



Accommodating sensory processing difficulties within the classroom environment

**Advice & Strategies for School** 

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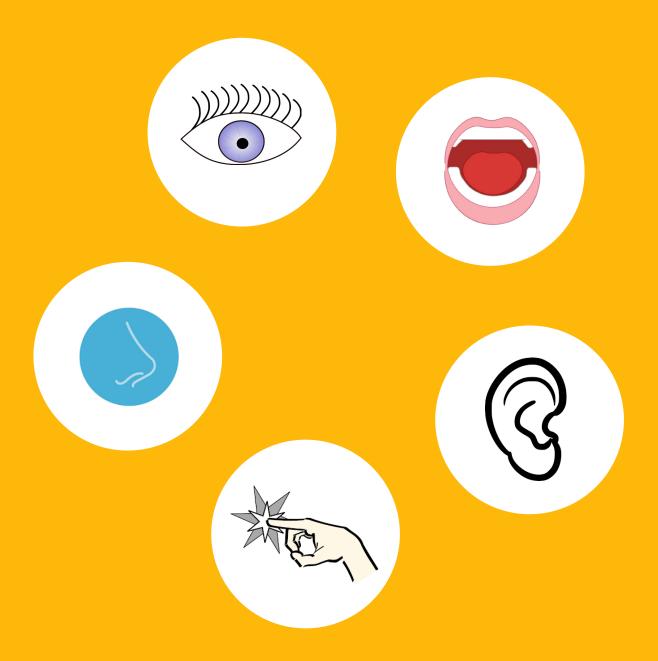
## How we use our senses to function

We all receive information about our environment through our senses. These senses include touch, smell, taste, sight and sound as well as hidden senses that enable us to detect movement and have an awareness of our bodies in space. Children can sometimes have difficulties processing this information, resulting in a reaction to, or avoidance of, the particular sensory stimulus involved.

This pack contains practical strategies and ideas for children who have sensory processing difficulties. It also suggests ways in which the child's school environment can be adapted to meet their sensory needs. The pack is designed to address the needs of children with a wide spectrum of abilities and difficulties.



# The 5 common senses and the 2 hidden senses



We are more aware of the 5 common senses including sight, touch, taste, smell and hearing. There are also 2 hidden senses; the vestibular and proprioceptive sense.

## The VESTIBULAR system

This is located in the inner ear and is activated by movement or by changing head position. This results in appropriate postural adjustments being made.

## The functions of the vestibular system are as follows:

- Automatically coordinates the movement of our eyes, head and body.
- "Sets us up" for moving our bodies through space.
- Responsible for maintaining muscle tone, coordinating the two sides of the body, and holding the body and head upright against gravity.
- Detects whether movement is up, down, fast, slow, linear or angular.

#### Difficulties within this area:

A child may have trouble with:

- Control of body position (consciously/unconsciously)
- Bilateral-motor coordination
- Speed, timing, anticipation and sequence.

A child may be **hyper-responsive** (over responsive) to movement stimuli and will **present** with an emotional response.

A child may be **hypo-responsive** (under responsive) to movement and will not become dizzy on rotational movements. They may also seek excessive amounts of movement.

## Strategies for vestibular processing difficulties

#### General advice

Vestibular input that is calming includes those activities that provide linear (back and forth) movements or those that provide a slow rocking motion.

Vestibular activities that are excitatory are those that involve fast movements, quick changes of direction and speed and rotary movements. **Please be cautious with these activities.** Some children who appear under aroused may be in a nervous system state known as "shutdown." These children are so over aroused that they have gone into shutdown" mode and may appear quiet and listless. Excitatory input at this stage can cause deeper levels of shutdown.

## **VESTIBULAR** continued

## Strategies for the child who is hyper-sensitive to vestibular input

- Limit unnecessary movement or the number of steps (directions) in new activities
- Slowly introduce different movements into the child's life in a safe way
- Teach the child some calming strategies, see pages 42-43
- Participating in repetitive exercise activities such as walking or swimming
- Holding head upright in movement activities
- Using firm touch and heavy pressure when carrying out movements
- Placing object at arm level height to avoid bending over
- Placing stool under feet to keep contact with the ground

## Strategies for the child who is hypo-sensitive to vestibular input

- Give the child an opportunity to move as much as possible
- Alternate "thinking activities" with movement activities. For example after about 20 minutes of "thinking activities" try movements such as chair push ups.
- Provide ample movement breaks, e.g., running an errand to the next class.
- Consider a move n sit cushion or ball chair.
- Exercises such as jumping jacks or push ups
- Using a variety of surfaces during physical activities e.g. exercise mats
- Using clear pathways for movement e.g. clutter free classroom
- Performing gross motor activities before fine motor activities
- Give child opportunity to stack chairs or move furniture if appropriate and with supervision (this is a heavy work activity which provides deep pressure)
- Place theraband around the front legs of the school chair to provide the child with a resistive surface to push against with their feet.

## **Calming vestibular activities**

- Jogging
- Stretching
- Swinging in linear movements
- Scooter board in linear direction. Encourage the child to lie on the scooter board on their tummy and move the board in linear directions using their flat hands.
- If possible, give child allocated time on a rocking chair.

#### **PROPRIOCEPTION**

Proprioception relates to information received from sensory receptors in muscles, joints and ligaments. It is our sense of body position.

## The importance of Proprioception:

Just as our eyes and ears send information about what we see and hear to the brain, parts of our muscles and joints sense the position of our body and send these messages to the brain. We depend on this information to know exactly where our body parts are and to plan our movements.

## **Functions of the Proprioceptive sense:**

- Interacts closely with the vestibular system
- Makes it possible for a child to skilfully guide his/her arm or leg movement without having to watch every action.
- Allows for automatic adjustment of the body and skilful manipulation. For example, the proprioceptive sense helps us stay in an optimal position in a chair.
- Helps us to judge how to manoeuvre through space so that we do not bump into obstacles.
- Responsible for force control. For example, this sense helps a child plan how much pressure to exert so they do not break a pencil lead.
- Allows us to hold utensils such as a pen or a fork in the right way
- Enhances our awareness of how far to stand away from people so we are not too close or too far

#### Difficulties in this area:

A child may:

- Have stiff and uncoordinated movements
- Be clumsy and fall frequently
- Crash into objects in the environment
- Not be able to do things without looking
- Have difficulty sitting in a chair (may overshoot or sit down too hard on the seat)
- Hold a pencil too hard causing the point to break or the paper to tear (force control)

To enhance proprioception children needs lots of activities against resistance or with pressure to enable them to become more aware of their body position. Weight bearing activities are most effective to provide proprioceptive input. See overleaf for some activity ideas.

