

SENSORY FOCUSED ACTIVITY



Family/Caregiver Seminar
18th September 2024

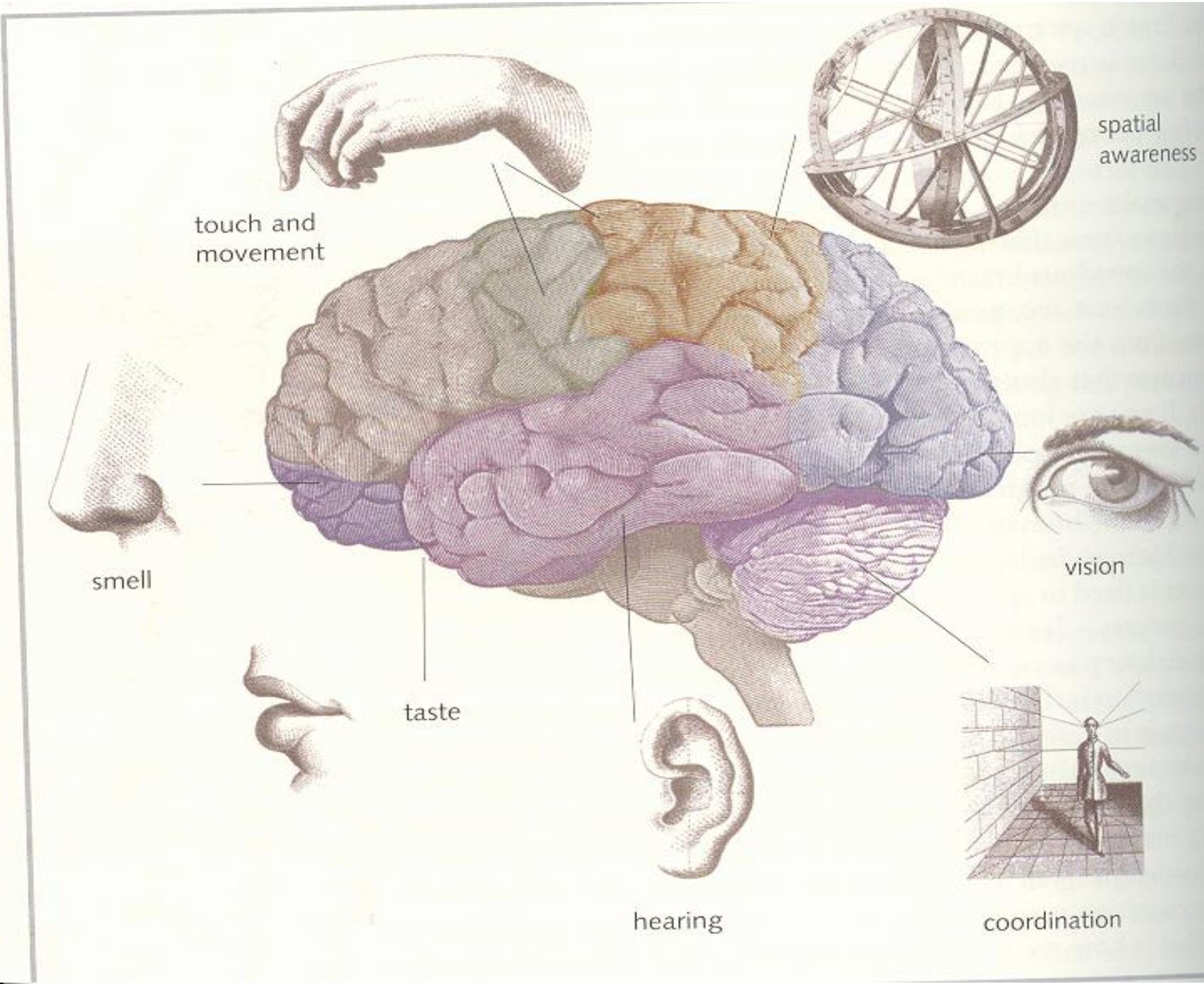
Sylvia Birkhead – OT



Diane Ackerman says:

- The senses are our gateway to our world - through which information from the outside world is processed and relayed to our brains.

