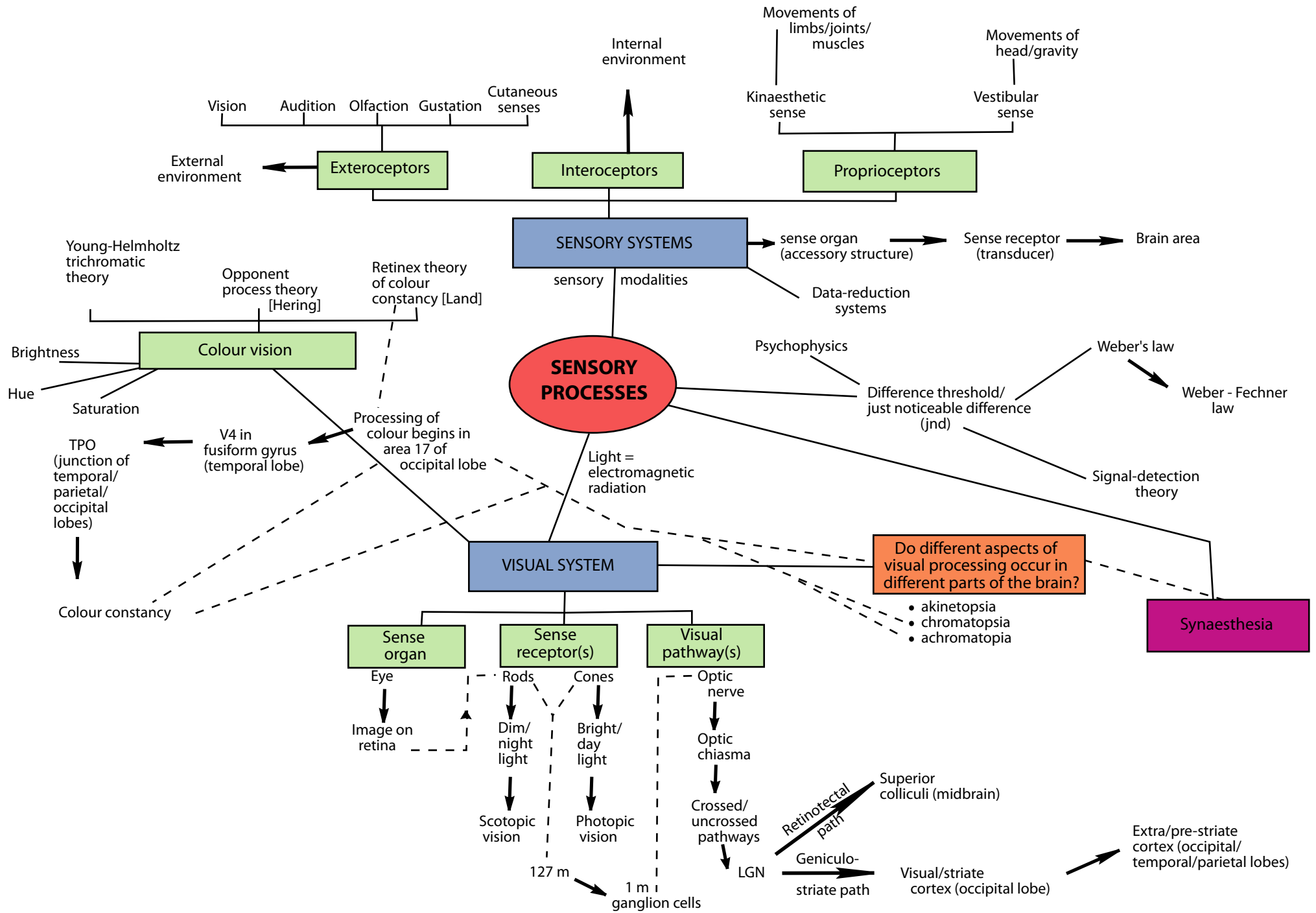
Movements of limbs/joints/ muscles
Movements of head/gravity
Internal environment
Vision
Audition
Olfaction
Gustation
Cutaneous senses
Kinaesthetic sense
Vestibular sense
External environment
Exteroceptors
Interoceptors
Proprioceptors
SENSORY SYSTEMS
sense organ (accessory structure)
Sense receptor (transducer)
Brain area
Young-Helmholtz trichromatic theory
Opponent process theory [Hering]
Retinex theory of colour constancy [Land]
sensory modalities
Data-reduction systems
Brightness
Colour vision
Hue
Saturation
SENSORY PROCESSES
Psychophysics
Weber's law
Difference threshold/ just noticeable difference (jnd)
Weber - Fechner law
Processing of colour begins in area 17 of occipital lobe
V4 in fusiform gyrus (temporal lobe)
TPO (junction of temporal/ parietal/ occipital lobes)
Light = electromagnetic radiation
Signal-detection theory
VISUAL SYSTEM
Do different aspects of visual processing occur in different parts of the brain?
Colour constancy
• akinetopsia
• chromatopsia
• achromatopsia
Synaesthesia
Sense organ
Sense receptor(s)
Visual pathway(s)
Eye
Rods
Cones
Optic nerve
Image on retina
Dim/ night light
Bright/ day light
Optic chiasma
Scotopic vision
Photopic vision
Crossed/ uncrossed pathways
Retinotectal path
Superior colliculi (midbrain)
127 m
1 m
ganglion cells
LGN
Geniculo-striate path
Visual/striate cortex (occipital lobe)
Extra/pre-striate cortex (occipital/ temporal/parietal lobes)