

More than 5 senses:
Integrating 5 senses and the others

Types of senses

Near



Far





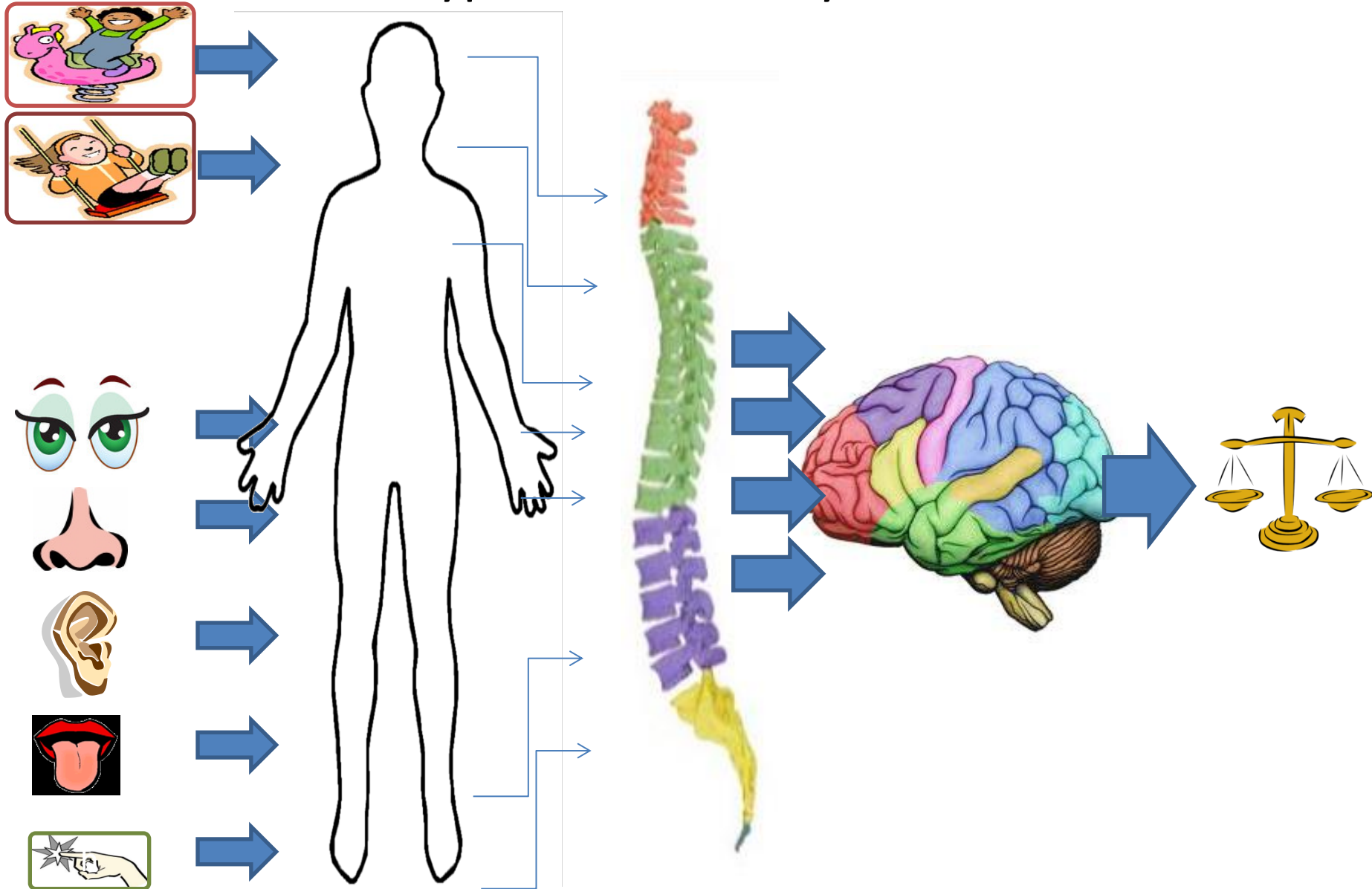
Proprioceptive

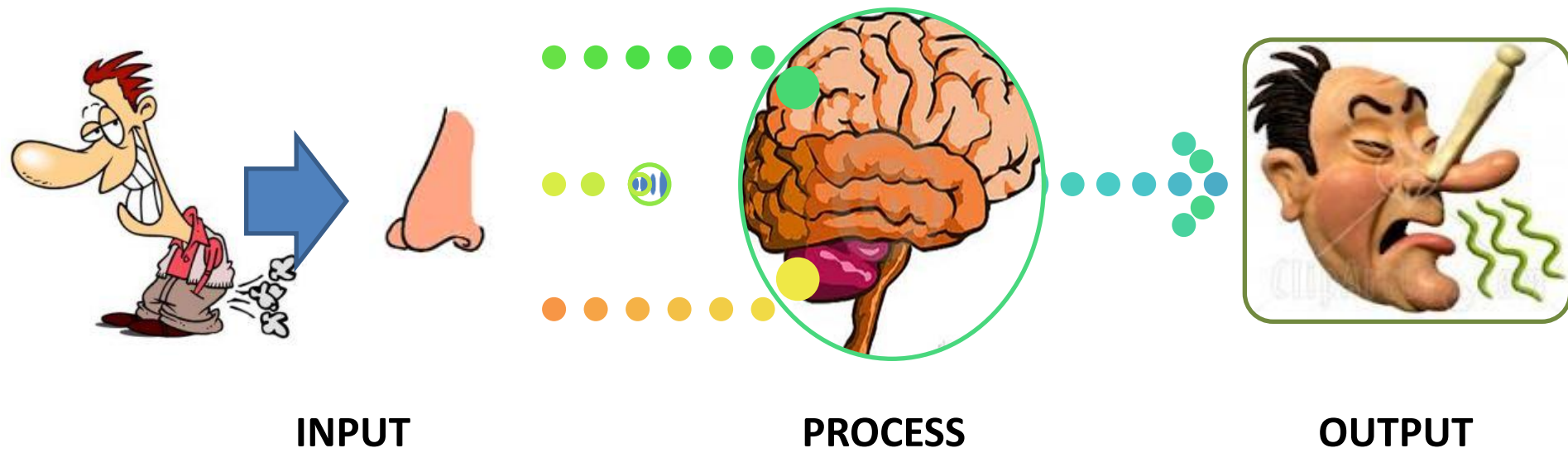
Sense: Sensory information we receive from our muscles, joints and body parts. e.g. Close your eyes and raise your hand in the air. You know where your hand is even though you are not looking at it because the muscles and joints in your hand and arm are sending information to your brain telling it the position of your hand.



Vestibular Sense: Sensory information we receive from our middle ear that is related to movement, balance and our change in head position. The vestibular sense tells us whether we are sitting, standing, kneeling, jumping, running, etc.

Typical Nervous System





What is Sensory Integration?

- Definition

Neurological process that organize sensation from one's (a person) body to response adaptively towards environment. ***“Brain-behavior relationship.”***

Bundy OTR et al. 2002

Everyone has “sensory issues”

SENSORY PROCESSING DISORDER

(Sensory Integration Dysfunction or SI Dysfunction)

(Dysfunction of Sensory Integration or DSI)



A neurological disorder **causing difficulties** with **taking in, processing and responding** to sensory information about the environment and from within the own body.

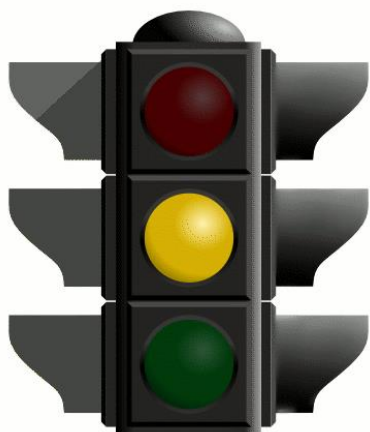
-Inability to use information received through the senses in order to **function smoothly in daily life.**

Adoi....
What's wrong
with my
child?



