Sensory Trails

What are Sensory Trails?

The aim of Sensory Trails is to facilitate sensory processing and sensory integration and to allow children to be in the optimum state of alertness and ready for learning. Some of the many benefits include:

- Improvement in self-esteem
- Development of physical skills (learning to skip, jumping, hopping and balancing etc.)
- 'Waking up' and being more readily engaged in group activities
- Improved communication skills
- Improved team-working skills
- An opportunity to develop individual skills in a safe and secure environment

Sensory Trails at York Road Nursery School take place 3 times a week in 2 sessions.
The sensory trails run **Monday, Wednesday and Friday** and children attend either the *8:40-9:00am* session **or** the *12:10-12:30pm* session.
Sensory trail groups are kept at around 4-5 children per session, this allows the best interaction and productivity during the trail.

Sensory trails take place in the garden room at York Road Nursery School and all the resources are stored here. Setting up a sensory trails takes around 5-10 minutes.

Children are highlighted as possibly needing sensory trails by key teachers, support staff, prior knowledge of SEN or as recommended on a child's EHCP.
If it is suggested a child attend sensory trails a permission form is sent home to the child's parent/carer and only then with the parent/carer's consent will the child be added to the trails.

Key Terms

Sensory Integration:
The neurological process that organises sensation from one's own body and the environment and makes it possible to use the body effectively within the environment.

Proprioception:
Proprioception is the perception and awareness of the position and movement of the body (in relation to the environment)

Vestibular:
Vestibular is the perception and awareness of movement and the sense of balance (felt through the ears)

Interoception:
Interoception is a lesser-known sense that helps you understand and feel what is going on inside your own body. Children who struggle with Interoception may have trouble knowing when they feel hungry or full, thirsty, hot or cold.

Habituation:
Habituation is the diminishing and innate response to a frequently repeated stimulus (clock-ticking, lights turning on) some children can not habituate certain stimulus.

Who may benefit from Sensory Trails?

There are many different sensory processing difficulties and these may present slightly differently is individual children.
Some of the more common difficulties are:

- Vestibular under-responsive
- Vestibular over-responsive
- Proprioceptive seeking

Below we will explore the common 'traits' of a child with each of these sensory processing difficulties although, it is important to remember that each child is individual and may have more than one sensory processing difficulty.

Vestibular under-responsive:
vestibular is the perception and awareness of movement and the sense of balance (felt through the ears), children using sensory trails for this difficulty may exhibit some of the following behaviours.

- Constant fidgeting
- Rocking in chair
- Leaving chair/carpet frequently
- Often displays fast and impulsive movements
- Looses attention when seated for a long time

Children may display these behaviours if craving enhanced movement input to 'switch on the brain' and increase alertness. Although it may appear the child is not listening or paying attention they may be moving constantly in an attempt to enhance concentration. These children may display impulsive and hyperactive behaviours.

Vestibular over-responsive:
Children that are over-responsive to movement with often avoid all movement activities (this can include games, dancing, action songs etc.) and will often prefer more sedentary activities. These children may display behaviours such as:

- Refusal to engage in movement activities
- Shows preference for sedentary activities
- Shows short time engagement in movement activities
- Refuses to engage in games/singing

These children may display these behaviours as they dislike the sensation of the movement involved. They will particularly dislike fast movement, backwards movement and spinning movements.

They may also dislike sudden changes in movement and will avoid chasing games/ contact games. They may refuse to use equipment which involves their feet being off the ground as they experience gravitational insecurity.

Proprioceptive seeking:
The proprioceptive system is located in our muscles and joints. It provides us with a sense of body awareness and detects/controls force and pressure. Proprioceptive input can assist in controlling responses to sensory stimuli.
Proprioceptive input can be very calming for those who are easily overwhelmed by sensory stimulation.

Some children will seek proprioceptive input in order to regulate their emotional and behavioural responses to sensory stimulation. This may result is some of the following behaviours:

- Bites/chews on objects (sleeves/pens)
- Hyper-extends joints (bends back fingers)
- Bangs body parts
- Holds objects with excessive pressure
- Enjoys rough and tumble play but can be excessively rough with others
- Throws self onto floor
- Prefers to run, jump or stamp
- Likes to sit with knees tucked under themselves
- Engages in weight bearing activities (swinging on tables, climbing)
- Walks on tip-toes (in addition to other seeking behaviours)

These behaviours are not the child displaying anti-social and uncooperative behaviours. They are the child trying to regulate sensory stimuli and regulate their emotions and behaviours.