# **Strategies to enhance Proprioception**

Activity
❖ Any push/pull activities i.e. tug of war
Use sand bags stretched on outstretched arms, head, shoulders and back of neck whilst playing games.
<ul> <li>Pulling own body along a bench using arms</li> </ul>
<ul> <li>Skipping with weighted skipping ropes</li> </ul>
❖ Volleyball
❖ Wall push ups – stand an arms distance away from a wall. Lean on the wall, with the hands flat on it. Lean towards the wall and push away from the wall by bending and straightening the elbows. Make sure the child's feet stay flat on the floor.
Ask the child to close their eyes and "feel" where their legs, hands, arms, etc. are. Ask if they are up or down. See if child can get into different positions without looking, such as roll into a ball, touch their nose, make a circle with their arms, make an "x" with arms and legs etc.
❖ Tearing thick paper or card
Stiff construction games i.e. lego, stickle bricks and poppa beads.
Marble painting: hold tray on outstretched arms with piece of paper on it. Add a marble coated in paint and roll it around the tray.
Large drawings on walls/blackboard.
Draw on paper over textured surfaces e.g. corrugated card, texture rubbings, i.e. tree bark/coins
❖ Carrying and delivering heavy items
<ul> <li>Carrying books close to body with hands touching opposite elbows</li> </ul>
❖ Allow child to erase white board
The use of a weighted lap pad or heavy book on the lap
❖ Doing chair push ups — whilst sitting ask the child to push against the chair with the palms of their hands and try to raise their bottom off the chair for a count or 3 seconds —keep feet on ground but do not take weight through feet.
While standing, push down on the table for a count of 5. Pretend with the child you are trying to be really strong and push through the table.
Place theraband around the front legs of the school chair to provide the child with a resistive surface to push against with their feet.

## **TOUCH (TACTILE)**

The touch receptors are located in the skin. The protective system responds to light or unexpected touch and helps to alert our body to anything that may be potentially dangerous. The discriminative touch system tells us where and what is being touched. An example of this would be finding an item in a school bag without seeing it. Children with poor tactile discrimination may register touch but have difficulty discriminating between textures.

A balance of both the protective and the discriminative systems allows successful function of the tactile system by protecting us and enabling us to adapt to sensations.

## **Functions of tactile system:**

- Links to emotional and social development
- Contributes to the development of body awareness
- Works closely with the proprioceptive sense
- Allows us to detect the consistency and texture of objects
- Allows us to detect temperature

#### Difficulties within this area:

#### A child with a hypo-responsive tactile system:

- May get hurt and not realise it
- May know that he/she was touched but not know the exact location
- May not have realised he/she dropped an item that he/she was carrying
- May have poor body awareness when vision obstructed

## A child with hyper-responsive tactile system (tactile defensive):

- Is overly sensitive to being touched by objects and / or people, especially unanticipated touch
- Has difficulty standing close to people
- Dislikes messy activities such as gloop or finger painting
- May dislike certain foods because of the texture
- May dislike bathing, having hair washed, brushed or cut
- The child is usually associated with excessive emotional responses hyperactivity and distractibility.

## Strategies for children who are sensitive to touch

A child who is hypersensitive to touch may find a wide variety of textures and light touch overwhelming. Light touch may even be interpreted as pain. Although children may be sensitive to light touch, deep/firm pressure touch can be soothing as it is thought to have an inhibitory effect on the nervous system.

## The following are examples of deep pressure activities:

- Firm massage. Begin with the outside of the hands and arms and gradually progress to the palms as this is the most sensitive area.
- Firmly press down on the child's shoulders. (Ensure the child is sitting well and upright in the chair before beginning).
- Use a weighted lap pad or shoulder wrap.
- If possible, give the child an opportunity to have time out sitting in a large bean bag in the corner of the classroom. The bean bag will encompass the child and provide a form of deep pressure.
- Using a weighted backpack during stressful times, i.e. transitions to different classes in busy corridors. Ensure the backpack is only worn for 20 minutes at a time and weighs no more than 5% of the child's bodyweight.

## For younger children:

- Roll the child up in a blanket or thin mat. Ensure their head is exposed. Apply firm pressure through the blanket or mat. Ensure the child is at ease and only carry out this activity if the child appears content.
- Use a "steam roller" technique. Roll a large soft ball up and down a child's body while they lie on the floor, keeping the pressure firm.

Caution is required with the above activities; monitor the child's reactions throughout.

## **General strategies:**

- Introduce new textures very slowly to build up tolerance. Allow the child to use tools rather than fingers initially when participating in arts and crafts such as painting.
- Allow the child to be in control when introducing new textures.

# General advice for children who are hyposensitive to touch

Children who are hyposensitive touch may have difficulty registering the touch cues that are required for skilful manipulation. For example, they may not notice that their clothes are twisted, that they have food on their face or that they have messy hands. It is important to give these children ample opportunities to engage in activities that provide enhanced tactile stimulation. Incorporate a variety of textures and shapes to encourage development of tactile discrimination.

## Specific activity suggestions for tactile hyposensitivity:

- Massage to the upper limbs using a variety of lotions and massage items such as rollers etc.
- Use vibration to provide enhanced tactile input monitor child's reactions closely. Vibration can be overwhelming for some.
- Provide the child with fidget toys.
- Provide the child with opportunities to go barefoot and walk across a variety of textures.
- Regular movement breaks.
- Stirring/kneading dough during baking activities.
- Popping bubble wrap
- Provide raised line paper when writing
- For younger children, place sand paper underneath the paper they are drawing/writing on to enhance tactile feedback.



## **SMELL (OLFACTORY)**

The receptors for the olfactory system are located in the nasal structure which provides information about different smells. The olfactory system is closely related to the gustatory (taste) system.

A child may be hyper or hypo sensitive to smell.

## **Strategies for hypersensitivity**

- Try to gradually desensitise to smells that cannot be removed.
- Keep a hanky with a pleasant smell close at hand. This may be helpful for the child to place over their nose in environments which are particularly overwhelming for them such as dinner halls.
- ❖ Certain scents are considered calming: banana, vanilla and lavender. It may be helpful to use these scents within the classroom. However it is important to note that every child has individual preferences.
- Reduce amount of different smells where possible. If the child is extremely hypersensitive it may be necessary to ask teachers not to wear strong perfume or after shave.
- As it is not always possible to reduce/eliminate smells it may be helpful to read books about the sense of smell with the child. See below for some suggestions. The use of social stories may also be helpful.