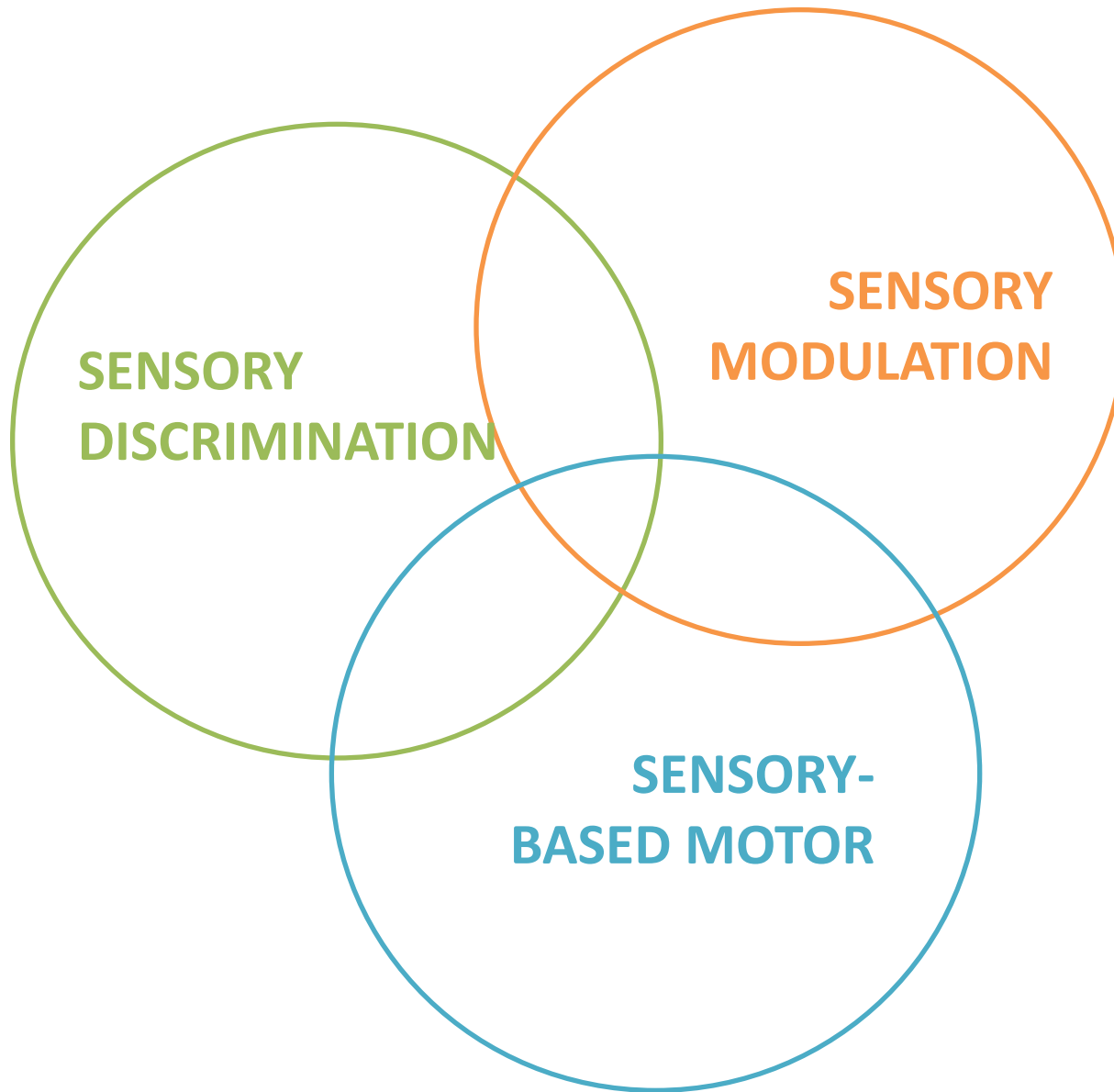
Nothing's wrong
with them but
something is not right
with how their CNS
process sensory
information!!!





