

# Sensory skills

A guide for Parents, Carers and Educators



Seeing, hearing,  
smelling, tasting,  
touching, balance  
and movement.

Sensory skills – A guide for Parents, Carers and Educators

Published by Alison Stone

Proudly funded by the Australian Government

Project Coordinator: Alison Stone

ISBN: 978-0-9924923-2-8

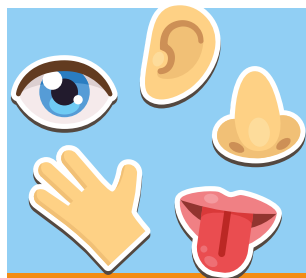
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Printed in Australia.



**Australian Government**

**Department of the  
Prime Minister and Cabinet**



The five senses  
I can see, hear, feel, taste  
and smell.

## The seven senses

Most people know about the five senses of seeing, hearing, smelling, tasting and touching. The other two important senses are balancing, our vestibular sense, and body position, our proprioceptive sense.

We receive information from our senses, which our brain must process and interpret to enable us to respond. This should happen automatically. We need lots of experience using our senses so we can respond appropriately.



Vestibular (the sixth sense)  
How we receive information  
about movement.



Proprioception  
(the seventh sense)  
How we receive information  
about where our body is.

1

RECEIVE

2

PROCESS

3

REACT

Remember that all children do things slightly differently. Some children do things early, some children take their time. If you are worried about your child, see a trusted health professional or your general practitioner.

# Vision



## WHAT DOES IT DO?

It allows our eyes to send images to our brain. It allows us to focus on specific details, recognise colours, and adjust to varying levels of light.



## HOW DO WE USE IT?

Information from the eyes is processed in the brain so that we can...

- Find the important detail in a busy picture or environment.
- Make sense of something we can only partially see.
- Recognise familiar things.
- Use memories to learn the shapes to read, write and recognise numbers.



## WHAT DO WE USE IT FOR?

Almost every aspect of daily life including...

- Recognising faces.
- Learning to read and write.
- Scanning the environment for danger.
- Helping us to balance.
- Looking around for objects we want.
- Exploring the environment.
- Playing.



# Vision allows children to...



## Babies

- Begin to focus on your face.
- Follow you with their eyes as you move.
- Reach for you.
- Reach for toys that they are looking at.

## Toddlers

- Point to pictures in a book.
- Pick up small bits of food to feed themselves.
- Recognise familiar people and things.
- Learn to balance in standing and walking more easily.



## Preschoolers

- Find objects to play with.
- Look for things they need, and can distinguish these even in a big mess.
- Learn to recognise shapes, letters and numbers.
- Learn to remember what their name looks like.
- Recognise familiar places and things.
- Look around for danger.



- You can teach them to use all their senses to plan activities.
- Enjoy and experiment with colour, such as finger painting.
- Experience a sense of wonder in the natural world, through different shapes and textures of leaves, flowers, pebbles etc.



# Hearing



## WHAT DOES IT DO?

Enables sound waves to reach the brain through the ears, so that sounds can be recognised.

In the brain, the information is processed to enable us to use it.

When babies are born they can recognise their parents' voices. One way they learn to talk is by having their parents talk while looking at them, from birth.



## HOW DO WE USE IT?

We can tell where sounds come from.

We can learn to interpret different sounds, such as an alarm or a dog barking.

We can remember sounds so well that we learn to understand words, speech intonations, and language.

We perceive small differences so that we can tell the difference between similar words such as cat and bat.



## WHAT DO WE USE IT FOR?

To understand speech sounds and words and then learn to speak.

To communicate.

To react to sounds that tell us what is happening, such as the phone, the doorbell and a fire alarm.

It enables us to enjoy music and rhythm, and to appreciate the emotions that music can communicate.



# Hearing allows children to...



## Babies

- Recognise their parents' voices.
- Recognise words long before they can say the words themselves.
- Learn to say words after listening to them for many months.
- Enjoy music.
- Recognise familiar sounds such as the dog or the doorbell.