#### Books about the sense of smell

Poo! What IS That Smell?: Everything You Need to Know About the Five Senses [Book] by Glenn Murphy, Lorna Murphy · Pan Macmillan · Paperback · 192 pages · ISBN 0330538527

Theo at the Park: Theo Has Lost His Sense of Smell, Can You Help Him Find It? [Book] by Jaclyn Crupi, Aurelia Verdoux · Smellessence · Paperback · 24 pages · ISBN 1908982047

My Amazing Sense of Smell [Book]

by Ruth Owen · RUBY TUESDAY · Hardback · 24 pages · ISBN 1909673366

What Can I Smell? [Book]

by Joanna Issa  $\cdot$  Raintree  $\cdot$  Hardback  $\cdot$  24 pages  $\cdot$  ISBN 1406283711

Sense-abilities: Fun Ways to Explore the Senses: Activities for Children 4 to 8 [Book] by Michelle O'Brien-Palmer · Chicago Review Press · Paperback · 166 pages · ISBN 1556523270

Smell [Book]

by Clara Reade · Rosen Publishing Group · Hardback · 24 pages · ISBN 1477728570

## **TASTE (GUSTATORY)**

Our sense of taste is often referred to as the gustatory system. Receptors in the tongue give us information about different types of taste, such as sweet, sour, bitter, salty and spicy. The gustatory system also works closely with the olfactory system (sense of smell) to help us identify various qualities of food. Information from the tactile system is also incorporated to help us determine temperature, texture and movement of food in the mouth.

Some children may have oral hypersensitivities or hypo sensitivities

## Characteristics of Hypersensitivity

- Emotional response to food and eating
- Gagging or vomiting
- Objecting and or sensitivity towards taste, texture and temperature of food.
- Difficulty moving food around mouth or chewing food
- Tasting food with the tip of the tongue
- Disliking food on face or lips

## **Strategies for hypersensitivity**

- Introduce new tastes/textures gradually
- Change one characteristic of food at a time
- Being introduced to new foods whilst distracted by other activities
- Reducing strong smelling foods/objects in environment
- Try to determine if it is taste smell or temperature that is causing the avoidance.



## TASTE (GUSTATORY) continued

## **Characteristics of Hyposensitivity**

- Likes spicy food
- Eats/mouths non food objects
- Regurgitating when eating
- Overfilling mouth when eating
- Not noticing when face is covered in food
- Messy eating

## **Strategies for hyposensitivity**

- Try a Vibrating toothbrush
- Use strong tooth paste
- Sucking from different straws
- Using a water bottle
- Eating snacks which are spicy, crunchy, salty, sour
- Using mouth instruments such as recorders, harmonicas
- Combining bland foods with intensely flavoured foods



#### **VISUAL**

The visual system gives us information about objects, people and our immediate environment. It provides us with the skills to carry out visual perceptual tasks such as the following:

- find objects in a competing background
- recognise similarities between objects
- know the position in space of objects

The visual system helps children develop hand-eye coordination, fine motor skills and cognitive skills.

Children can often have good visual acuity but demonstrate difficulties in visual processing. These difficulties may manifest in a number of ways. Children may:

- demonstrate sensitivity to visual stimuli such as lighting
- have difficulty registering visual stimuli (hypo sensitivity)
- difficulty with visual perceptual skills (as described above)

## **Characteristics of Hypersensitivity**

- Reduced eye contact and looking down frequently
- Covering eyes from lights and preferring to be in darkened rooms
- Difficulty filtering visual stimuli within the room and responding to all actions and stimuli
- Easily distracted by certain colours or patterns

## **Strategies** for hypersensitivity

- Reducing visual clutter and distractions (for example, cover bookcases with fabric)
- Using a cut out frame to isolate sentences for reading
- Position the child away from doorways and windows
- When looking at or copying work from a smart board, position the child as close as possible to the board
- If possible, limiting copying from the board.
- If board work is necessary highlight key words
- Use of a privacy screen to try and block out excess visual stimuli
- Encourage the child to take visual breaks by closing their eyes. If they are particularly overwhelmed, it may be necessary to provide them with the opportunity to have time out in a room with little visual stimuli to help them self regulate.
- Break tasks down into small achievable sections with clear visual representation of what is expected.

## **Characteristics of Hyposensitivity**

- Staring at people or objects
- Staring at lights or looking into a bright light
- Flicking fingers in front of eyes
- Not noticing when people enter the room
- Fascinated by reflections

## **Strategies for hyposensitivity**

- Use of visual schedules to give a clear representation of what is expected
- Break tasks down into achievable sections
- Use brightly covered overlays for reading
- Placing brightly coloured mats under worksheets or materials for activities
- Position the child near the teacher to assist the child with following instructions and reading from the smart board etc.
- Use highlighters to mark key words on worksheets
- Use bold coloured paper
- Use a writing wedge to position work closer to child and assist with handwriting
- Clearly label items in class for child to find
- Use certain coloured jotters for specific subjects



## **HEARING (AUDITORY)**

The auditory system provides us with information about sounds in the environment. It allows us to discriminate, associate and filter out sounds. It also tells us about volume, rhythm, pitch and distance. Some children are hyposensitive to sound and some display hypersensitivities. Children with auditory processing difficulties often find it difficult to filter noise and/or have difficulty discriminating between sounds.

## Characteristics of hyposensitivity of the auditory system:

- Appearing to ignore sounds or spoken words
- Enjoying vibration due to the noise
- Enjoying noisy areas such as bathrooms or assemblies

## **Strategies** to address hyposensitivity

- Sitting near sources of information e.g. Teacher, smart board
- Use auditory cues e.g. a clap or a bell to get attention
- Present information in a slower manner to allow for longer processing time
- Provide information in small sections at a time

## Characteristic of hypersensitivity of the auditory system:

- Being extremely sensitive to loud or unexpected noises
- Holding hands over ears
- Making noises to cover up environmental sounds
- Easily distracted by sounds

## **Strategies** to address hypersensitivity

- Use a study carrel/cubicle or a pop up barrier on child's desk.
- Where possible encourage minimal auditory distractions within the classroom.
- Wear headphones with soft, slow music.
- Wear ear plugs.
- Use a stretchy headband to cover ears.
- Ear defenders may be helpful during particularly noises times of the day such as assembly and bell time.
- Use other soft environmental sounds in classroom i.e. soft relaxing music.
- Listen to predictable and repetitive sounds
- Receiving directions one at a time.
- Being taught in low-tone and repetitive teaching styles.
- Sitting away from hallway or noisy areas of the classroom. Keep classroom door closed. If an open plan school, provide a study carrel or pop up barrier on child's desk.
- Provide a warning for loud occasions, such as fire drills or assemblies. Use a sand timer to help pre warn child about loud noises.
- Provide handouts to supplement verbal information.
- Participating in smaller groups to maintain focus.
- Take an outdoor break to a quiet area of playground.