"There is no way in which to understand the world without first detecting it through the radar net of our senses."



touch and movement

spatial awareness



smell



taste



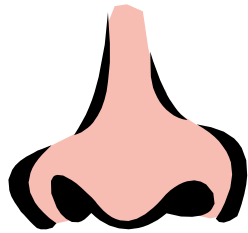
hearing



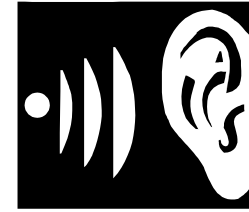
vision



coordination



The Senses ...



gather some 11 million bits per second of input from the environment ...



to send to the brain ...



Surely resulting in



Sensory Overload !



The Conscious Mind


Processes 50 bits per second

*The brain needs to
Compress and Select
Sensory Input !*

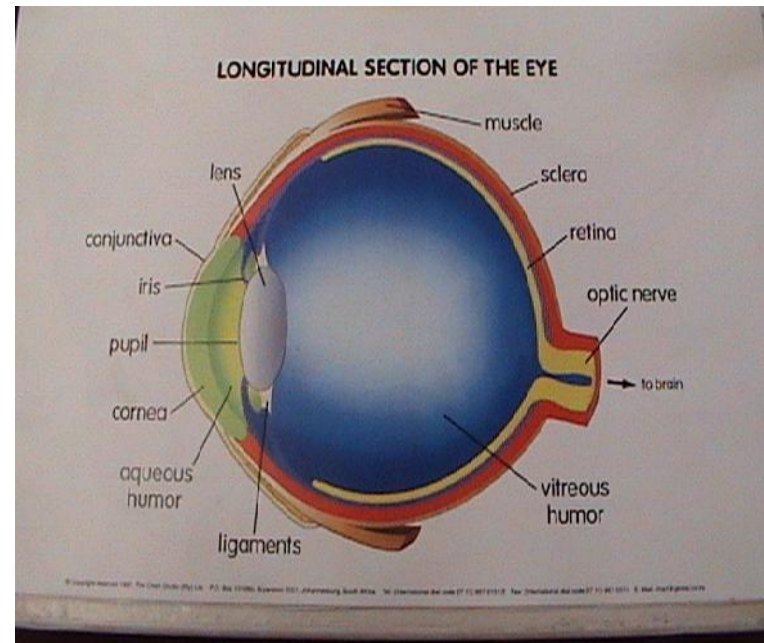
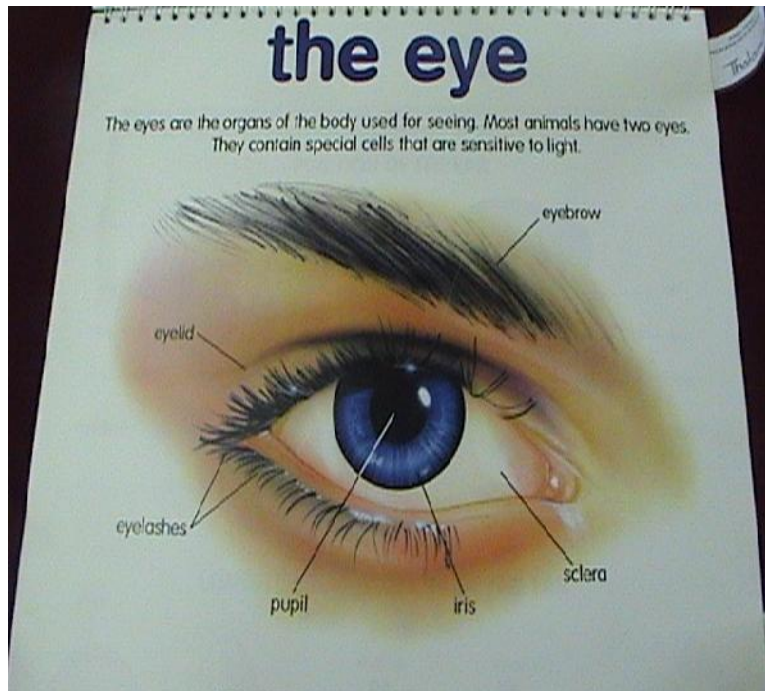
Major co-ordinating senses

- Vision
- Sound
- Taste
- Smell
- Touch
- Vestibular
- Proprioception
- Interoception



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- What happens to the senses as we age?
 - What happens to the senses when a person gets dementia?
 - What happens to the person living with dementia when exposed to sensory stimuli?

