

# THE 8 SENSORY SYSTEMS

Copyright © 2018, Heather Greutman - Growing Hands-On Kids, LLC

[www.GrowingHandsOnKids.com](http://www.GrowingHandsOnKids.com)

All rights reserved. This printable or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission from the author.

For personal use only in your home, classroom, or clinic/school-based practice. Please do not share this file either electronically or physically. Please direct those interested to the blog post to download for their own use.

<https://www.growinghandsonkids.com/what-is-sensory-processing.html>

Heather Greutman is a Certified Occupational Therapy Assistant. This product is for educational use only. The advice and tips given are not a replacement for medical advice from a physician or pediatrician. Please consult their advice if you suspect any medical or developmental delay with your child. This book and tips do not replace the relationship between therapist and client in a one-on-one treatment session with an individualized treatment plan based on their professional evaluation. Please seek out your local Occupational Therapist for an evaluation if you suspect any delays in fine motor skills or other skills with your child.

All activities are designed to be completed with adult supervision. Please use your judgment when setting up these activities for your child and do not provide items that could pose a choking hazard for young children. Never leave a child unattended when completing any of these activities. Please also be aware of all age recommendations on the products you are using with your child. The author is not liable for any injury caused to your child while completing any of these activities.



# THE SENSORY SYSTEMS



## The Tactile System

The tactile system is often the most commonly recognized sensory system of the body. It is also the one most people notice most often if a child has an overactive or under-active tactile system. Anything you touch or feel is part of this system.

### Sensitivity Symptoms

- Avoids messy hands, face, or just mess in general
- Has difficulty with certain clothing items such as tags
- Needs to touch everything (brushing along walls while walking, picking up everything)
- The need to fidget in order to focus or when bored
- Avoids hugs or physical contact with others
- Unaware of pain or if hands or face are messy

### Activity Suggestions

- Sensory bins with various textures
- Weighted blankets or lap pads
- Use fidget items in the classroom or at home to help focus
- Sensory play dough or finger painting
- Deep pressure either by rolling a therapy ball across the back or squeezing the hands
- Using a stress ball for hand squeezes
- Tag-less clothing options

# THE SENSORY SYSTEMS



## The Auditory System

This includes hearing, listening, interpreting, localizing sounds, and being able to filter and selectively attend to auditory stimuli.

### Sensitivity Symptoms

- Sensitive to loud, sudden sounds
- Distracted by background noises
- Does not speak as well as others their age
- Has a significant history of ear infections
- Covers their ears often to block sound
- Asks others to repeat what they said
- Has trouble with phonics and learning to read
- Unusually high volume or low volume in their voice
- Often seems to ignore parents or teachers

### Activity Suggestions

- Use headphones or ear plugs to block out background noises
- Simplify language when giving instructions to your child or in the classroom
- Give a verbal or visual warning before loud sounds (like fire drills) to cover ears.
- Try Therapeutic Listening programs
- Include a rain stick in your sensory space or room
- Musical instruments such as shakers or learning to play an instrument
- Calming, soft music to encourage regulation and self-calming
- Use a white noise machine, fan, etc.
- Play clapping games

# THE SENSORY SYSTEMS



## The Visual System

Using our eyes to see what is far or close to us. A typical person is able to use smooth and precise eye movements to scan and visually assess their environment.

### Sensitivity Symptoms

- Sensitive to sunlight or fluorescent lights
- Overly distracted by classroom or home wall decorations
- Poor hand-eye coordination
- Difficulty tracking across a page while reading
- Difficulty copying from chalkboard
- Often complains of headaches
- Skips words or lines or loses their place while reading
- Poor handwriting and drawing skills

### Activity Suggestions

- Decrease wall decorations
- Adjust lighting in classroom or home
- Use a table easel to bring working surface in a more upright position
- Use a window guide and/or colored overlays for reading
- Copy from page or book at close range instead of a chalkboard
- Make sure screen and monitors at a proper height
- Focus on eye-hand coordination activities such as playing catch

# THE SENSORY SYSTEMS



## The Gustatory System

You may recognize the gustatory system more by the word taste or oral sensory system. Taste and smell or the olfactory system are very closely related.

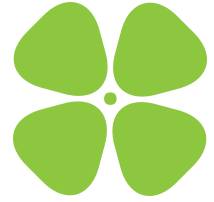
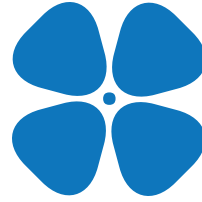
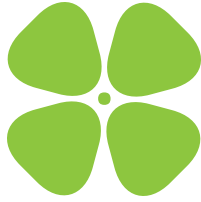
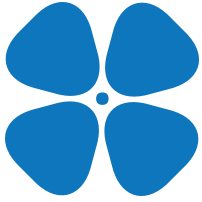
### Sensitivity Symptoms