# **Checklist for classroom environments**

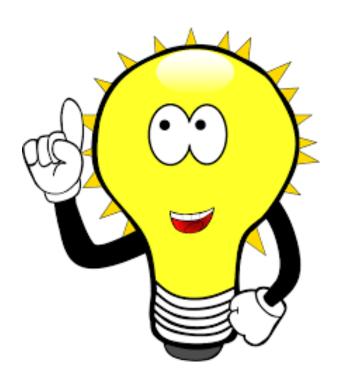


## **CLASSROOM CHECKLIST: Easy Modifications**

A child's classroom environment can have a significant impact on how they respond and cope with day to day activities. Not all environmental factors can be controlled, but here are a few ideas to help reduce any stress and create a nurturing classroom.

## **Lighting and vision**

- Turn off lights when not needed. Make use of natural light. Adjustable blinds are also beneficial.
- ❖ Take regular breaks where all students are asked to close their eyes for 60 seconds.
- Children with an autism spectrum disorder may have skills in the area of visual processing. However they may also try to process too much information at once and become overwhelmed. It therefore important to try and limit the amount of visual materials attached to the walls.
- It may be helpful to provide a privacy screen if children are particularly distracted by visual stimuli in their environment. See the following links for examples:
  - http://www.sensorydirect.com/special-education/concentration-focus/concentration/pop-up-desk-partition.html
  - http://www.sensorydirect.com/special-education/concentration-focus concentration/portable-workstation.html
- Ensure that all classroom materials have an organised and labelled place where they belong.
- The child may find it easier to copy work from sheets on their desk compared to copying from a whiteboard.



## **CLASSROOM CHECKLIST: Easy Modifications** continued

#### **Noise**

- If possible, control noise by keeping doors and windows closed when necessary.
- If a child is easily distracted by noise, seat them away from windows and doors and close to the front of the class.
- Carpets, rugs and blinds can help to absorb noise.
- If there is no carpet in the classroom, place felt pads under furniture legs to reduce dragging sounds.
- ❖ If a child is particularly distracted by noise allow them to wear ear defenders. Ear phones with music may also muffle background noise and assist the child to concentrate.
- As much as possible, prepare the child who is sensitive to noise for school bells etc.

#### Smell

- Some children have a heightened sense of smell and may be easily distracted by perfumes etc. If this is evident try to reduce the amount of perfume and scented cosmetics that staff use.
- Consider what outside smells may be present. For example, if the grass has recently been cut, keep the windows closed.
- Consider using an aromatherapy burner to mask smells. The following scents are considered calming: lavender, vanilla and banana. However be mindful that every child has individual preferences and dislikes.
- Allow the child to carry a handkerchief coated with their favourite scent to help them cope with environments they find challenging such as the dining hall.



## **CLASSROOM CHECKLIST: Easy Modifications** continued

#### **Useful Website**

The Autism Education Trust have a very helpful website which contains a classroom environment checklist/audit to help you identify any possible environmental factors that may be affecting a child's performance. See the following link:

http://www.autismeducationtrust.org.uk/

## Other useful strategies

#### **Schedule:**

Children with sensory processing difficulties will benefit from a predictable schedule. Try the following:

- ❖ Each morning, outline the schedule/activities for the day. Highlight any changes from the typical routine. If a child has an autism spectrum disorder, they may benefit from the use of a visual schedule. This will reduce the amount of language they have to process and help keep them calm and organised.
- Discuss or create a "story" about unexpected events/situations before they occur (for example, fire alarms, special assemblies etc.). This will help children prepare for these potentially overwhelming events.
- Help younger children make transitions between activities by creating a "tidy-up" or "new activity" song. If a child has an autism spectrum disorder, they may benefit from a "First and Then" board depending on their comprehension and level of need.
- Colour code workbooks to assist children in collecting the correct materials for each activity (e.g. yellow for spelling, red for literacy etc).
- If a child finds it difficult to attend to tasks, give them a set time for each activity. Some children perform better if they know there is a clear beginning, middle and end to the task. The use of sand timers may also help.





# Common concerns within the classroom



## **Auditory Sensitivities**

BEHAVIOUR	STRATEGY
Child becomes upset with school bells and fire alarms	<ul> <li>Forewarn the child of any loud noises.</li> <li>Position the child toward the front of the class to facilitate his or her ability to attend to verbal instructions and block out irrelevant information.</li> </ul>
Child covers his ears to noises, demonstrates increased anxiety or increased distractibility with noise	<ul> <li>Limit unnecessary noise in the environment.</li> <li>Use rugs or carpet in the area to minimise extraneous noise.</li> <li>Try ear defenders at times of the day that are most challenging for the child as it is not advisable to wear them all day. For example use at assembly time.</li> <li>Try reading books about the senses and noise/sound to raise the child's awareness and hopefully help enhance their tolerance.</li> </ul>
Child becomes upset or agitated in noisy public environments	<ul> <li>Avoid special events which are known to be loud whenever possible until the child's sensory system can accommodate them.</li> <li>Encourage the child to wear snug clothing as this can sometimes have a calming influence.</li> <li>Try ear defenders for particularly noisy events, environments.</li> <li>Use headphones attached to a mobile phone or i pod to listen to a favourite piece of music or radio station. This may help to drown out environmental noises and help the child stay focused on an activity.</li> </ul>

## **Tactile Sensitivities**

BEHAVIOUR	STRATEGY
Resistance to touch paper	<ul> <li>The use of deep touch pressure can reduce/inhibit sensitivity. Before activities that involve touching paper, provide deep pressure into the palms of the hands such as firm clapping, rubbing hands together for 10-15 seconds, and pressing palms together in praying motion.</li> <li>Ask the child to press down firmly on their thighs.</li> <li>Put hands under thighs and sit on them prior to touching paper.</li> <li>Wear fingerless gloves or extended jumper sleeves over the area of the hand that is touching the paper when writing.</li> <li>Try using wrist weights when writing to offer deep pressure. Available from:         <ul> <li>http://www.sensorydirect.com/catalogsearchresult/?q=wrist+weights</li> <li>If working with individual sheets of paper try putting them in a poly pocket and just slide out a section of paper at a time that requires to be written on. The child may prefer the sensation of</li> </ul> </li> </ul>
Child reacts negatively when touched by others	<ul> <li>the poly pocket.</li> <li>Teach others to touch the child firmly.</li> <li>Explain to others that the child may feel light touch more strongly and may even perceive it to be painful. Firm touch can over ride sensitivities.</li> <li>Approach the child from within his/her visual field.</li> </ul>
	Teach people always to approach the child from the front and always make sure the child is able to anticipate touch or an expression of affection.
Child reacts when standing in line	<ul> <li>Position the child at the front or end of the line. Children bumping against him/her may be perceived as painful.</li> <li>Assign a special task. For example, ask the child to go ahead to make sure the area is ready, or ask him/her to stay behind to make sure the lights are turned off.</li> </ul>

## **Tactile Sensitivities continued**

#### **BEHAVIOUR**

#### **STRATEGY**

Child uses only their fingertips when playing with toys, manipulating tools etc.