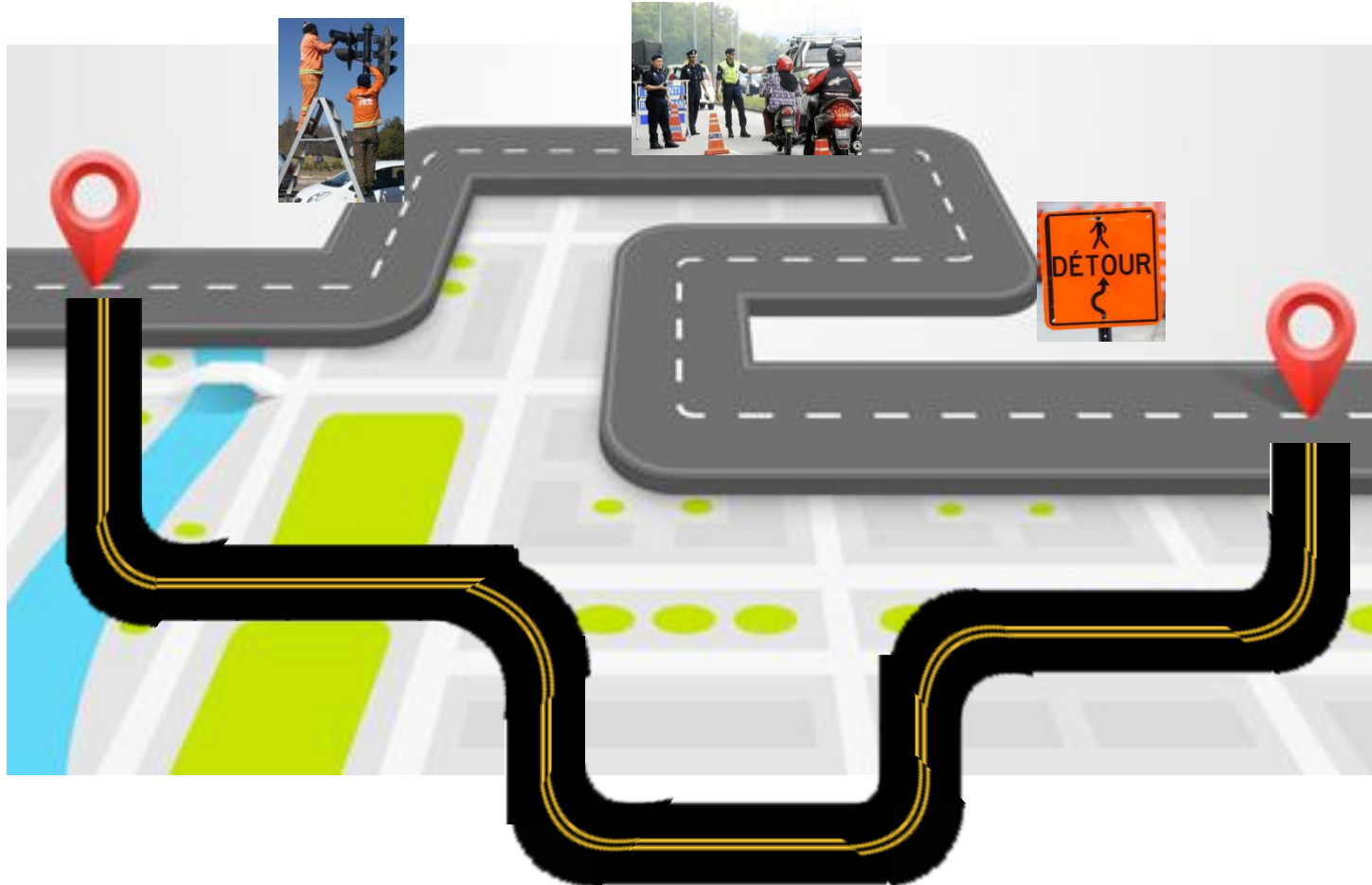


Overview



Sensory discrimination (what)