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Sensory Trails/ Circuits

A sensory trail runs in 3 sections, these are based on the theories of sensory processing and sensory integration and the practical consideration of providing a structured sensory motor input.

1. Alerting Section – To provide vestibular stimulation (allowing fluid in the ears to move about through jumping and head movement), preparing the brain for availability for learning and the school environment.
2. Organising Section – activities that require multi-sensory processing and balance. The individual child needs to organise their body, plan their approach and do more than one thing at a time in a set sequential order. Activities such as hopping, climbing, balancing, looking and throwing into a target.
3. Calming Section – this is very important to provide input to ensure that as children leave the sensory trails and enter nursery they are as calm as possible.

Here are some examples of activities used in sensory trails

Alerting Activities	Organising Activities	Calming Activities
- Jogging / running (preferably outside) - Star jumps - Stepping up and down onto a wooden block or step - Frog jumps - Squat jumps - Jumping on the trampoline - Hopscotch (also organising)	- Balance beam work - Wobble board - Stepping stones - Tower building - Climbing - Kicking or throwing balls/ bean bags on/into a target - Simon says sequences - Army crawling - Using hand weights - Egg and spoon race - Using a skipping rope	- Rolling up tightly in a blanket - Wearing a weighted jacket - Rolling yoga ball over the child - Mindfulness breathing exercises - Stretching with yoga bands

*Important to note is that some children may resist some of these activities due to the nature of their sensory processing difficulty. It is key not to pressure children into participating if they do not want to and instead offering an alternative activity and re-visit the other activity another time.

Practical activities

There are many practical activities staff can use to support children with sensory processing difficulties in the classroom. These can include:

Proprioceptive seeking	Vestibular under-responsive	Vestibular over-responsive
- Using a weighted blanket - Stress balls - Fidget toys - Theraband (tie around base of chair to kick feet against) - Wiping tables - Sweeping - Carrying heavy items - Stacking chairs - Moving furniture	- Move n sit cushion - Theraband around chair - Foot fidgets - Taking the register - Handing out resources - Collecting things - Tidying up - Taking messages to other teachers	- Giving the child choices - Provide visual strategies (demonstrate) - Turn taking games to avoid constant movement - Allow breaks - Setting out materials - Moving furniture - Sweeping - Taking the register

All these activities can help a child self-regulate better whilst in the classroom environment.

Highlighting the need for small sensory interventions can greatly improve a child's nursery school experience and allows them the opportunity to better process their surroundings. It may also help to control unwanted behaviours that can/may result as a consequence of sensory processing difficulties.

Tracking progress

You may wish to track the children on sensory trails to ensure they are both benefitting and progressing.
Using a note book to record notes and observations of a session can help to better understand a child's individual needs and tailor the sensory trails to target specific skills.

You may also wish to track progress using a target sheet like the one included in this pack.

Sensory Trails Target Sheet

Childs name:	Key teacher/group:
Start date:	Review date:

Individual overview:	
Target 1	**Target 2**
Target: Strategies in place:	Target: Strategies in place:

Next steps/ New target	Signed……. Dated…….

Strategies by sense

Children can have sensory processing difficulties in relation to each sense.
They may present with more than one of these difficulties at the same time.
Below are some strategies that can be used to assist with these sensory processing needs.

Visual over responsive

- Expresses discomfort with bright/fluorescent lighting
- Prefers darker rooms
- Difficulty making eye contact
- Easily distracted by visual stimuli (movement)

Strategies

- Change lighting if possible
- Allow as much natural light as possible
- Turn off overhead lighting in some areas of classroom
- Don't force or demand eye contact
- Do not ask the child to 'look at me'
- Reduce clutter in classroom
- Seat child away from windows
- Limit visual material hanging from walls/ceiling
- Limit excessive hand movements

Visual under responsive

- Often misses objects in competing backgrounds
- Finds sorting by shape/colour/size hard
- Finds it difficult to name colours/shapes
- Likes bright/spinning/reflective objects
- Difficulty writing

Strategies

- Limit visual materials
- Reduce clutter
- Use visual structure (organise/label materials)
- Allow access to visual stimulation before 'work time'
- Use visual resources to gain attention
- Try writing in different materials (sand/shaving foam etc.)

