

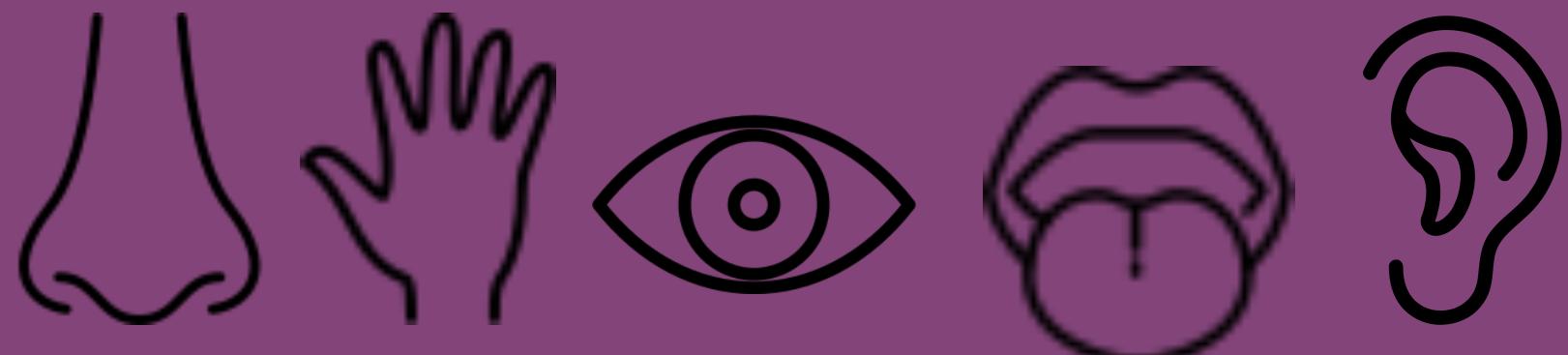
Sensation: **BASIC CONCEPTS**

UNIT 1: BIOLOGICAL BASES OF BEHAVIOR



SENSATION

The process by which we receive information from the environment.



Perception

The interpretation of information from the environment so that we can identify its meaning.



TRANSDUCTION

The process of converting energy of a stimulus into neural activity.

1

STIMULUS ENERGY



Light, sound, smell,
taste, touch, etc

2

SENSORY RECEPTORS



Eyes, ears, nose,
tongue, skin

3

NEURAL IMPULSES



4

BRAIN



Visual, auditory,
olfactory areas, etc.



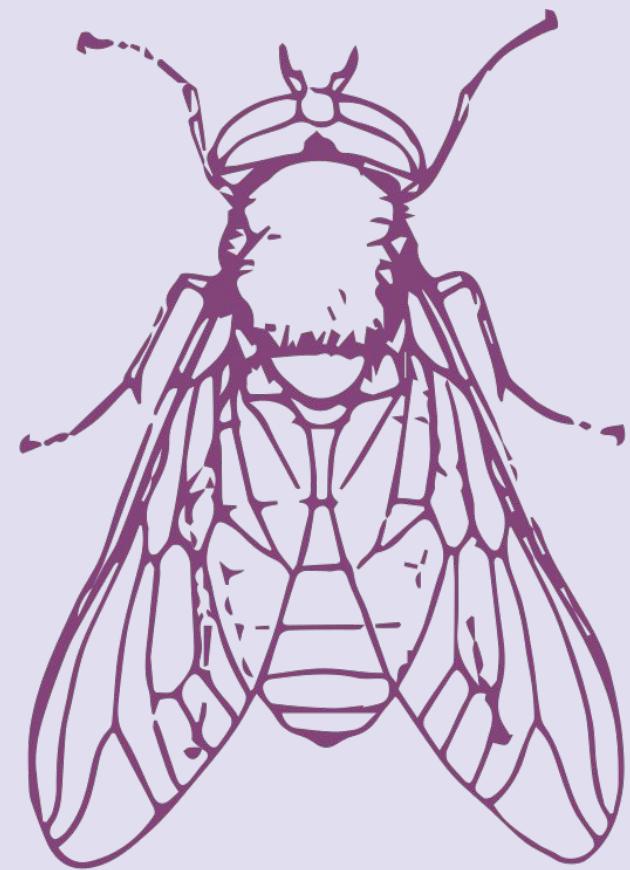
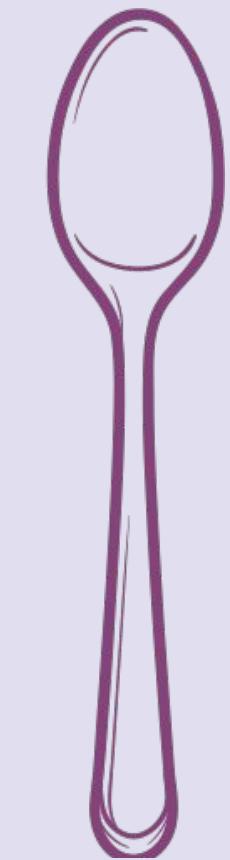