Difficulty interpreting subtle qualities of objects, places, people or other environment



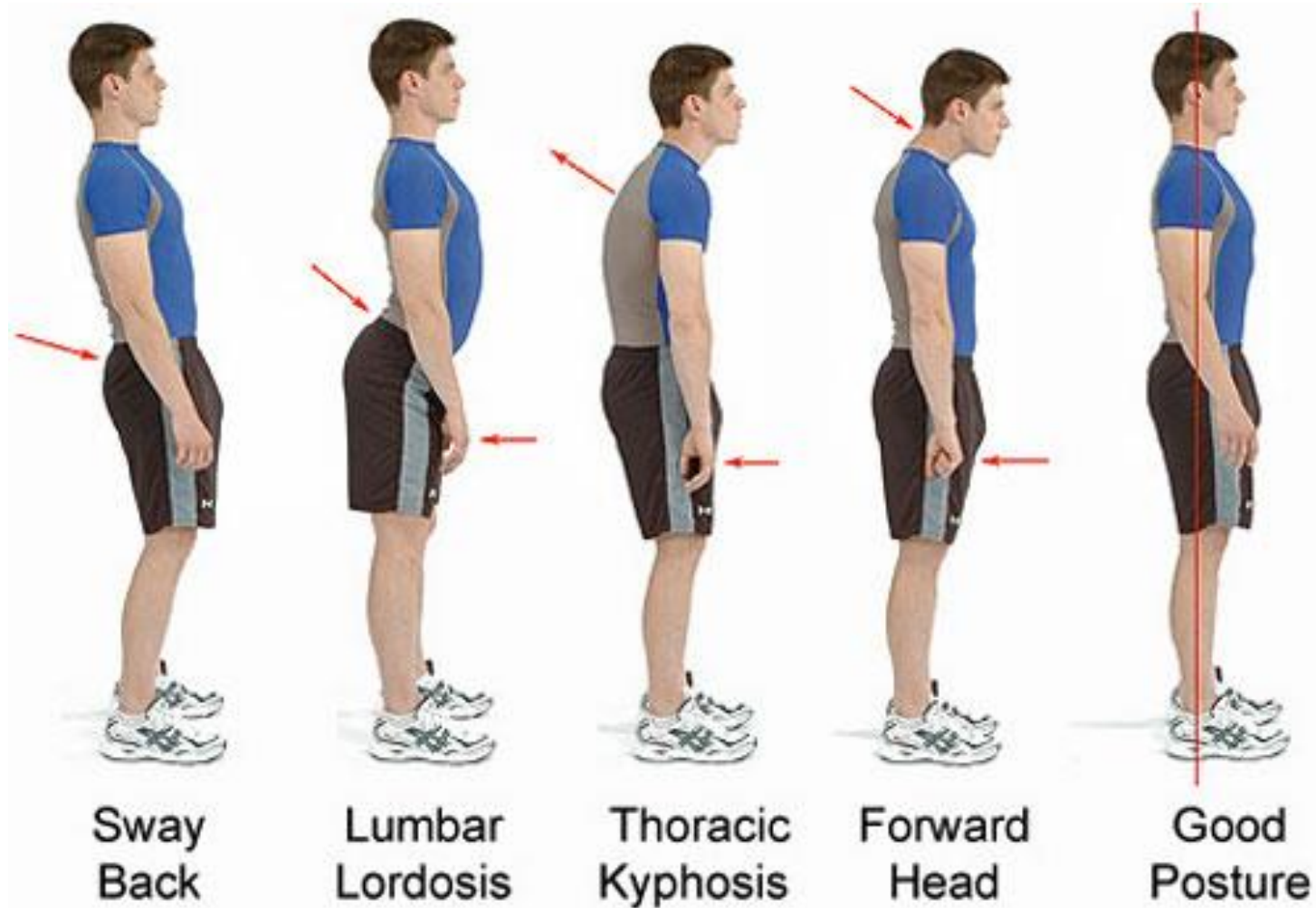
Sensory modulation (how much)

