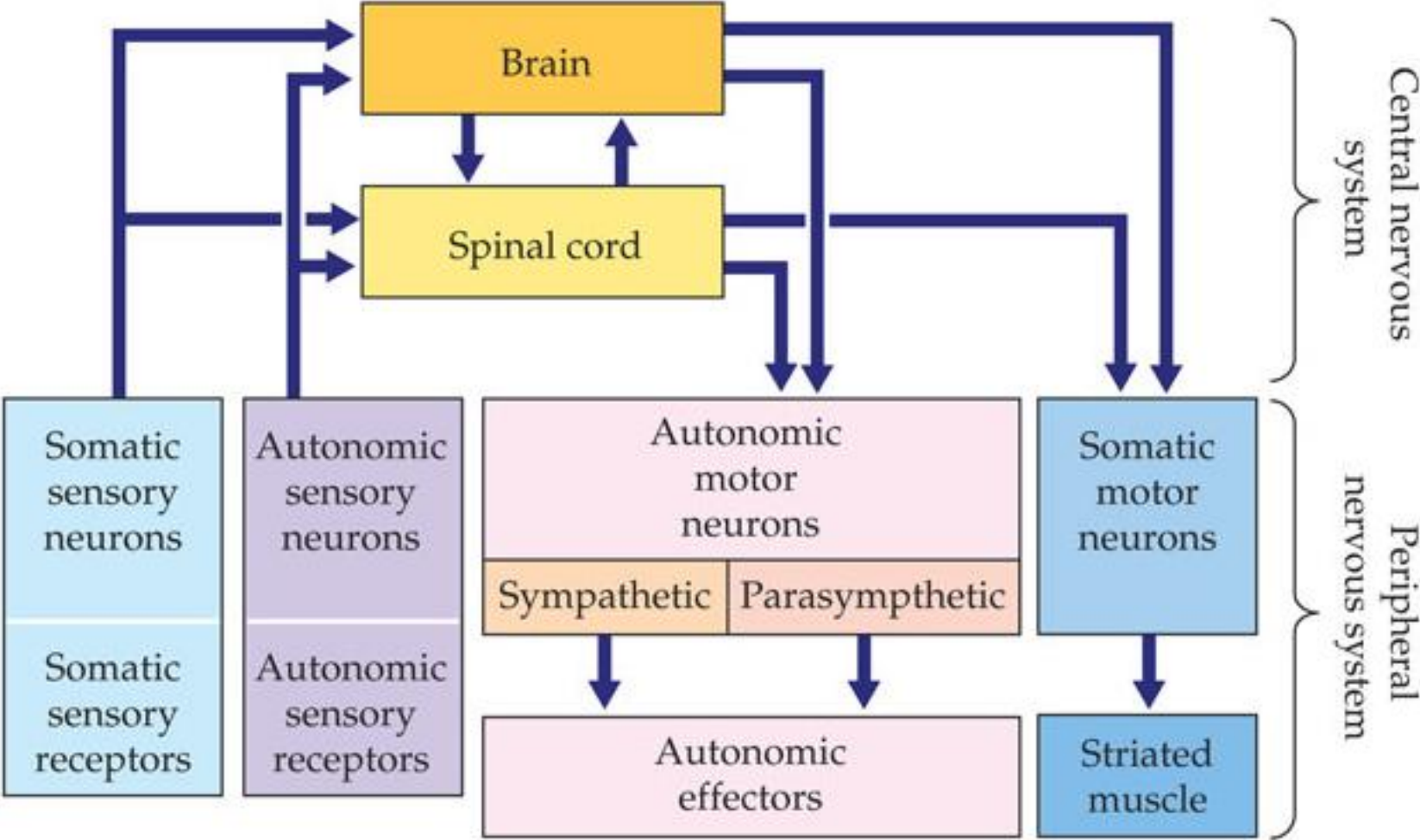


# Nervous system



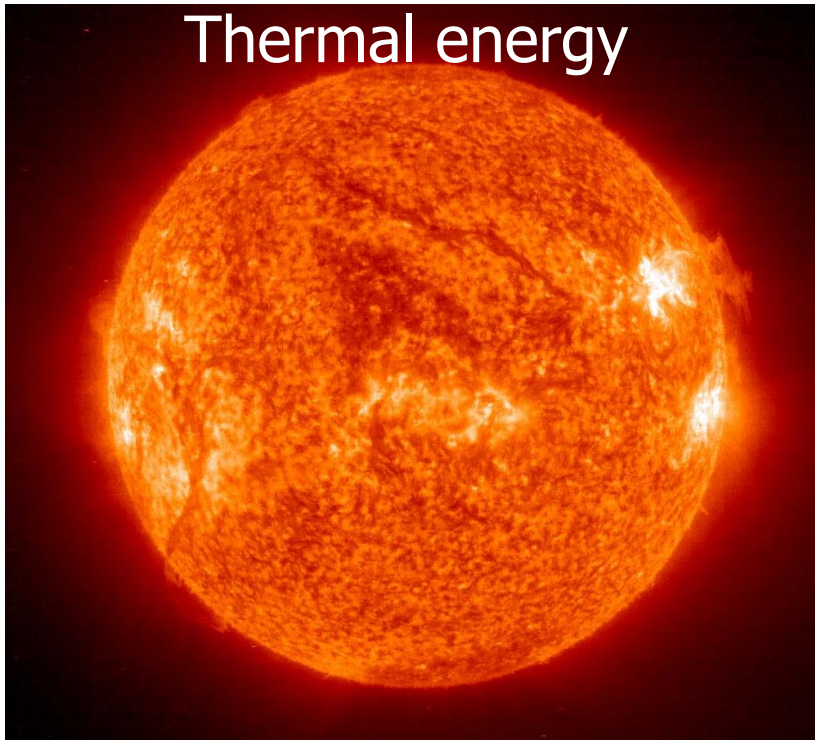
Chemical energy



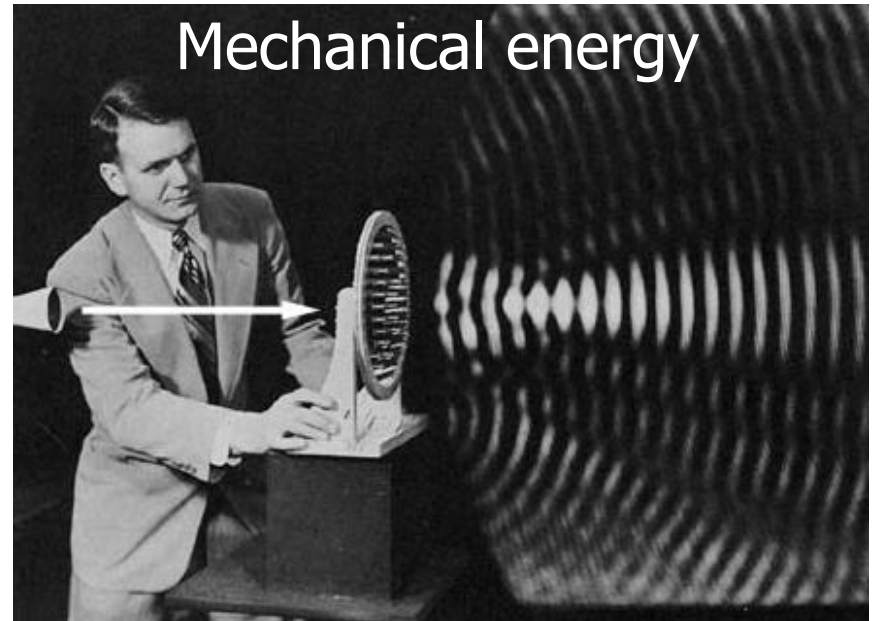
Electromagnetic energy



