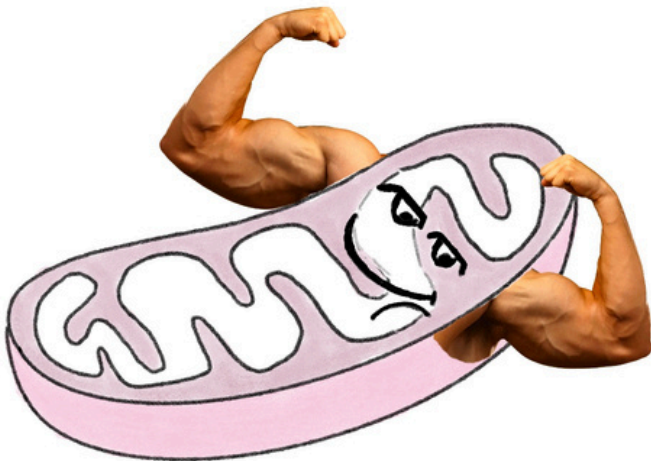


AP PSYCHOLOGY

SENSATION

REVIEW



KEY CONCEPTS

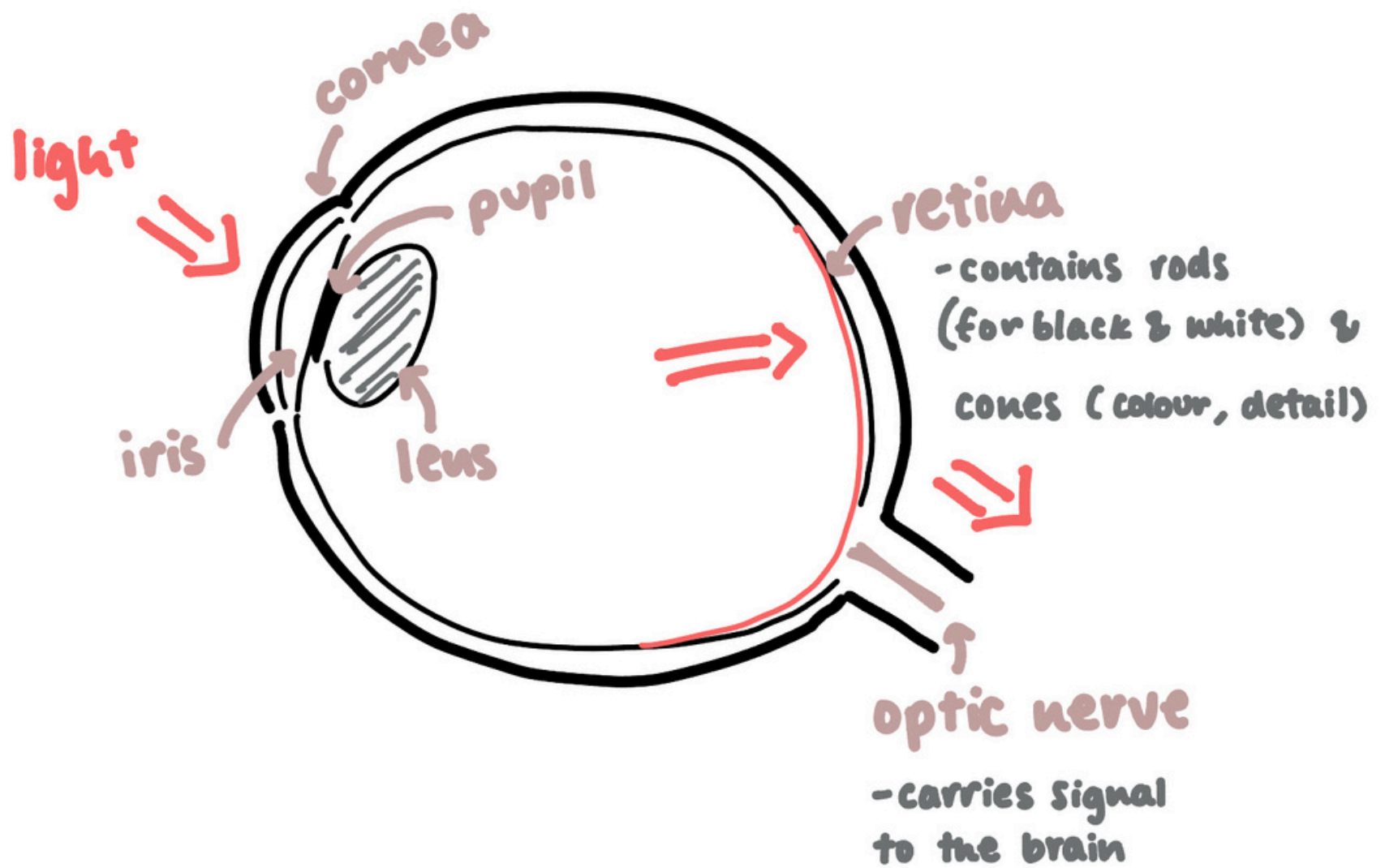
→ **Transduction**: converting stimuli into neural signals