Auditory over responsive

- Easily distracted by background noise
- Seems to ignore or be slow to follow instructions

- Difficulty participating in group activities
- Dislikes noisy environments
- Responds negatively to certain sounds
- Responds negatively to unexpected sounds (fire alarms etc.)
- Distracted by noises others don't notice

Strategies

- Seat child away from auditory distraction
- Allow child quiet time
- Control noise level within the room
- Use ear defenders whilst familiarising with a distressing sound (alarms etc)
- Use a visual cue to gain attention
- Wait for quiet before giving instructions

Auditory under responsive

- Appears not to hear you (unresponsive)
- Makes noises to concentrate (humming etc.)
- Has difficulty remembering or understanding what you are saying

Strategies

- Stand beside child when speaking to them
- Use visual cue to gain attention
- Allow longer for child to respond
- Break instructions down

Tactile (touch) over responsive

- Difficulty standing in line or next to others
- Dislikes contact games
- Avoids messy play
- May react aggressively to unexpected touch
- Dislikes certain clothing (labels/tights/seams on socks)

Strategies

- Position child at the back of the line
- Allow extra time for transitions
- Teach everyone to walk an arms length away
- Allow child to wear gloves during messy play (gradually desensitise child)
- Reduce unexpected touch (teach all children about personal space)

Tactile (touch) under responsive

- Does not seem to notice when others touch them
- Leaves clothes twisted/backwards
- Touches other frequently

- Over grips pens/pencils
- Harms other unintentionally

Strategies
- Increase tactile awareness (messy play/deep pressure work)
- Provide fidget toys
- Use therabands around base of chair
- Weight bearing activities before pencil work
- Writing on tissue paper to increase pressure awareness

Gustatory (taste) over responsive
- May be under-weight or deficient (other factors can be the cause of this)
- Will only eat certain foods
- Dislikes the texture of certain foods

Strategies
- Involve the child in food preparation
- Introduce new food outside of meal times
- Ensure eating is done in a calm environment
- Do not try to persuade the child
- Desensitise by trying new foods at the same time each day
- Only move the new food to mealtimes when the child can tolerate it

Gustatory (taste) under responsive
- Prefers strong flavours
- Eats non-food items
- More alert after eating a strong flavour

Strategies
- Allow strong flavours/spice
- Teach discrimination between food and non-food
- Offer replacement objects (chewy toys)
- Include oral activities in routine (blowing bubbles/drinking through straw)

Olfactory (smell) over responsive
- Overwhelmed by smell others do not find unpleasant
- Refuses to eat in designated eating areas
- Dislike school toilets because of the smell

Strategies

- Use unscented cleaning products
- Seat child away from bins
- Allow child to sit near a window
- Keep room well ventilated
- Teach child to cover their nose
- Allow child to use an alternative toilet (if possible)

Olfactory (smell) under responsive

- Preference for certain smells
- Under reacts to strong smells

Strategies

- Provide stimulating activities (playing in grass, scented play dough)
- Provide scented soaps/pens/stickers
- Teach children strong smells by watching others reactions.

Important to note it that many children may show small traits of sensory processing difficulties and be able to self regulate very well. These strategies are for those children who greatly struggle and whose nursery day is being negatively affected by these sensory processing difficulties.

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Useful links and resources

This is a list of possible equipment that can be used during a sensory trail/part of a child's individual sensory diet.

- Balance Beam
- Foam stepping stones
- Yoga balls
- Large wooden building blocks
- Wobble board
- Trampoline
- Skipping ropes
- Hand weights
- Stretchy yoga bands (therabands)
- Bean bags
- Yoga mats
- Egg and spoon (plastic)
- Footballs
- Tennis rackets/balls (can also use balloons)
- Fidget toys
- Move n sit cushion
- Weighted blanket

This list is not static and can be changed/adapted to suit individual children.

This list has some websites/online resources that can be useful in creating a better understanding of sensory processing and sensory trails/circuits.

- https://sensory-processing.middletownautism.com/
  This website has lots of great information regarding each sensory processing disorder and more strategies we can use to aid these.

- https://www.lanc.org.uk/related-conditions/sensory-integration-disorder-adhd-asd/

- https://www.cpft.nhs.uk/Documents/Miscellaneous/Sensory%20Motor%20Circuits.pdf