## Toddlers

- Learn to listen and then to speak.
- Learn to listen and then sing familiar songs.
- Remember what different sounds mean, such as a parent's phone or car, the lawnmower etc.

## Preschoolers

- Have a conversation.
- Listen to and remember instructions.
- Enjoy music, song and dance, and remember tunes and rhythms.
- Use the sounds around them to understand what is happening, such as bells, phone, traffic, TV theme songs and a parent's car arriving.

“Smells can trigger strong emotions and memories.”





# Smell



## WHAT DOES IT DO?

Allows us to detect molecules in the air. This information goes to the brain where it is processed in several areas, including those responsible for memory and emotions.

Babies can detect and remember the smell of their mother from birth.



## HOW DO WE USE IT?

Enables us to gain information about all the things around us that have an odour. This includes foods, drinks, flowers, animals and chemicals.

Smells can trigger strong emotions and memories.



## WHAT DO WE USE IT FOR?

The sense of smell increases our sense of taste, and the enjoyment of food and flavours.

It helps us to detect odours, which could be dangerous such as smoke, gas or chemicals.

It helps us to detect when food may have gone off, and is unsafe to eat.



# Taste



## WHAT DOES IT DO?

Taste buds on the top of the tongue are able to detect five main tastes, which are sweet, sour, salty, umami\* and bitter.

This information is processed in the brain, like the other senses.

Children are born with a very sensitive sense of taste. They gradually get used to a wider range of different tastes.



## HOW DO WE USE IT?

We use taste in combination with the sense of smell to detect different flavours.

It greatly increases the enjoyment of foods and eating.

It can warn us about things that may be dangerous to eat or drink, because they taste bad.



## WHAT DO WE USE IT FOR?

To increase our appetite.

It helps us to enjoy our food.

It helps us make safe and appropriate food choices.

\* Umami is the savoury taste



## Smell and taste allow children to...



### Babies

- Recognise the smell of their closest carers.
- Feed well.
- Feel secure when they experience familiar smells.



### Toddlers

- Form memories of smells that will remain with them all their lives.



### Preschoolers

- Learn about a wide range of foods.
- Enjoy foods.
- Enjoy the smells of the environment about them, such as foliage and flowers.
- Learn which smells can mean danger.

# Touch



## WHAT DOES IT DO?

Different sensors in our skin are able to send information to the brain about pain, temperature, pressure and light touch.

Children develop these senses through experiencing a wide range of touch sensations.



## HOW DO WE USE IT?

Pain awareness allows us to keep ourselves safe.

Temperature awareness allows us to choose appropriate clothing, and prevent burns.

Pressure and light touch are used together to give us information. It's how we learn about the texture, shape, material and weight of objects.



## WHAT DO WE USE IT FOR?

To maintain safety inside and outside the house.

Tactile sensation is needed to use tools such as knives and forks, scissors and pencils.

Good sensation is required for skilful use of the hands.

Using our hands effectively, without vision.





Babies need to **experience a lot of touch**, holding and cuddling, to grow and develop in a healthy way.

## Touch allows children to...



### Babies

- Explore by putting things in their mouth as soon as they can.
- Suck their fingers and thumbs.
- Explore using their hands to touch and reach for everything. So dangerous things should be kept out of reach!
- Experience a wide range of textures so they can learn more about touch.



### Toddlers

- To learn about different textures. They need to experience walking on grass, dirt, concrete, sand, wood, pine bark, stones and anything else that will not hurt them, but feels different.
- Toddlers also need to experience as many different food textures as possible. They should taste and feel with their mouth as well as their fingers and hands.
- Try textures that are crunchy, gooey, slimy, dry, wet, slippery and grainy.



### Preschoolers

- Tolerate the feel of a range of textures if they have had experience when they are young. Expose them to playdough, finger paint, crayons, chalk, foods, sticky substances, sand, sticks and stones, mud and water, different fabrics, walking on different surfaces etc.
- Play games such as finding things hidden in sand or a pillowcase.