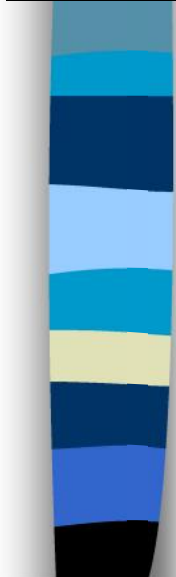
Vision



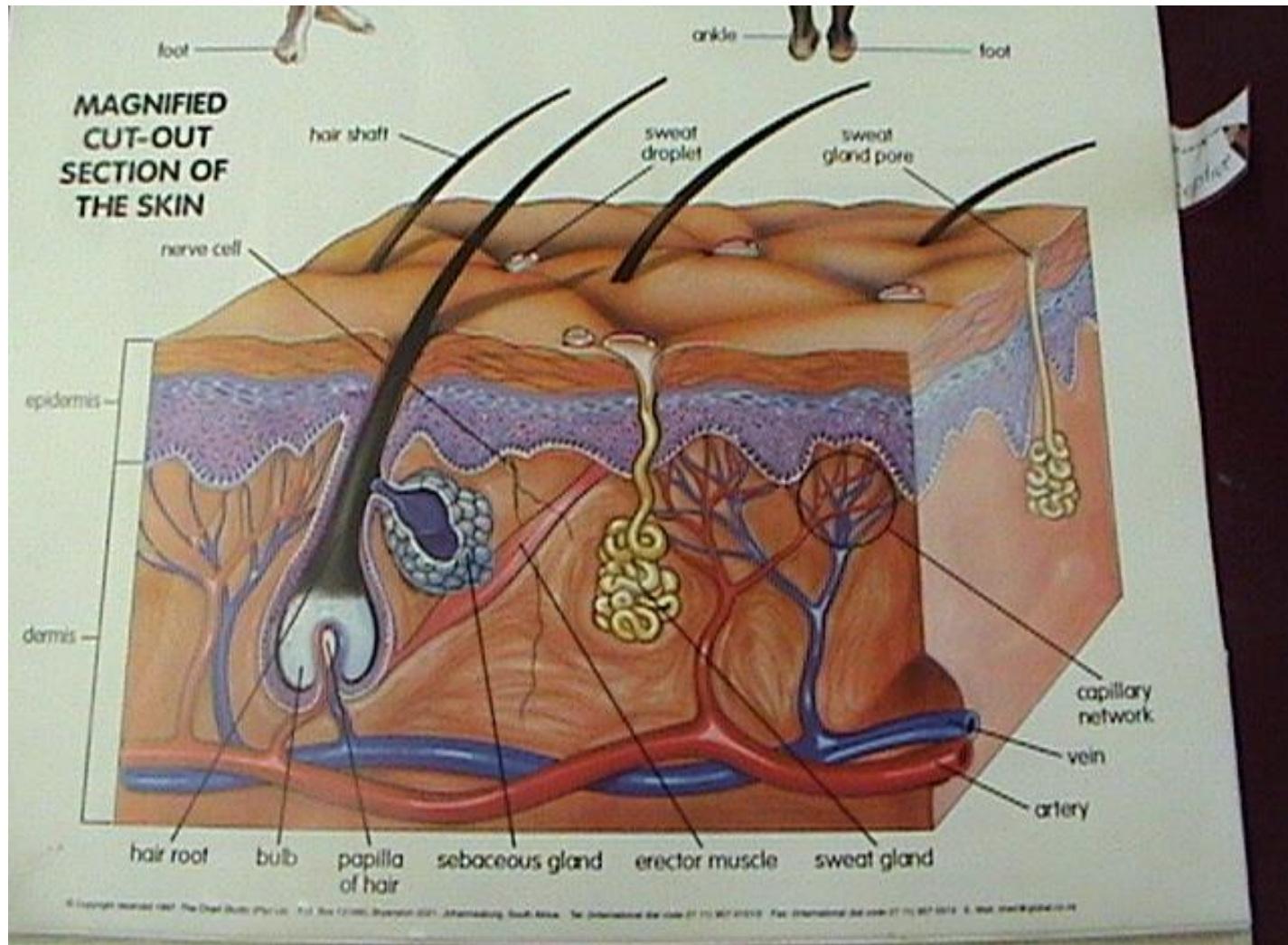
VISION



- This is the major co-ordinating sense
- The brain is stimulated by light/dark contrast, vivid colours, large size and movement
- Vision involves acuity, tracking and field and perception e.g. FG - tablecloth/shirt.
- Monocular vision affects depth perception as well as processing of speed and movement e.g. person suddenly seen before movement processed
- We are all born with a "face" reflex