- Before activities, provide deep touch pressure into the palms of the hands, such as firm clapping, chair push-ups, wall push ups etc.
- Progress to sustained deep pressure into the palms through resistive or weight bearing activities such as crab or bear walking.
- Grade activities by using the fingertips then moving towards using the whole hand. If the child will tolerate it, provide deep touch input over the hand and writing tool, i.e. hand over hand squeezing.

Child avoids getting their hands dirty or using messy materials.



- Use tools to manipulate the supplies whenever possible (for example, a paintbrush or roller rather than finger paint).
- Gradually introduce messy activities if the child can tolerate this. Begin by introducing dry materials such as arts and crafts using pasta shapes. Gradually progress to softer and wet materials.
- Try using messy materials that provide resistance, such as putties and dough.

## Fidgeting and difficulty sitting still

BEHAVIOUR	STRATEGY
Fidgeting and touching others	<ul> <li>Try and establish if the child is finding the current task challenging. The fidgeting may be a reaction to the task they find difficult. Break the task down into small achievable chunks.</li> <li>Provide the child with fidget toys and/or a stress ball.</li> <li>Ensure the child has regular movement breaks throughout the day and access to a water bottle.</li> </ul>
Seeking movement, difficulty sitting still	<ul> <li>As above, try and establish if the child is finding the current task challenging and adjust accordingly.</li> <li>If it is particularly challenging for the child to stay seated for any length of time, try using sand timers to establish how long the child has to attend to the task and when they can have their next movement break.</li> <li>Provide the child with regular movement breaks and encourage them to engage in activities which provide deep pressure and proprioceptive input.</li> <li>Try tying theraband around the front legs of the child's classroom chair. This will give them movement while seated by providing a resistive surface to push their feet against.</li> <li>Try a move n sit cushion.</li> </ul>

## **Oral Sensory Processing**

#### **BEHAVIOUR**

#### **STRATEGY**

#### Chewing non food items



- There is a close correlation between the hands and the mouth. Therefore provide opportunities for enhanced tactile exploration.
- If safe for the child, provide them with opportunities throughout the day to eat crunchy snacks and food that requires more chewing.
- Try using a vibrating toothbrush to provide strong sensory feedback.
- The child may be seeking oral motor stimulation to stay focused. Try fidget toys as an alternative. If this is not successful you may need to "feed the need" and provide chewelry.
- If the child chews their clothing and/or pencils, try chewelry and/or pencil toppers. Available from: http://www.sensorydirect.com/sense/chewys.html

# Putting non food items in mouth



- Provide opportunities for enhanced tactile exploration.
- ❖ If the child permits, try massage. Firstly massage the outside of the child's arms and hands, and then progress to the inside of the arms and palms. Lastly, if the child permits, try massage to the face with firm strokes. Begin on the outside of the face and gradually move towards the mouth.
- Try a vibrating toothbrush to provide enhanced sensory feedback.
- Provide oral sensory stimulation through blowing games e.g. straw football, blowing bubbles, musical instruments such as the recorder.
- Sipping water regularly through a straw.
- Give the child opportunities to eat crunchy snacks throughout the day.

## **Oral Sensory Processing continued**

#### **BEHAVIOUR**

#### **STRATEGY**

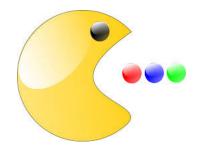
#### **Limited diet**



It is important to note that there may not be a sensory basis to this common concern. The child may choose to eat only certain items of food to help them feel in control of their day and reduce any unpredictable situations. However if you feel there may be some sensory sensitivities impacting on the child's ability to try certain foods, try the following:

- Introduce new tastes/textures gradually.
- Change one characteristic of food at a time.
- Reduce strong smelling foods/objects in the environment.

## **Eating non food items**



In the first instance it is advisable to ask the parent to seek assistance from a GP or Paediatrician to rule out any vitamin or mineral deficiency. If this has been ruled out try the strategies mentioned for mouthing and chewing non food items.

## **Seeking or avoiding smells**

STRATEGY
Keep a hanky with a pleasant smell close at hand. This may be helpful within environments that the child finds particularly difficult to cope with, for example the dinner hall. The child can place the hanky over their nose to block out the scents that are overwhelming for them.
Reduce the amount of different smells where possible.
Try to gradually desensitise to smells that cannot be removed.
It may also be helpful to read books with the child about the sense of smell to raise their awareness and assist them to tolerate.
The child may have a hyposensitive sense of smell. Provide them with opportunities to engage in sensory activities during the day where it is appropriate to sniff and smell items. For example, baking groups, sensory lessons where they have to identify the smell without looking at the item.
If you suspect the child is hyposensitive to smell try using alerting scents within the classroom such as peppermint, citrus and pine. This may be more appropriate for individual sessions as all children are individual and have different preferences.
If the child is becoming obsessive about smelling/ sniffing certain things and it is interfering with day to day tasks, it may be helpful to put together a social story to raise the child's awareness and reduce any behaviours that are upsetting others.

## **COMMON CONCERNS: Toe Walking**

Toe walking is quite common in very young children. It may be observed in toddlers as they learn to walk. For many children, toe walking may only last for a short period of time with no long term consequences. However some children continue to toe walk and it may become a habitual pattern.