# Proprioception



## WHAT DOES IT DO?

In our joints and muscles we have receptors, which send information to our brain about the position of our joints and the movement of our bodies.

It enables us to be aware of where our body is in space, even with our eyes shut.

Babies need to develop this sense as they learn to control their movements.



## HOW DO WE USE IT?

It enables us to use the correct amount of strength and effort when moving.

It helps us to keep parts of the body still when needed.

It assists us to copy actions when we're watching someone else.

It allows us to control the movement of parts of our body, even in the dark.



## WHAT DO WE USE IT FOR?

It is used in all movement such as crawling through tunnels, hopping, skipping and dancing.

We use it in swimming where we often can't see.

It is used to get the correct pressure when writing with a pencil.

It is used to type without looking at the keyboard.



# Proprioception allows children to...



## Babies

Babies develop the use of this sense as soon as they start moving in the womb.

- Turn to look at you with their eyes and head.
- Reach for your face when you are holding your baby.
- Copy mouth movements when parents talk to them.
- Suck their fingers and toes, play with their hands and feet.
- Spend lots of time on the floor on their back, on their side and especially on their tummy (only when awake).
- Roll over, get in and out of sitting, and crawl.



## Toddlers

Toddlers continue to develop the use of this sense by:

- Pointing to different body parts when asked and moving them.
- Feeding themselves with a spoon.
- Pointing to pictures in a book.
- Joining in action songs such as “Twinkle Twinkle Little Star” and “Jack in the Box”.



## Preschoolers

Preschoolers continue to develop the use of this sense by:

- Playing on equipment at the playground such as climbing frames.
- Playing ball games and especially hitting a ball with a bat.
- Active whole body play including jumping, hopping, running.
- Playing “Simon Says” and other copying action games.
- Playing dress-ups.



## The Vestibular Sense



### WHAT DOES IT DO?

Organs in the inner ear are able to send information to the brain about how fast we are moving or slowing down and if the head is upright. It is detecting our response to gravity.

It is an early sense to develop in a baby and continues to need to develop in infancy and early childhood.



### HOW DO WE USE IT?

It is used to keep us upright when we are moving or still.

It enables us to coordinate the movement of our head and eyes.

Vision and proprioception work together to help us to balance.



### WHAT DO WE USE IT FOR?

To keep our head stable so we can use our eyes to track things, such as keeping your eye on the ball.

It is essential for sitting up safely, crawling, walking and running.

Gentle rhythmic swinging and rocking can be very calming and soothing in babies, and at all ages, because this system is connected deep in the brain.



# The vestibular sense allows children to...



## Babies

Babies start to develop the use of their vestibular system long before birth. They need to continue to develop it by experiencing:

- Rhythmic rocking and gentle bouncing.
- Their own independent movement as it develops.
- Being carried about.
- Experiencing movement in the car or stroller.



## Toddlers

Toddlers continue to develop this sense from a lot of experience with:

- Swings.
- Rolling across or downhill on grass or another soft surface.
- Bouncing on your knee.
- Riding on your back like a horse etc.



## Older children

Older children can benefit from all of the Baby and Toddler activities as well as:

- Playing on slides.
- Going through tunnels.
- Climbing playground frames.
- Jumping on trampolines.
- Skipping, jumping, hopping, running.
- Swimming, dancing and all forms of sports and games.

“Remember, some children do things early, some children take their time.”



## Acknowledgements

Dr Sue Jenkins, Consultant

PANDA Physiotherapy <http://www.pandatherapy.com.au>

Design and Layout Digital Ink

Printed by Mercury Walch

Kate Gillham, Photographer

### **Families featured in photos:**

Georgia Clark, Isabella Whitney, Taram Kivi, Essi Kivi, Nikita Bannister,  
Lily Cantrell and Mia Cantrell

