## ICSE CLASS 8 BIOLOGY NERVOUS SYSTEM AND SENSE ORGANS



Image: Sour Sweet Salty         Taste buds (groups of sensory cells)→         sensory hair→ food dissolved in         saliva→brain receives and interprets         sensation	
Skin Feidermis Dermis Subcutaneous layer Sensory receptors→ sensory neurons→ brain	<ul> <li>The skin is prone to bacterial and fungal infections. We must keep it clean and consult a doctor in case of any blister or sore.</li> <li>Insect bites and stings should not be neglected.</li> <li>Since the skin is sensitive to UV rays, we must try to use a sunscreen when going out in the hot sun</li> </ul>

Voluntary actions	Reflex actions
Under the control of free will	Not under control of free will
and thought	
Initiated and controlled by	Initiated and controlled by spinal
cerebral cortex of brain	cord
Stimulus→ sensory	Stimulus→ receptor organ→
receptors $\rightarrow$ sensory	sensory neuron $\rightarrow$ spinal cord $\rightarrow$
neurons $\rightarrow$ spinal nerves $\rightarrow$	effector neuron $\rightarrow$ response by
brain $\rightarrow$ motor impulse $\rightarrow$	muscle
motor nerves→	
glands/nerves→ effect	
Learned actions	Instinctive actions
Riding a bicycle, reading,	Scratching, sneezing, pulling
swimming	hand away from hot object,
	salivation on seeing food
More neurons involved, so	Occurs instantaneously
takes longer than reflex action	