-Difficulty regulating responses to sensory stimuli



Sensory-based motor disorder

-Difficulty with balance, motor coordination, and the performance of skilled, non-habitual and/or habitual motor tasks



WHAT TO DO TO HELP MY CHILD

1. SENSORY INTEGRATION THERAPY
 - Sensory diet
 - Wilbarger Protocol
2. RESPIRATION
3. RHYTHM
4. PLAY!!!!

1. SENSORY INTEGRATION THERAPY

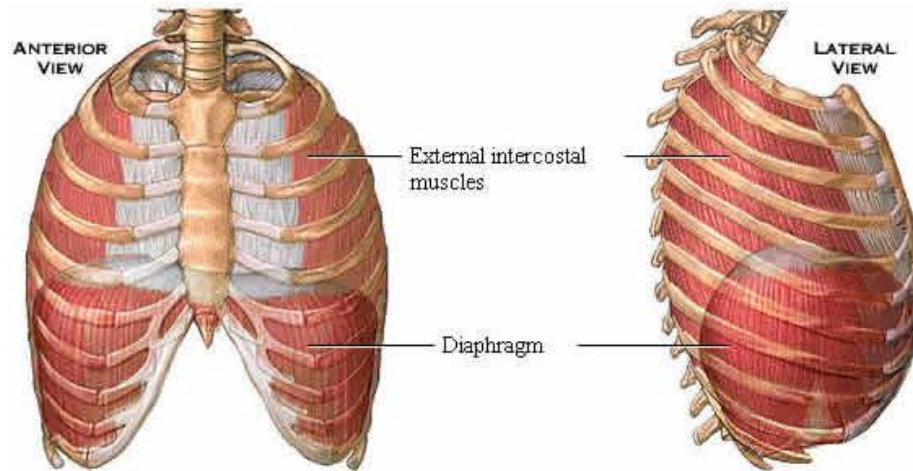
- Sensory-based activities/ heavy work and deep pressure
- Sensory diet

A “**sensory diet**” (coined by OT Patricia Wilbarger) is a carefully designed, personalized activity plan that provides the **sensory** input a person needs to stay focused and organized throughout the day.

- Wilbarger Protocol



2. RESPIRATION



-can be used as a tool to regulate heart rate
-to support attention and focus

- Therefore need to work on core body and proper body alignment to support respiration by:
 - a. positioning
 - b. extending exhale
 - c. activation of diaphragm
 - d. respiration toys
 - e. hand placement
 - f. respiration songs

3. RHYTHM

EVERYTHING IN THE UNIVERSE IS RHYTHM

E.G. annual rhythms, monthly or weekly rhythms, twenty-four hour rhythms, continuous rhythm with or body

- Rhythmicity is absolutely fundamental to the healthy status of every human being
(Don Campbell: “Rhythms of learning”)
- Poor regulation is a state of poor rhythmicity within the body
(Genevieve Jareb: “The traffic jam in my brain”)
 - We can use external rhythms to significantly impact the internal rhythms of out-of-sync child
(Carol Stock Kranowitz : “The out of sync child”)

4. RELATIONSHIP

- Play
- Follow you child's lead and interest (Hanen Program, DIR Floortime)
- Build on the Child's Lead and do only as much as to have to