THRESHOLDS



Absolute **THRESHOLD**

The minimum amount
of energy needed to
produce sensation
more than 50% of the time



SENSORY ADAPTATION

**When sensory receptor cells are
constantly stimulated, they undergo a
loss of sensitivity to stimuli.**

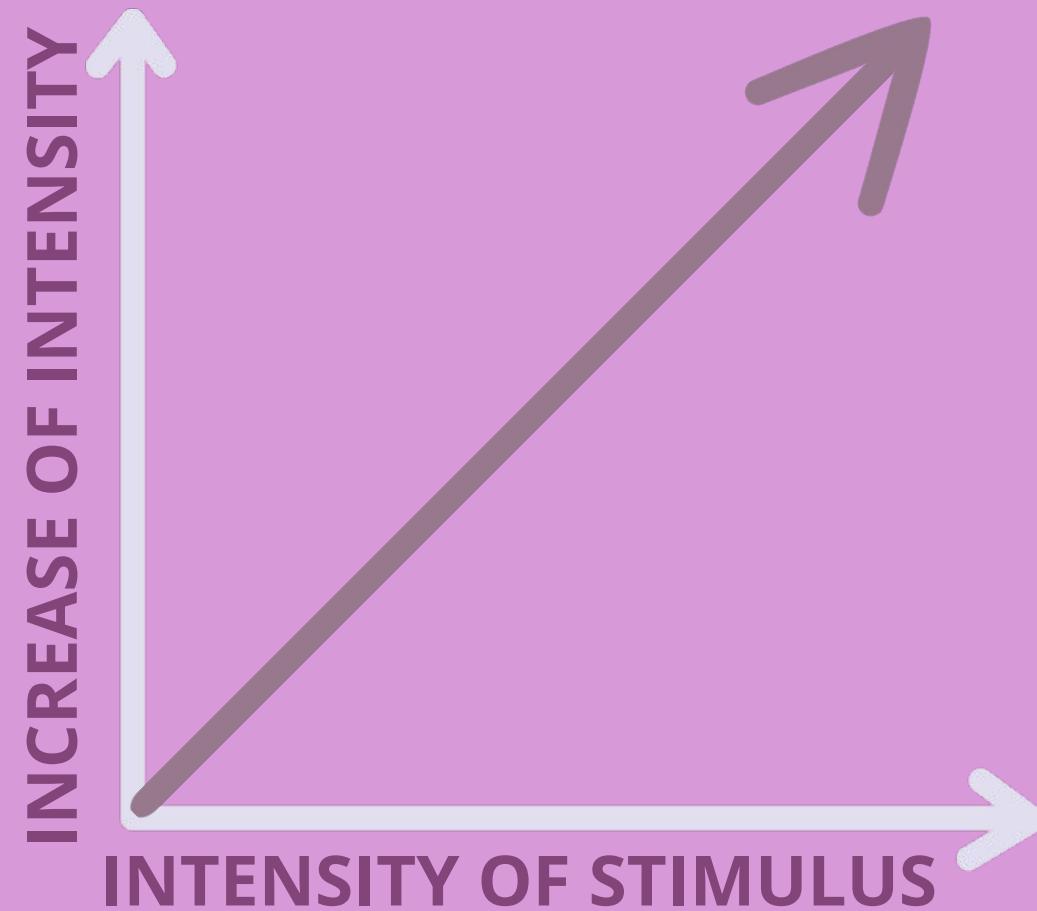
JUST-NOTICEABLE DIFFERENCE



The smallest difference between two stimuli that can be consistently and accurately detected 50% of the time.

Weber's LAW

The relationship between actual and perceived differences in stimulus intensity.



SENSATION

BRIGHTNESS- 1.7%

WEIGHT- 2%

PITCH- 0.3%

ODOR- 5%

SALTINESS OF TASTE- 20%

SENSORY SYSTEMS

Sensory INTERACTION

The process by which our five senses work with and influence each other.



SYNESTHESIA

When your brain routes sensory information through multiple unrelated senses, causing you to experience more than one sense simultaneously.