Children may walk on their toes to provide them with enhanced tactile, proprioceptive and vestibular input. The following activity suggestions/ guidance may be helpful to inhibit the toe walking pattern and encourage a heal strike gait:

- Provide deep pressure into the bottom of the child's feet. Seat child firmly on your lap facing a wall. Place child's feet flat against the wall and put pressure directly through their knees into their feet. Ask child to help you push.
- Progress to positions such as half kneeling. Encourage weight shift over the flat foot.
  Maintain pressure downward into the foot.
- Progress to static and standing activities, then dynamic standing activities. For example:
  - Encourage child to put their feet in paint and make footprints in paper on the floor.
  - Encourage the child to walk with a heel strike gait so you can see their whole footprint.
  - Use sensory materials to provide more feedback through the soles of child's feet, i.e. encourage child to walk with a heel strike gait over bubble wrap.
- \* Firmly massage child's calf muscles. Incorporate creams and firm textured sensory materials into the massage. Primarily massage the calf muscles but if the child enjoys the sensation, also massage their heels and soles of their feet.
- Recommend that the child wears boots with stiff soles and high stiff heel counters. This footwear will assist in preventing them from standing on the balls of their feet and help keep the footwear on.

# Strategies for behaviours of a more challenging nature



## STRATEGIES FOR BEHAVIOURS OF A

## **More Challenging Nature**

It is important to note that factors other than sensory processing difficulties may be triggers for certain behaviours. For example a child may hit out due to fear and/or frustration. It is therefore important to try and identify the triggers. The following strategies should be used together with good consistent approaches to communicating with the child and appropriate behavioural strategies.

BEHAVIOUR	STRATEGY
Biting	Why?
and teeth grinding	The child may be hyposensitive and seeking oral stimulation. Alternatively the child may be hypersensitive to other stimuli and reacting by biting. Teeth grinding may be the child's own calming strategy. <b>Try:</b>
Coope	Examine the circumstances prior to the biting. If you suspect the trigger was sensitivity to sound, touch or movement, try to identify the trigger and eliminate it or position the child to minimise the exposure.
	Chewelry to provide oral stimulation.
	"Chewy wrist bands" may be helpful. Available from: https://funandfunction.com/chewy-wristband-set-of-846.html#
	"Bite bands" may also be helpful. Available from: https://funandfunction.com/bite-bands.html
	❖ Regular use of a vibrating toothbrush.
	Crunchy snacks during the day.
	If the child is biting their own hands and/or arms. Try:
	Weighted wrist cuffs to provide sensory feedback. Available from: http://www.sensorydirect.com/deep-pressure/deep-pressure- weighted-toys-html/wrist-ankle-weights.html
	Try a vibrating cushion. Encourage child to weight bear against the cushion with flat hands.
	Try to incorporate an arm and hand massage into child's daily routine. Use firm pressure to override any sensitivity. Progress from outside of arms to palms of hands.
	Encourage child to engage in bi manual activities as often as possible.
	If the child is harming them self and/or biting others and safety is paramount it may be necessary for the child and/or adult to wear protective garments. An example available from: https://www.bite-pro.com/products/arm-guards/

## STRATEGIES FOR BEHAVIOURS OF A

## **More Challenging Nature** continued

#### **BEHAVIOUR**

## **STRATEGY**

# Child is banging their head

## Why?



The child may be overwhelmed by the various sensory stimuli within the environment. The child may also have a high pain threshold and therefore requires strong stimuli to register sensation. Also try and establish if the child has any pain such as an ear infection as this may be their way of trying to counteract the pain.

#### Try:

- Weighted hats will provide the child with deep pressure input and may assist to calm. Supervision and caution is required. The hats should not be worn for more than half an hour at a time. Available from:
  - http://www.sensorydirect.com/deep-pressure/deep-pressure-weighted-toys-html/weighted-cap.html
- Provide the child with opportunities to engage in activities that provide deep touch pressure and resistance throughout the school day.
- ❖ If the child is at risk of harming themselves and safety is the main issue it may be necessary to consult with the parents regarding the use of a protective helmet. The use of a rugby helmet and/or riding/cycling helmet may be a preventative measure. It is recommended that only CE marked helmets are used.

Child is crashing and bumping into objects and/ or people and clinging to/ squeezing others

#### Why?

These actions provide proprioceptive and deep pressure touch input which the child may be craving. The child may also have a high threshold and therefore requires strong stimuli to register sensation.

#### Try?



- ❖ Provide the child with opportunities to engage in activities that provide deep touch pressure and resistance throughout the school day. Examples are: theraband exercises, wall and chair push ups, wheelbarrow walks, manipulating theraputty.
- Try using a weighted lap pad or shoulder wrap during table top tasks.
- Try tying theraband around the legs of the child's chair so they have something with resistance to push their feet against.

## **STRATEGIES FOR BEHAVIOURS OF A**

## **More Challenging Nature** *continued*

BEHAVIOUR	STRATEGY
Pulling	Why?
	The child may be seeking proprioceptive input. Pulling against something or someone involves resistance which provides proprioceptive input. <b>Try:</b> Provide the child with opportunities to engage in weight bearing exercises such as wheelbarrow walks, chair and wall
	push ups etc.
	Encourage the child to engage in resistive exercises throughout the day such as theraband exercises.
Screaming	Why?
	The child may be screaming to "drown out" other environmental sounds they find difficult to tolerate/filter. The child may also be frustrated and/or in pain. It is important to try and establish the triggers. <b>Try:</b>
	If the child is sensitive to sensory stimuli, try to eliminate the sensation that is upsetting them or position the child to minimise the exposure.
	If they are screaming to "drown out" other sounds, try ear defenders or head phones with music that is relaxing to the child.
	If the child is frustrated, break the classroom task into achievable steps and use sand timers to give the child a clear beginning and end to the task. This will hopefully help calm the child and make the task more manageable.
Hitting	Why?
WHI TO SEE	The child may be sensitive towards light touch from others and may hit to override these sensitivities. <b>Try:</b>
	Carry out deep pressure/heavy work. For example chair and/ or desk push ups, carrying heavy books on an errand, firm hand massage etc.
	Use fidget bags/toys at regular points throughout the day.
	<ul> <li>Use toys that offer vibration.</li> </ul>
	Regular theraband exercises.

# SENSORY TREASURE CHEST

# for the classroom

The following are items that will be useful in the classroom to help children regulate their sensory systems. It is important to note that each child may respond differently to certain items. "What works for one may not work for the other". Take note of each child's reaction to these items. If the items help a child become calm, remember to produce them at times of stress. They can be used within a time out room or brought to the child's desk at appropriate times throughout the day.

- Move n sit cushion
- Theraband (red)
- Vibrating cushion
- Fidget toys (such as tangle toys)
- Stress balls
- Theraputty (progress from yellow to red)
- Chewelry
- Ear defenders
- Privacy board
- Weighted lap pad
- Weighted shoulder wrap

# **Useful websites** to source above equipment:

http://www.sensorydirect.com

https://www.cheapdisabilityaids.co.uk

https://www.sensorytoywarehouse.com/

https://www.nrshealthcare.co.uk

https://www.amazon.co.uk

# **AROUSAL LEVELS**

All students present differently and some students arousal levels change regularly throughout the day. Modulation refers to a child's ability to filter or attend selectively to sensory information. Some children have sensory modulation difficulties and as a result they may over respond, under respond or fluctuate in response to sensory input. They may also have difficulty transitioning from one activity to the next and may become fixated on specific things. If this is the case the child will need structure and consistency to assist them to cope with the changing demands of each day.

