2020

LEARNED(ACQUIRED) BEBAVIOR

- By the end of this lesson you should be able to

-list the different types of learned behavior

-Explain how the learning processes takes place in each type

-Describe examples of each types of learning

-Compare innate and learned behavior patterns

LEARNED(ACQUIRED) BEBAVIOR

- **Learned behavior :- is a behavior that is acquired through experience (such as trial and error) or by insight.**
- ***The strengthening of existing responses or the formation of new responses to existing stimuli that occurs because of practice or repetition.***
- **unlike innate behavior, they are rarely fully functional the first time they are performed.**
- **Can you mention some differences between innate and learned behavior?**

Differences between innate and learned behavior

Innate behaviour	Learned behaviour
Genetically determined and common to all members of a species	The behaviour is changed by, or develops through, experience and may vary from individual to individual
Behaviour is fully functional at the first attempt	The animal develops the behaviour through trial and error or by insight
There is, generally, no modification of the behaviour	The behaviour may be modified by new experiences
Adaptive behaviour that has been retained as a result of natural selection	Behaviour is learned anew by each member of the species and may not be adaptive

Characteristics of learned (acquired) behavior

- Learning is a process through which experience changes an individuals behavior.
- Not all behavioral changes are due to learning.
- Most learning experiences must be repeated

  -Example :- small child learning to walk
- The behavioral changes that result from learning may not be expressed immediately.
- Learning ability is the product of natural selection.

Types of learned(acquired) behavior

1) Habituation
2) Sensitization
3) Associative learning(classical conditioning and operant conditioning)
4) Latent learning
5) Insight learning
6) Imprinting



1) **Habituation** :- is the simplest form of learning

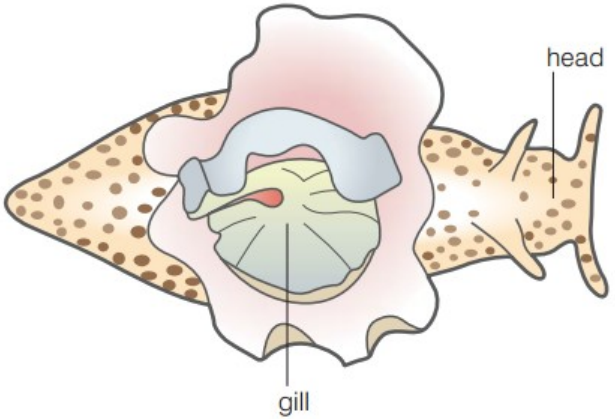
:- the **progressive loss** of responsiveness to repeated stimulation

:- is a process which results in a **decreased response to a stimulus** after a repeated exposure to that stimulus over a period of time.

Example :-habituation to human occur in prairie dogs (reduced alarm calls)

- a short and long term habituation of *aplysia* (sea slug)(withdrawing its gill after touch)





2. Sensitization :- is an increase in response to a harmless stimulus when that stimulus occurs after a harmful stimulus.

- **Two types of sensitization**

a. **Peripheral sensitization :- sensitization that results from changes in neurons of the peripheral nervous system.**

b. **Central sensitization :- sensitization that results from changes in neurons of the central nervous system.**

3. Associative learning

- It involves associating different types of stimuli with different types of responses
- There are two types of associative learning

1. Classical conditioning
2. Operant conditioning

1. Classical conditioning

- **Classical conditioning is learning in which one stimulus comes to be linked through experience with another one.**
- **Naturally occurring stimulus becomes associated with a different stimulus, which now also produces the same response.**
- **It was discovered by a Russian physiologist**

  Ivan Pavlov, who worked with dogs to develop this theory.
- **In 19th century the Russian physiologist Ivan Pavlov discovered classical conditioning , a form of associative conditioning . He found a dog automatically salivate at the sign of food (unconditioned response)**

The various stimulus and responses are

1. The unconditioned stimulus (US)

- **This unconditionally, naturally and automatically triggers a response**

Example :- when you smell a favorite food, you immediately feel very hungry. The smell of food is unconditioned stimulus.

2. The unconditioned response (UR)

- **The unconditioned response is the unlearned response that occurs naturally to the unconditioned stimulus.**

Example :- in a “feeling hungry “ feeling hungry is the unconditioned response.

