**Chapter Four**

**Sensation**

**Chapter Four**

**Sensation**

**Sensation (definition):** is the process of **receiving** , **converting ,**

and **transmitting** information from the outside world to the brain .

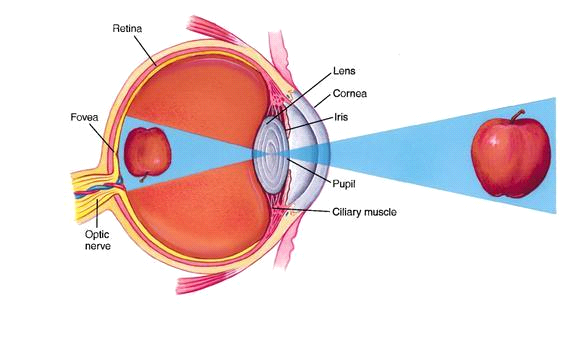
**Sensory Systems**

**1- Vision:** Visual receptor cells located on **retina** (**rods for night**

**vision and cones for color vision)**. The eye captures light and

focuses it on the visual receptors, which convert light energy

to neural impulses sent to the brain.



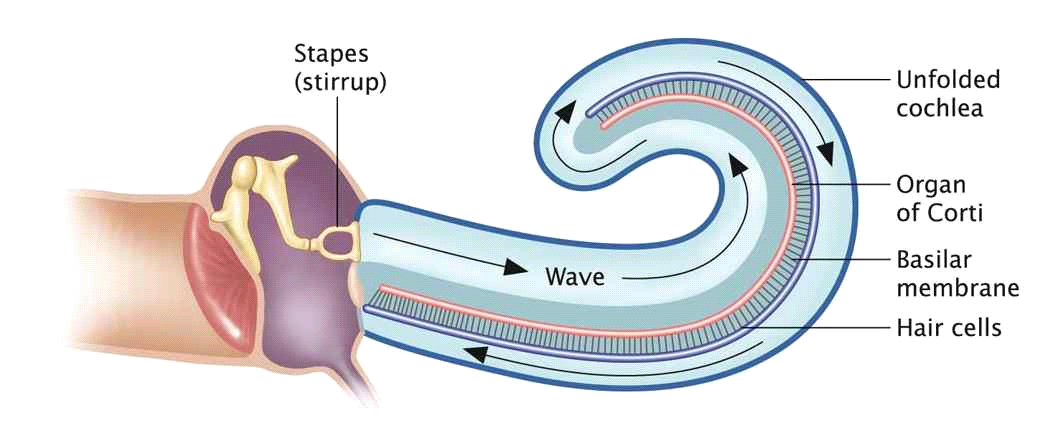
**2- Hearing (Audition):** occurs via **sound waves**, which result from

rapid changes in air pressure caused by vibrating objects.

Receptors located in the **inner ear (cochlea)** which are tiny hair

cells that convert sound energy to neural impulses sent to brain.

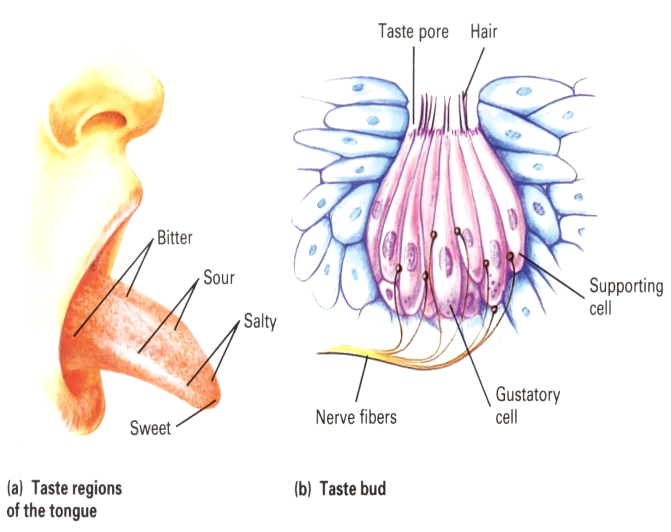
**The Cochlea**



**3- Smell (olfaction):** receptors are located at top of **nasal cavity**.

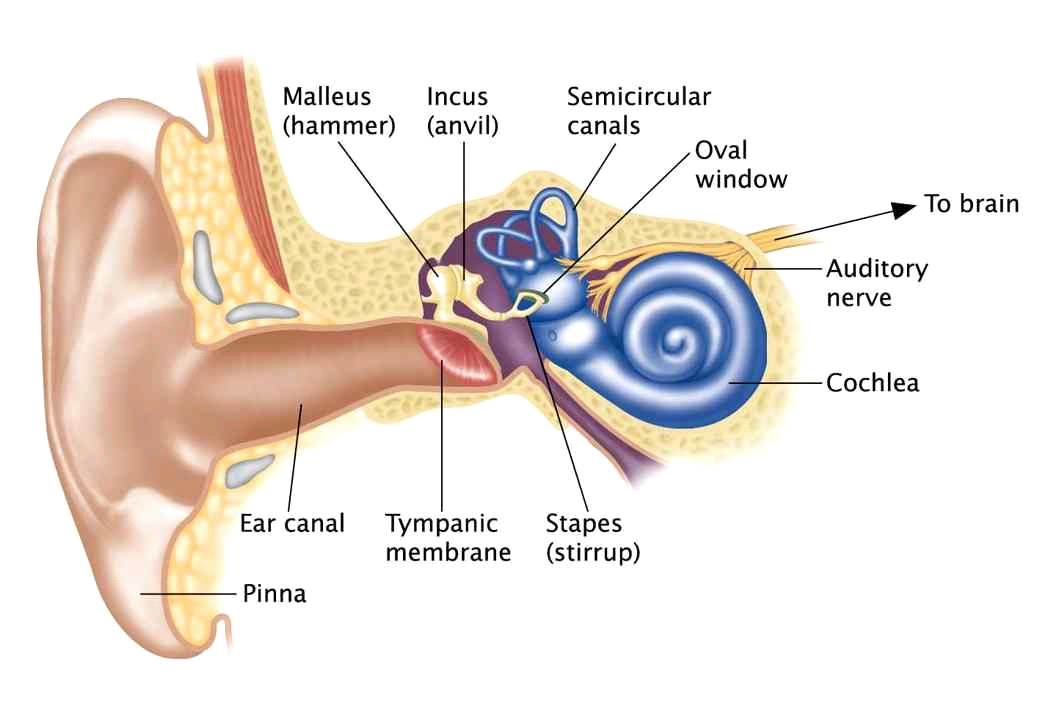
**4- Taste (gustation):** receptors are **taste buds on tongue**. There are

four basic tastes ( **sweet**, **salty**, **sour** and **bitter**).



**5- Touch:** skin senses detect touch (**pressure**, **temperature** and **pain**).

**6- Vestibular sense (balance):** results from receptors in **inner ear**.



**7- Kinesthesis:** (**body posture**, **orientation**, and **body movement)**

Results from receptors in **muscles**, **joint** and **tendons**.