- Sensitive to brushing teeth (hypersensitive)
- Sensitive to food textures (hypersensitive)
- Mouthing non-food objects and exploring textures such as chewing on pencils, clothing etc. (Seeking)
- Frequent Drooling
- Loves or has a strong fear of going to the dentist

### Activity Suggestions

- Chewing gum
- Chewable jewelry or chewies
- Vibrating toothbrush
- Drinking from a straw (sucking can be focusing and help with attention)
- Creating tasting bottles with various safe items with different scents or flavors
- Blowing bubbles
- Explore textures through sensory bins or messy sensory play
- Blowing out candles
- Drinking through a sports bottle

# THE SENSORY SYSTEMS



## The Olfactory System

When we eat, we smell something first. If it smells good we are more likely to try it. If it smells bad that sends a warning that we may not like it OR that it is dangerous for us to eat. Smell travels through chemical receptors with direct neuronal connections to limbic system (responsible for emotional memory). This is often why our emotions are tied to smells and food.

### Sensitivity Symptoms

- Overly sensitive to certain smells and avoids them
- Limited diet (gagging or avoiding)
- Explores objects by smelling
- Craves certain smells or textures
- Holds their nose to avoid smells, even if you don't smell anything
- Avoids foods most children their age enjoy

### Activity Suggestions

- Scented play dough, finger paints, or sensory doughs
- Use scented markers or stickers
- Create smelling bottles with various spices or items to introduce new smells
- Use scented bubbles
- Scented chewable items
- Avoid scented soaps, lotions, perfumes and oils
- Visit a herb garden

# THE SENSORY SYSTEMS



## The Proprioceptive System

The proprioceptive system or proprioception is one of the internal senses of the body that comes from the joints, muscles, ligaments, and other connective tissue. The proprioception system allows you to know where your body parts are and what they are doing without necessarily looking at them. The receptors are in the joints, muscles, and tendons and perceive contraction, stretching, and compression.

### Sensitivity Symptoms

- Poor body awareness - knowing where their body or body parts are in space
- Poor coordination - they move awkwardly or stiffly
- Difficulty grading amount of pressure - using excessive force on an object (such as breaking a pencil or crayon when writing or coloring or not enough pressure)
- May push, hit, bite, or bang into other children
- Avoid or crave jumping, crashing, pushing, pulling, bouncing or hanging
- Chew on clothing or objects more than other children
- Have to look at what they are doing (staring at their feet while walking or running)

### Activity Suggestions

- Weighted lap pads or vests
- Bean bag chair to sit in
- Heavy work activities
- Swimming
- Karate
- Climbing
- Playing in a sandbox
- Carry groceries
- Wearing lycra
- Chair push-ups
- Dancing
- Washing the car
- Rolling a ball
- Yoga Stretches
- Pillow fights
- Chewing bubble gum
- Using the monkey bars at the playground

# THE SENSORY SYSTEMS



## The Vestibular System

The vestibular system is located in the inner ear and helps you to detect changes in regards to gravity. Are you sitting, standing, lying down, upside down, spinning, standing still etc? It is often referred to as the internal GPS system of your body.

### Sensitivity Symptoms

- Gravitational insecurities - will become very upset when movement is forced on them
- Movement intolerance - uncomfortable with fast movement or spinning
- Craves spinning or swinging
- Does not like feet off the ground - fearful of heights, fear of falling
- Has difficulty standing still - is constantly moving (fidgets)
- Prone to being carsick or motion sick - this can also manifest as falling asleep immediately in a car, bus, boat, or airplane)
- Becomes dizzy easily, or never becomes dizzy

### Activity Suggestions

- Using a ball chair or wiggle cushion for seated activities
- Use movement breaks
- Jumping on a trampoline
- Swinging
- Riding a bike
- Yoga poses
- Using a scooter board
- Sit and spin chairs
- Rolling down a hill
- Balance beams or lines
- Jumping rope



# THE SENSORY SYSTEMS



## The Interoception System

The interoception system is the internal sensory system of the body. The receptors for this system are located in the organs, muscles, and skin. Interoception is responsible for the sensations of hunger, thirst, temperature changes, bathroom needs, and any other internal body sensation.

### Sensitivity Symptoms

- Difficulty with toileting (bed wetting and accidents).
- Unable to track hydration or food intake (never feel thirsty or hungry. Or may always feel thirsty or hungry).
- Difficulty in recognizing and communicating internal body states or sensations (feeling hot/cold, pain etc).
- Difficulty regulating emotions and feelings (not feeling they are angry before they verbally or physically lash out).
- Distracted by internal sensory input such as hearing their heartbeat.
- Unable to tell how loud their voice is in an environment. May use sound to cover up unwanted sensory stimuli.

### Activity Suggestions

- Mindfulness activities
- Yoga
- Heavy work activities
- Alerting activities
- Repetitive and rhythmic vestibular input
- Visual prompts and cues to identify and communicate emotions
- Social stories