Touch

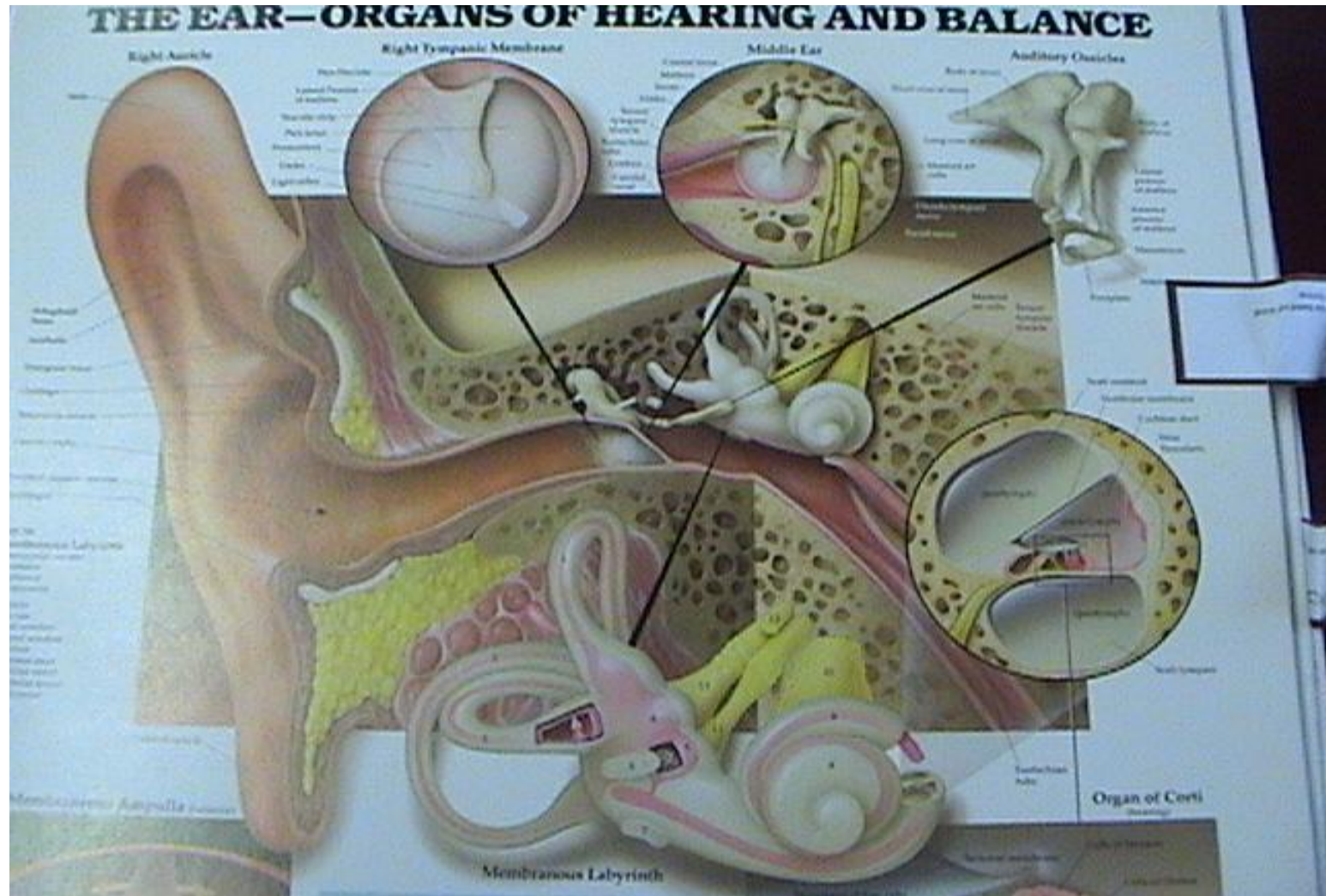


TOUCH

- Our biggest sensory organ is touch
- Without touch we do not grow and flourish emotionally
- We have haptic touch in our hands i.e. can discriminate temperature or pressure for example
- We're all born with a 'touch seeking' hormone



SOUND



SOUND

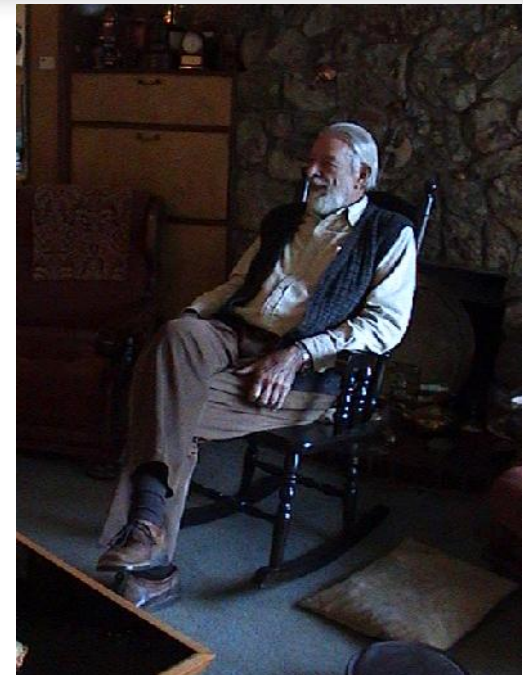


- Many components e.g. pitch, tone, intensity, harmony, rhythm
- Attention to certain sounds e.g. loud or high pitch sounds get our attention but soft sounds also can make us listen more carefully
- Localising sounds - where it comes from
- Perceiving and understanding sounds - confuse vacuum with a plane; know whether 1 or many people, or when to cross the road;

Proprioceptive system

Achieved by the change of body positions i.e. the muscles, tendons, joints and ligaments all move position and receive this information which travels to the brain and is perceived as movement.

E.g: see-saw; escalator; rocking chair



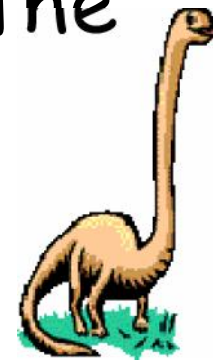
Vestibular system

Gross movements/ Centre of gravity/
Balance/ Changing head positions
Even if eyes are closed we know if we are
upright/flat
Maintains appropriate levels of arousal
Links to vision e.g. horizon/ballerina
Sound-vibrations



SMELL

- Links to the area of the brain to do with emotions (amygdala/limbic part)
- Longest lived sense i.e. primitive
- Smell receptors (nasal cilia and on roof of mouth) but largest brain area
- Smell part of brain closest to the memory part (hippocampus)
- Smell and taste go together



Taste



TASTE

- Mainly composed of smell
- Tongue is important-covered in sweet/sour/bitter/umami receptors
- Taste receptors cover the tongue and sides of cheeks
- Saliva is important for swallowing and speech
- Textures affect taste - Tactile defensiveness



Interoception

Sense of internal awareness




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Creating The 'Just Right'
sensory environment



Tools to address the different sensory thresholds

- SNACKS
- DIETS
- ERGONOMICS

These are suitable for both the PlwD as well as the carer