It is important to have a good understanding of different arousal levels/states, how they present and how to assist the child to focus and learn.

## The under-aroused child

Children with low arousal levels may become fatigued during sedentary activities such as listening to a story, watching a screen or completing lengthy worksheets. They may have poor sitting posture and appear sleepy. Some children may fidget in an attempt to stay alert and focused.

# **Strategy**

Alerting activities are required to raise their arousal levels and assist them to focus on classroom tasks. Examples of movement break ideas and alerting activities to raise arousal levels are provided on the following pages.

## "Shut down" mode

A child may present as under aroused but may actually be in "shut down" mode. This can happen with children who are hyper sensitive to sensory stimuli, for example they may be overly sensitive to touch, sound or light. It is a way of protecting children from becoming completely overwhelmed.

Children who are in "shut down" mode are actually so over aroused that they have stopped registering sensory stimuli. It is therefore essential that you do not encourage the child to engage in alerting activities.

# **Strategy**

Try to establish the preceding activities to help pin point any triggers that would have been overwhelming for the child. For example has the child had a difficult transition to school? In this instance they may appear under aroused but may actually be in "shut down" mode. Provide the child with a quiet area with few distractions to assist them to self regulate. Calming strategies may also be helpful. Some ideas are provided on the following pages.

# **AROUSAL LEVELS** continued

# The sensory seeking child

"Sensory seekers" constantly fidget, run, seek out messy activities and move around erratically. They need to be stimulated by things in their environment in order to self regulate. They may have a high threshold for sensory stimuli and therefore seek increased sensations in order to gain feedback.

# **Strategies**

- Regular and structured movement breaks may reduce the need to fidget and move around the classroom.
- Provision of a "move n sit" cushion may give the child acceptable movement while assisting them to stay seated to complete table top tasks.
- Wrapping theraband around the front legs of the child's chair while provide something with resistance to push against with his/her feet.
- As far as possible engage the child in "active learning" activities such as baking, modelling, arts and crafts etc.
- Provision of fidget toys may help such as a stress ball, tangle toy etc.

## The over aroused child

Children who are over aroused are often hyper sensitive and quickly over whelmed. They may have difficulty filtering environmental distractions and consequently find it hard to concentrate.

# <u>Strategy</u>

These children need a low arousal classroom environment to assist them to focus and learn. See previous pages with guidance on environmental adaptations. Children who are easily over aroused will also benefit from the calming strategies described on the following pages.

# Movement break ideas

We all have different arousal levels which impacts on our ability to concentrate and focus on day to day tasks. Following seated activities children may benefit from movement breaks to help them self regulate and re focus on the next classroom task. The following are some examples of movement breaks which can be carried out at regular points throughout the day.

- Jog around the gym hall
- Theraband exercises. While holding the theraband with each hand, ask the child to pull their hands away from each other, placing resistance on the band. Then slowly release the tension and bring hands back together.
- March on the spot, touching elbow to opposite leg as high as possible.
- Weight bearing exercises such as crab and bear walking.

# **Daily sensory activities**

If a child is presenting with sensory processing difficulties and displaying difficulties with modulation and arousal levels they would benefit from daily sensory activities to help them self regulate, focus and attend to tasks. The following activities are divided into three main sections: alerting, organising and calming. It is best to carry out the activities in that order and always finish with those that are calming. If a child appears to be over aroused or even in "shut down" mode it is best to avoid alerting activities.

# **Alerting activities**

Jumping jacks Jump from a crouched position with arms and legs out to the

side then return to the crouched position.

Star jumps

**Jog on the spot or inside a hoop. Advance by changing speed** 

up and down, or jogging around a mini course of cones.

**Ball bounce** Bounce while seated on a gym/exercise ball (specify and limit

number of bounces).

**Arm spinning** Stand with arms stretched out to the sides. Spin in a circle

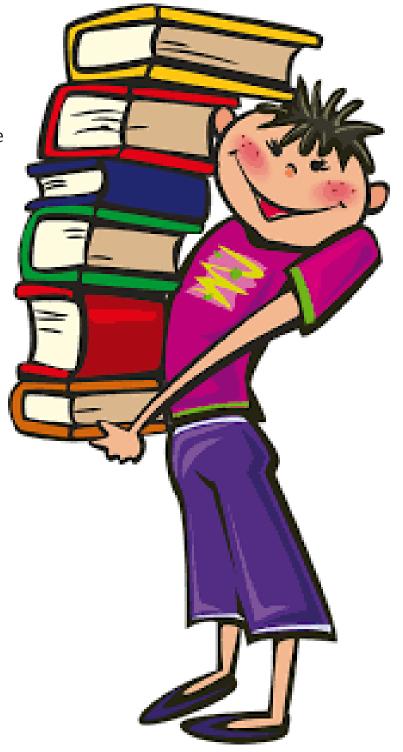
10 times one way then reverse.

Apply caution when introducing the above activities. Ensure the child is not already over stimulated. Always finish an alerting activity with an organising and/or calming activity (see following pages).

# **Daily sensory activities continued**

# **Organising activities**

- Carrying a heavy book or item on an errand.
- Allow child to erase whiteboard.
- Use of fidget toys.
- Water bottle at desk.
- Oral motor activities such as blow football.
- Making figures of eight use ribbons or scarves, or use chalk on a large vertical surface to draw figures of eight. Ensure the child crosses their midline by keeping their hips still and facing forwards.



# **IDEAS TO CALM**

Here are some examples of activities that can have a calming influence. It is helpful to be aware of preceding activities. This will assist you to determine the most appropriate activity for the child. For example, if the child has experienced a difficult transition to school they may require 10 minutes in a time out room before being able to concentrate on classroom activities. This will assist them to self regulate and begin work.

The following activities provide deep touch pressure and/or proprioceptive input which can help regulate and calm.