→ **Absolute threshold**: minimum stimulus intensity to detect smth 50% of the time

→ **Difference threshold**: minimum diff to detect a change btwn 2 stimuli

→ **Sensory adaptation**: decreased sensitivity to an unchanging stimulus over time

VISION



COLOUR VISION THEORIES

→ **Trichromatic theory**: 3 types of cones (red, green, blue), combinations produce colours we see

- location = retina

→ **Opponent-process theory**: nervous process colour in opposing pairs (eg. red-green), explains afterimages

- location = visual cortex

HEARING

sound enters ear canal → vibrates
ear drum → cochlea

→ cochlea: fluid filled, has hair cells
that bend & trigger transduction

- Place theory: diff pitches activate
diff locations along cochlea
- Frequency theory: rate of neural
firing matches frequency of sound

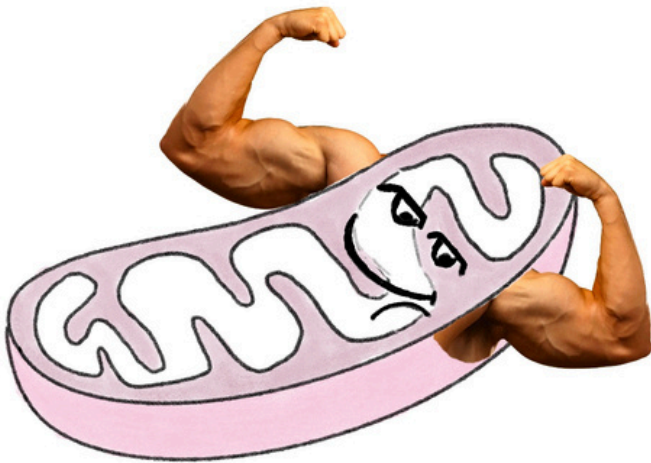
OTHER SENSES TO KNOW

- **Kiwesthesis**: sense of body part position / movement
- **Vestibular sense**: sense of balance / head position
- **Taste (gustation)**: sweet, sour, salty, bitter, umami
- **Smell (olfaction)**: goes straight to brain areas, skipping thalamus

AP PSYCHOLOGY

PERCEPTION

REVIEW



Perception: brain organizing & interpreting sensory input

Bottom-up processing: starting w/ raw data, building up to full perception

Top-down processing: using existing knowledge to interpret sensory info

GESTALT PROCESSING

- **Figure-ground**: separating object from background
- **Proximity**: objects close together = group
- **Similarity**: objects that look alike = belonging together
- **Closure**: brain fills in gaps to perceive a complete whole shape

DEPTH PERCEPTION

→ **Binocular cues**: require both eyes, includes retinal disparity (e/ eye sees diff image)