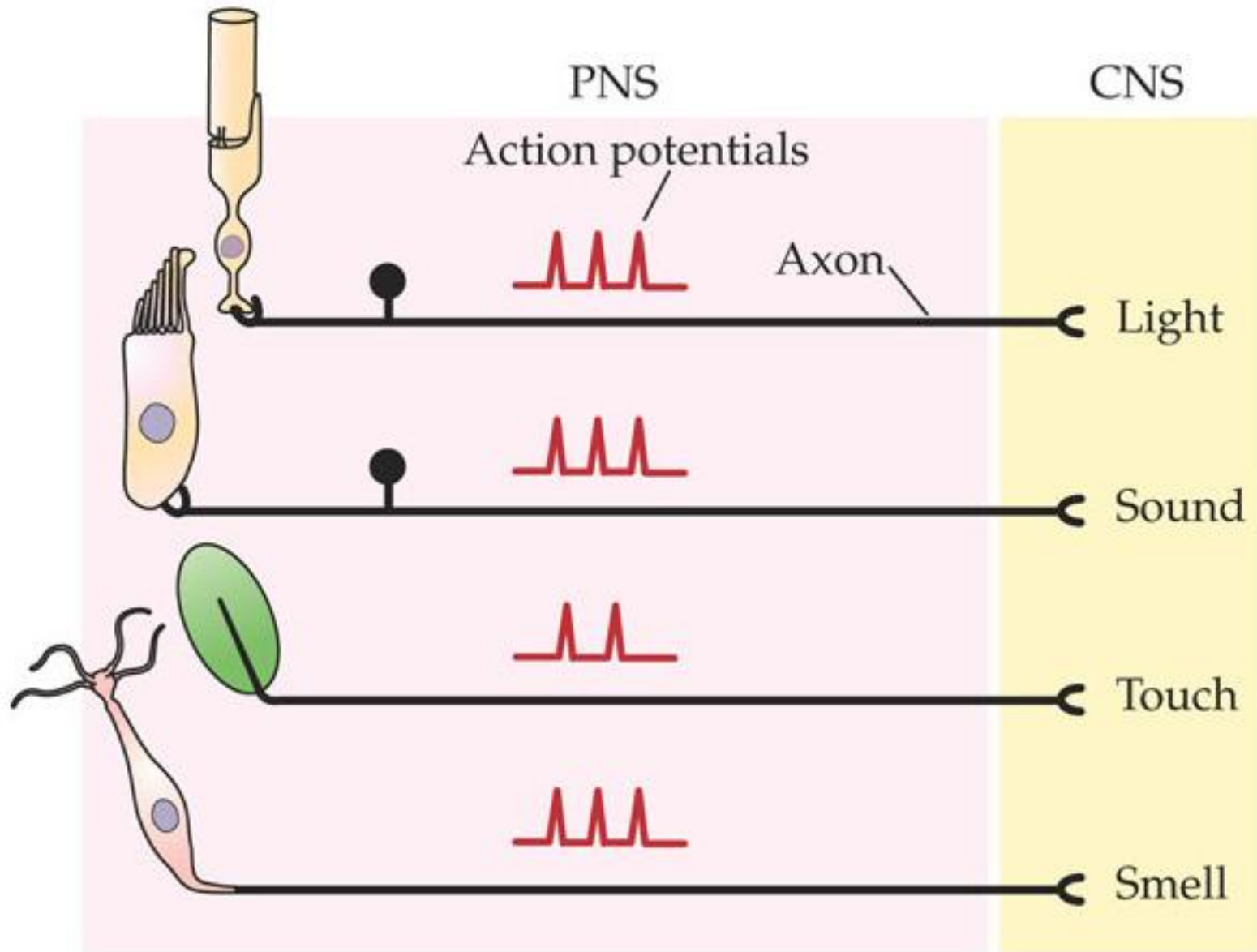
Thermal energy



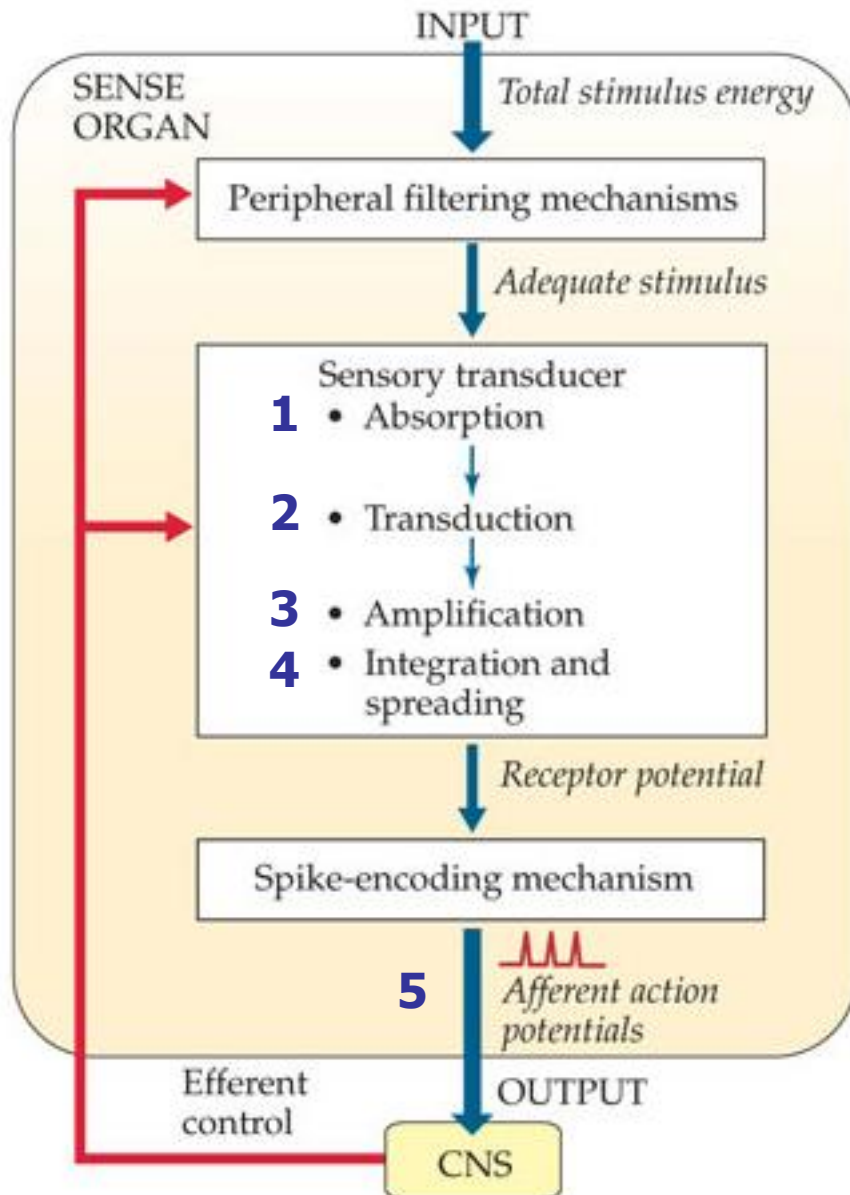
Mechanical energy



# The principle of labeled lines



# Transduction of sensory input into electrical signals



