Glossary of Senses in Biology

Adaptation (Sensory): The reduction in sensitivity to a constant stimulus over time (e.g., getting used to a smell).

Audition: The sense of hearing; the perception of sound waves through vibration-sensitive structures like the cochlea.

Chemoreceptor: A type of sensory receptor that detects chemical stimuli, such as those involved in taste and smell.

Electroreception: A sense found in some animals that allows them to detect electric fields, used for navigation and detecting prey.

Equilibrioception: The sense of balance and spatial orientation, primarily governed by the vestibular system in the inner ear.

Exteroception: The perception of stimuli that originate from outside the body, such as light, sound, and external temperature.

Gustation: The sense of taste; the detection of dissolved chemicals by taste buds on the tongue.

Interoception: The sense of the internal condition of the body, such as hunger, thirst, and internal pain.

Magnetoreception: The ability of certain organisms to detect Earth's magnetic field and use it for orientation and navigation.

Mechanoreceptor: A sensory receptor that responds to mechanical pressure or distortion, important in touch, hearing, and balance.

Modality: A type or category of sensory input (e.g., visual, auditory, olfactory).

Multimodal Perception: The integration of information from two or more senses to form a coherent perception of the environment.

Nociception: The sense of pain; the detection of harmful or damaging stimuli through nociceptors.

Olfaction: The sense of smell; the detection of airborne chemicals by the olfactory epithelium in the nasal cavity.

Perception: The conscious awareness and interpretation of sensory information by the brain.

Photoreceptor: A receptor that responds to light, such as the rods and cones found in the retina of the eye.

Proprioception: The sense of body position, movement, and spatial orientation, based on input from muscles, joints, and tendons.

Receptor: A specialized cell or nerve ending that detects specific types of stimuli and initiates a neural response.

Sensation: The process by which sensory receptors detect and transmit stimulus information to the brain or spinal cord.

Sense: A physiological capability that allows an organism to detect stimuli in its environment or within its own body.

Sensory Organ: A body structure that houses specialized sensory receptors (e.g., eyes, ears, nose, tongue, skin).

Stimulus: A detectable change in the internal or external environment that elicits a response in a sensory receptor.

Thermoception: The sense of temperature; the detection of heat or cold via thermoreceptors in the skin.

Thigmotropism: A directional growth response in plants to physical touch or contact with a solid object.

Transduction (Sensory): The conversion of a physical or chemical stimulus into an electrical signal by a sensory receptor.

Vestibular System: The inner ear structures responsible for detecting motion and maintaining balance and spatial orientation.