3. The conditioned stimulus

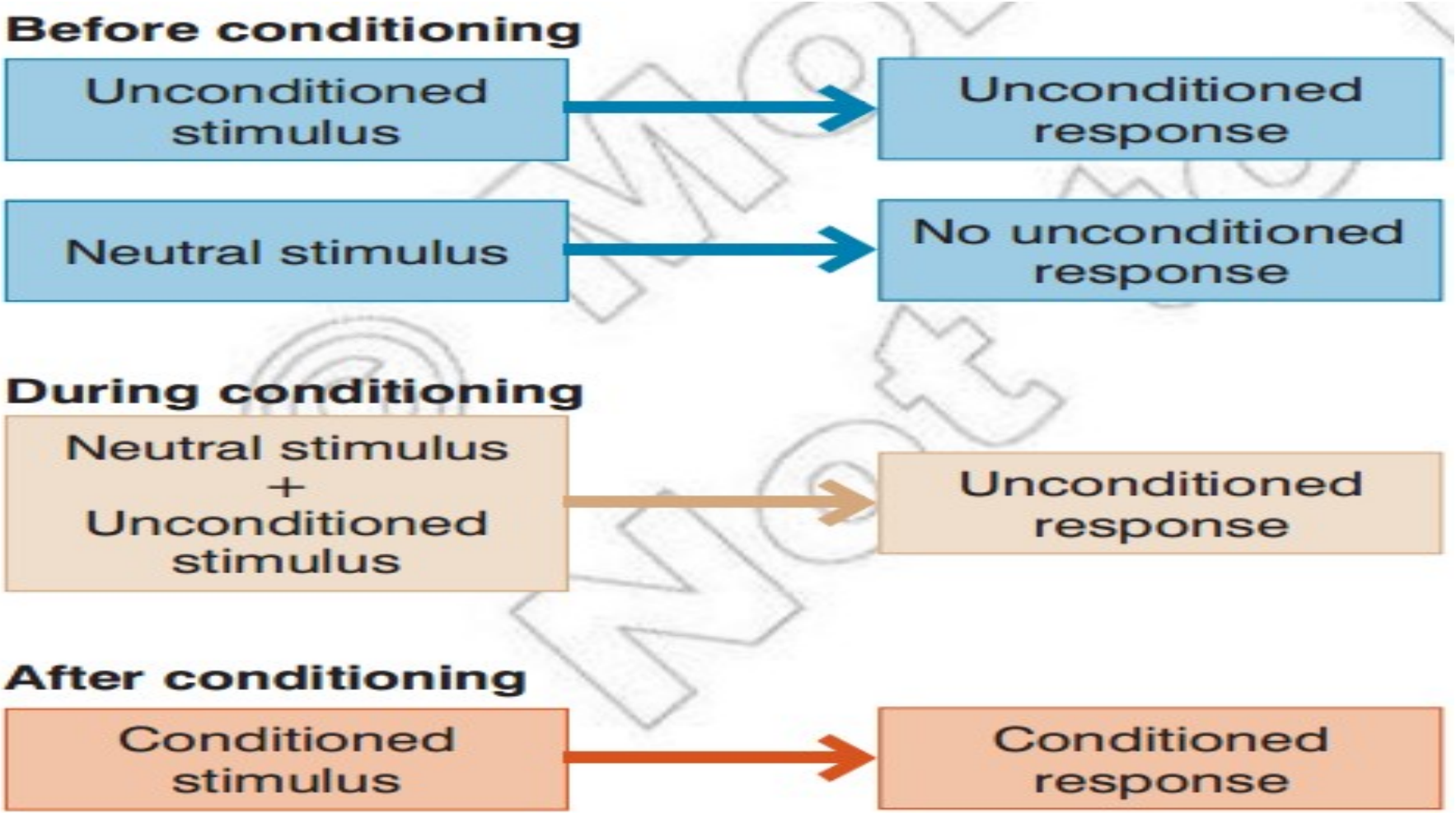
- **This neutral stimulus does not initially produce the unconditioned response. But after association with the unconditioned stimulus, it triggers the same response.**

4. The conditioned response

- **The conditioned response is the response to the previously neutral stimulus.**

Pavlov's research involved the following phases

1. First he served food (unconditioned stimulus) to the dogs at regular intervals = they salivate (unconditioned response)
2. Then, as he feed them (unconditioned stimulus) , he rang the bell (neutral stimulus) , they continued salivation (unconditioned response) as the food was presented and the bell was rang.
3. After a period, the dogs salivated when the bell was rang (conditioned stimulus) without food being presented. (conditioned response)


Before conditioning
Unconditioned stimulus
Unconditioned response
Neutral stimulus
No unconditioned response
During conditioning
Neutral stimulus + Unconditioned stimulus
Unconditioned response
After conditioning
Conditioned stimulus
Conditioned response

1. Before conditioning



food

unconditioned stimulus

salivation

unconditioned response

2. Before conditioning



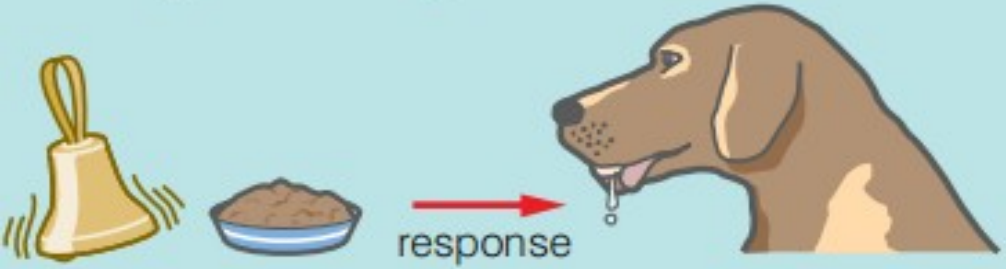
handbell

neutral stimulus

no salivation

no conditioned reponse

3. During conditioning



handbell food

salivation

unconditioned reponse

4. After conditioning



handbell

conditioned stimulus

salivation

conditioned reponse