Pyramid of Learning

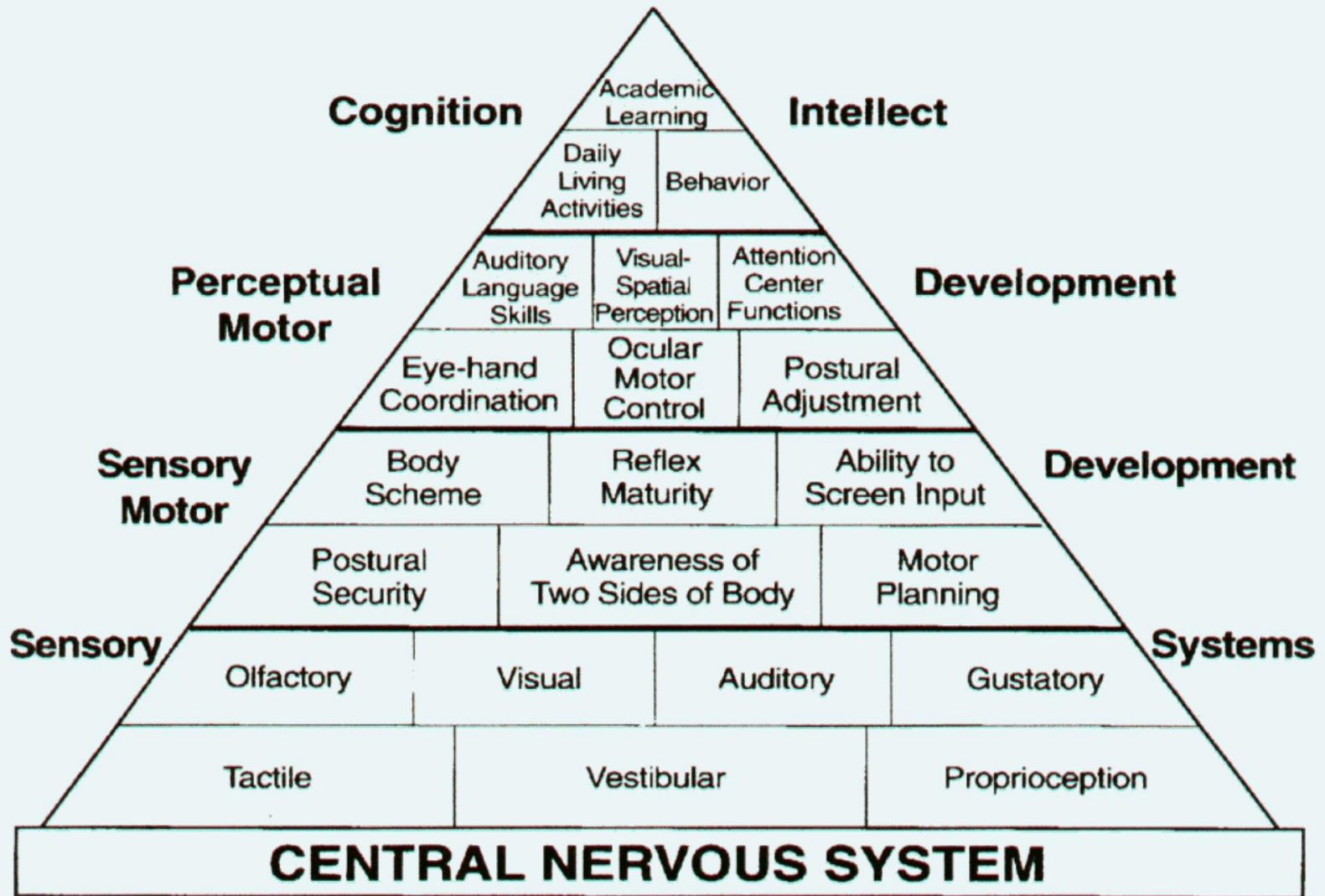
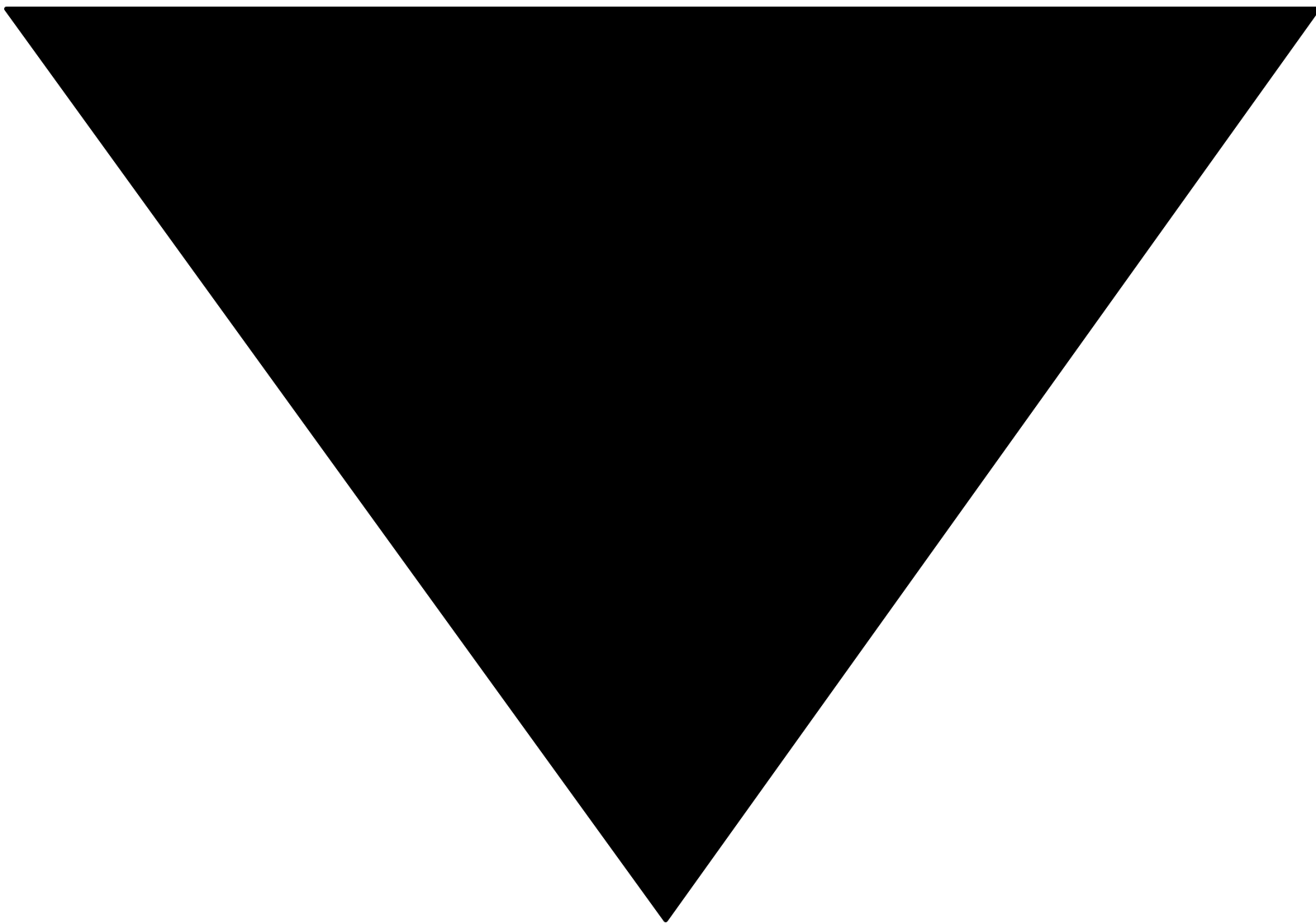


Figure 5. Pyramid of Learning. (Williams & Shellenberger, 1-4)



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JEANS

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THANK YOU

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