## **Desk activities**

- Stress balls or squeeze toys that can be used quietly on child's lap
- Chair push ups (Ask the child to place the palms of their hands at the sides of their seat and push down firmly to raise their bottom off the seat. Hold for a few seconds and repeat up to 10 times).
- Vibrating cushion (closely observe child's reaction to this, to some this may be alerting)
- Fidget toys (such as tangle toys)
- Theraputty (progress from yellow to red)
- Weighted lap pad
- Weighted shoulder wrap

Some children require a burst of movement to release excess energy and assist them to focus on classroom tasks. Provide the child with opportunities to carry out the following activities prior to desk duties:

# In gym hall or allocated room

- Push a large therapy ball across a room. An adult or another pupil can add resistance by pushing lightly in the opposite direction.
- Play catch with a heavy ball.
- Two children can play tug of war together using a skipping rope. Encourage them to do this while sitting on the floor facing each other, preferably long legged sitting with feet touching. Encourage them to do controlled push and pull movements, like a rowing exercise.

# **IDEAS TO CALM** continued

# In gym hall or allocated room

- Skipping with weighted skipping ropes, available from: https://www.therange.co.uk/exercise-fitness/fitness-equipment/ weighted-skipping-rope/
- Jog in linear directions around the hall.
- Do press ups against a wall. Make sure the child's feet are flat on the ground and they are pushing towards and away from the wall by bending and straightening their elbows. You can tell younger children they have to press hard and try and push the wall down.

If the child has engaged in the above activities ensure they finish their movement break with a few of the following to assist them to calm further and settle to table top tasks:

# Prior to engaging in table top tasks

- Encourage child to place palms of hands on the top of their head and press down (this can be described as squashing themselves into the floor) with even pressure for the count of 10. Repeat twice.
- Use a foam or squashy ball. Encourage the child to hold it between two flat hands in front of their chest. Squash the ball as hard as possible to flatten it and hold for the count of 10. Repeat twice.
- Massage can be calming and help students to re focus. Caution is required for those children who are hyper sensitive to touch and responses should be closely monitored. In general firm touch is recommended as light touch can be difficult for children with hyper sensitivities to tolerate. For more information on massage the following website is helpful:
  - http://misascotland.org.uk/
- Encourage the child to hold a small weight in each hand and hold arms extended above the head for as long as possible. You could use filled water bottles instead of weights.

# **Summary and contacts**

This booklet contains strategies to address the sensory needs of children of varying ages and a wide spectrum of abilities. It is important to remember that each child is an individual and may respond differently to sensory stimuli compared to other children of a similar age. "What works for one child may not work for another". Time and practice is often required to allow the child to adjust to the activities and before any change in behaviour can be seen.

If you are incorporating any of these strategies with a child with an autism spectrum disorder it may be necessary to introduce small changes, one at a time to allow the child to adjust. Try and incorporate the activity ideas within a structured and predictable routine for the child.

Should you have any queries about the content of this booklet or further concerns about an issue not included within the text, please contact Occupational Therapy at the addresses below:

# Occupational Therapy Children and Young People North Team

Glen Orchy Coathill Hospital Hospital Street Coatbridge ML5 4DN

Telephone: 01236 707778

# Occupational Therapy -Children and Young People South Team

Douglas Street Community Health Clinic 19 Douglas Street Hamilton ML3 OBP

Telephone: 01698 368714







Notes	
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Notes	

# **Image references**

#### biting

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#### ear

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#### pondering

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#### touch

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#### child at desk

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#### purple eye

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#### handprints

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#### mouth and tongue

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#### big eyes for vision

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## magnifying glass for vision

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### checklist

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### sand timer

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### children writing in class

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### school bell

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### hands over ears

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### crowds

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## holding paper

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#### do not touch

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#### waiting in a line

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#### fidaeting

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### seeking movement

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#### smelling flowers

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## child holding nose

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### Image references continued

#### children 123

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#### children abc

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#### children hugging

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en&as\_q=children+hugging\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images\&tbs=itp:clipart,sur:fc\#imgrc=wCwSqbVz-daflM:$ 

### helmet

https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=child%27s+protective+helmet&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=active&tbs=sur:fc#imgrc=jmOZd97cyBUA-3M:&spf=1510148391781

### boy eating strawberry

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=children+eating\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=active\&tbs=sur:fc#imgrc=3FM9HDlu34IGoM:\&spf=1510149242876$ 

### boy eating chocolate cake

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=children+chewing\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images\&tbs=sur:fc#imgrc=ODd-zWUId41VUM:$ 

### girl eating

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=children+eating+at+school&as\_epq=&as\_oq=&as\_eq=&cr=&as\_site-search=&safe=images\&tbs=sur:fc#imgrc=5ILMq3ZSaaU23M:$ 

### girl screaming

https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_ q=screaming&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=images&tbs=sur:fc#imgrc=mTYHQxtj\_\_x76M:

### pulling

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en&as\_q=pulling\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images&tbs=sur:fc#imgrc=jn1BLviBX0xpnM:$ 

### children hitting

 $https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en\&as\_q=children+arguing\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=imag-es&tbs=sur:fc\#imgrc=ISBa1tRPru-0VM:$ 

### fingertips

https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=hands+down&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=images&tbs=sur:fc#imgrc=T7btsl\_J1Or4JM:

### toe walking

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=walk-ing+on+toes\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=imag-es\&tbs=sur:fc\#imgrc=EiUV\_F\_Ya8EywM:$ 

#### child carrying books

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=carry-ing+books\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=imag-es\&tbs=sur:fc\#imgrc=DAgMWKAnsrATxM:$ 

## child mouthing bucket

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=teething+\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images\&tbs=sur:fc#imgrc=TD0thflWc7zqUM:$ 

#### teeth

 $https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=teeth&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=imag-es&tbs=sur:fc\#imgrc=R0b6HjmBO\_W-LM:$ 

#### Packmar

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=PAC+MAN\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images\&tbs=sur:fm\#imgrc=Ze0zG6ztMgnJEM:$ 

#### ightbulb

 $https://www.google.co.uk/search?as\_st=y&tbm=isch\&hl=en\&as\_q=light-bulb\&as\_epq=\&as\_oq=\&as\_eq=\&cr=\&as\_sitesearch=\&safe=images\&tbs=sur:fm#imgrc=FEtx9VeOW8lo-M:$ 

#### boy sniffing daffodil

 $https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=children+smelling&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=images&tbs=sur:fm\#imgrc=y0DSuJMmBc2OEM:$ 

#### ear defenders

 $https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=ear+defenders&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=images&tbs=sur:fc\#imgrc=qqRs0ID58Nq3VM:$ 

#### nose

 $https://www.google.co.uk/search?as\_st=y&tbm=isch&hl=en&as\_q=blue+nose&as\_epq=&as\_oq=&as\_eq=&cr=&as\_sitesearch=&safe=images&tbs=sur:fc\#imgrc=TbhgQdHDCA71NM:$ 

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