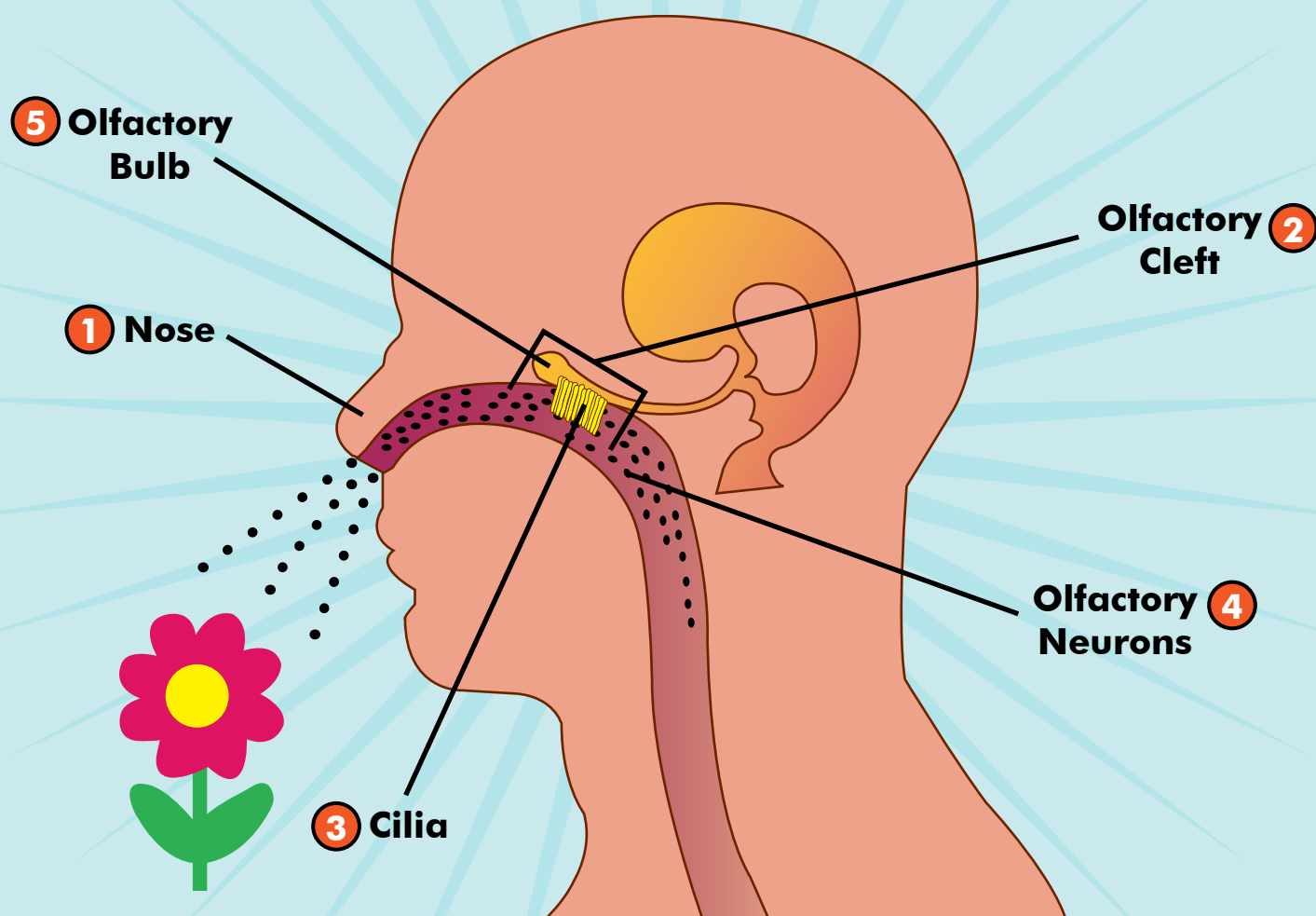


# SENSORY PROTEINS

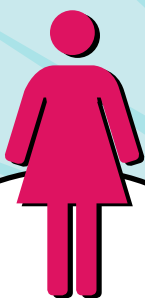
## OLFACTORY

The process of smelling, also known as olfaction, involves thousands of olfactory receptors that transmit signals to the brain.



### PROCESS OF OLFACTION (3, 5)

- 1 Nose:** Odors are inhaled through the nostrils and detected by olfactory receptors in the sensory epithelium, which is located in the olfactory cleft.
- 2 Olfactory Cleft:** Narrow passages in the upper part of the nasal cavity.
- 3 Cilia:** Binds with odor molecules and olfactory receptor cells, which the cilia are attached to, and creates an impulse.
- 4 Olfactory Neurons:** Transmit signals from the peripheral nervous system to the central nervous system via the olfactory bulb.
- 5 Olfactory Bulb:** Processes the signal and sends it to the brain.



**Women are better at detecting odors than men (1)**



**Humans can recognize 10,000+ odors (2)**

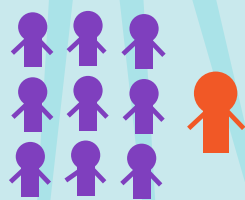


**Bloodhounds can detect 40,000+ odors (3)**

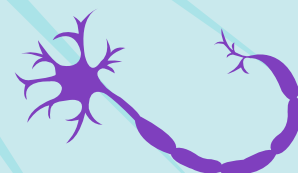
### OLFACTORY RECEPTOR PROTEINS



**The Olfactory Receptor gene family is the largest in the genome (6)**



**Olfactory Receptors are members of the GPCR family (7)**



**Important in neurotransmission and photo-reception (4)**