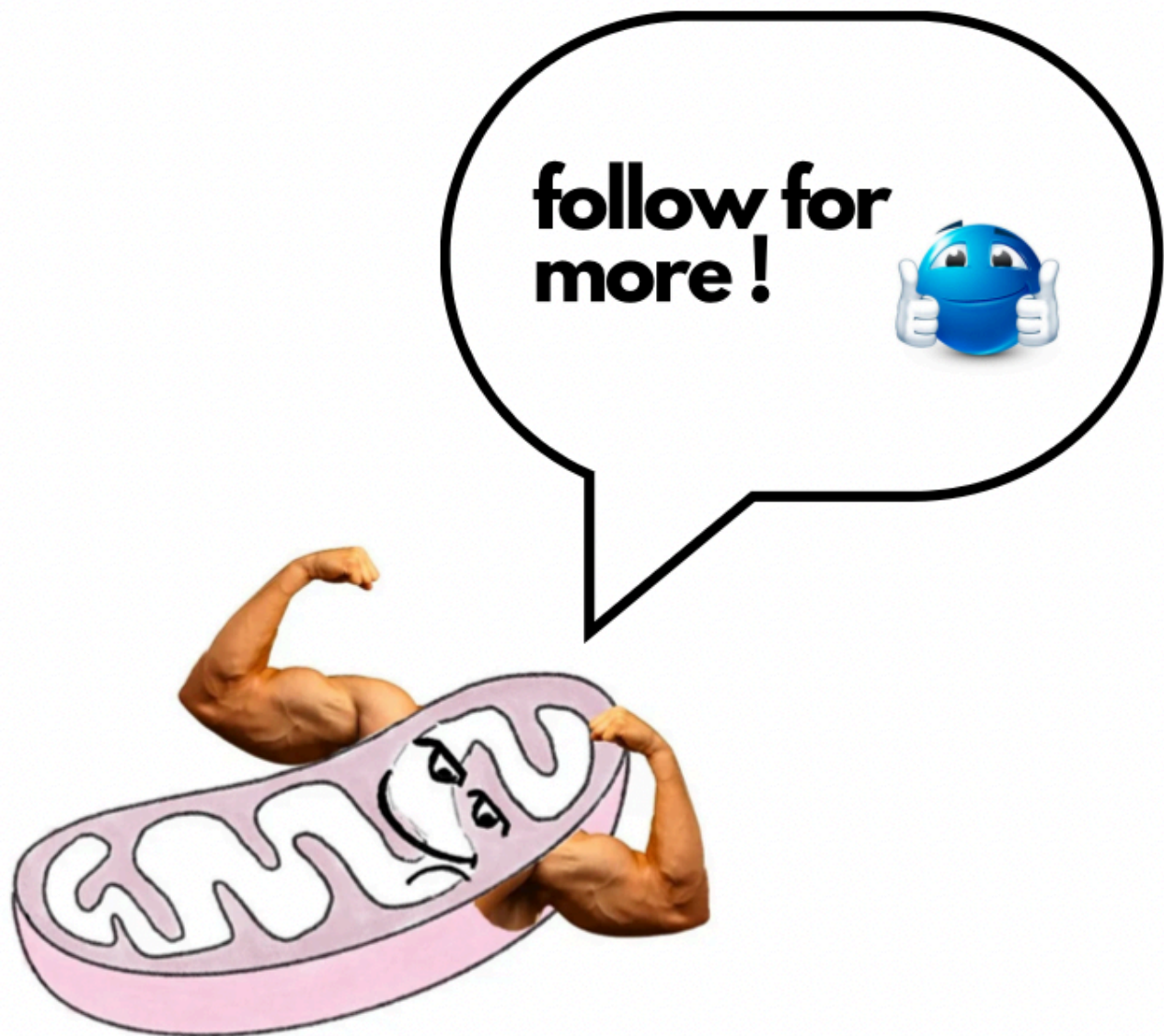
→ **Monocular cues**: work w/ one eye, includes relative size, interposition (one object blocking another = closer), linear perspective (parallel lines converge)

PERCEPTUAL CONSTANCY

Brain perceives objects as staying the same even as sensory input changes

→ **size constancy**: person walking away isn't shrinking even though in the retina they are

→ **shape constancy**: door opening isn't changing shape even though retina image is



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