**1 – stimulus energy absorbed**

**2 – stimulus energy transformed into electrical signal**

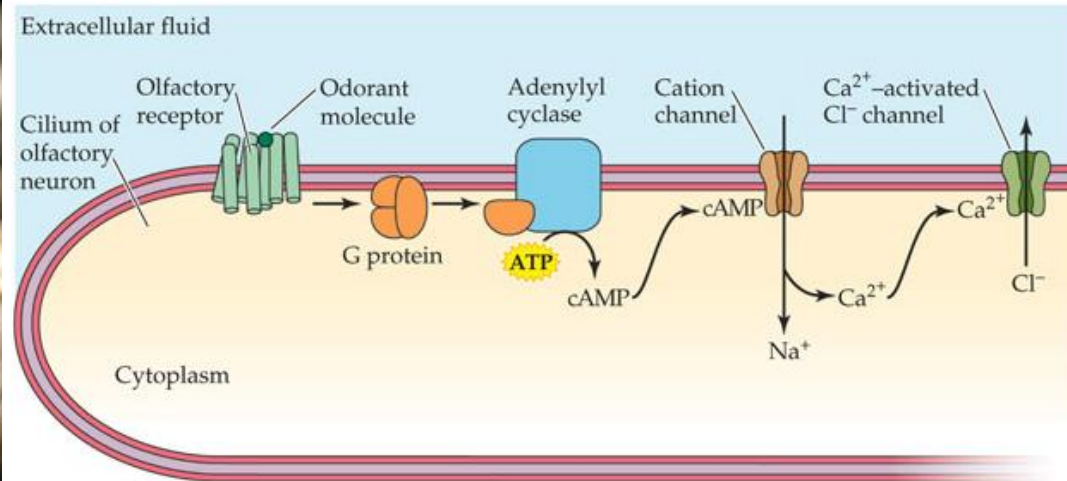
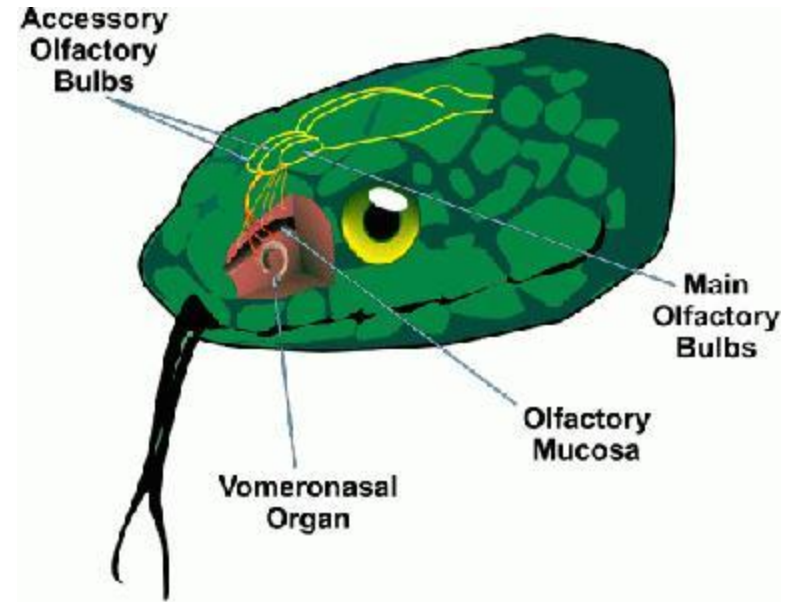
**3 – signal amplification**

**4 – sensory input integration, membrane depolarization**

**5 – AP generation and propagation**

# Chemoreception

## Vomeronasal organ in reptiles



# Mechanoreception

## Lateral line organ in fish

