

Sensory Strategies

Photocopiable resource taken from NAS publication 2013

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“Sensory Strategies “

Practical ways to help children and young people with autism learn and achieve

By Corinna Laurie



Sensory treasure chest

The following are examples of items that will be useful at home or in the classroom.

Students will often self-select items they need to regulate their sensory systems. Many items can be bought cheaply on the high street or from reputable internet sites.

- | | | |
|---|---------------------------|---|
| > Wobble cushion | > Vibrating cushion | > Chewable items (commercially available) |
| > Ear defenders | > Vibrating snake or tube | > Koosh ball or pom pom balls |
| > Privacy board | > Vibrating creatures | > Scented dough |
| > Weighted items such as blankets, lap weights, weighted vests, etc | > Textured balls | > Bubbles |
| > Large gym or 'peanut' ball | > Stress balls | > Oil jars or liquid timers |
| > Trampoline | > Theraputty | > Glitter sticks |
| > Swing (with a standard seat or made from a tyre) | > Weighted balls | > Spinning-top toys |
| | > Tangles | > Old CDs to spin |
| | > Exercise bands | |
| | > Aroma pots | |

Either allow the student to select an item or have a sensory play session, where all students have time to play with the items they choose.

Take note of each student's favourite items and their reaction to these items. If you see a student who is calm, or becoming calm, remember to find this item at times of stress.

These items can also be used in the sanctuary area of your classroom or brought to students' desks for calming throughout the day.



Resource

Behaviour	Sensory trigger	Sensory strategies
<p>Daredevil, reduced sense of danger, seeking rough and tumble play. Seeking firm hugs and squeezes. Poor co-ordination. Poor awareness of personal space.</p>	<p>Poor proprioception and vestibular processing.</p>	<p>Movement breaks are essential – see page 46.</p> <p>Carry out before the student is required to be seated and concentrate.</p> <p>Use alternative seating to give controlled movement, for example a wobble cushion, ball chair or wobble stool.</p> <p>Use weighted products (see the sheets about proprioception and vestibular activities on pages 51-54, and 59). Carry out before the student is required to be seated and concentrate.</p>
<p>Motion sickness. Fear of heights or of falling.</p>	<p>Poor vestibular and visual processing.</p>	<p>See 'Vestibular activities' on page 59.</p> <p>Use heavy work activities to calm the student's system before an event (see proprioceptive photocopiable sheets on pages 51-56)</p> <p>Try pulse point wristbands, or offer ginger biscuits or stem ginger to reduce nausea.</p>
<p>Excessively chewing or licking anything and everything, for example cuffs, collars, and pencils.</p>	<p>Decreased tactile processing especially around the mouth area. Poor proprioceptive processing.</p>	<p>Provide commercially available items suitable for chewing, such as pencil toppers, chewy tubes and chewable jewellery. Give the student chewable food items such as chewy sweets and, if suitable, chewing gum.</p> <p>Seek advice from an occupational therapist about implementation of the Wilbarger Protocol.</p>
<p>Pinching or head banging.</p>	<p>Poor proprioceptive and tactile processing.</p>	<p>See photocopiable sheets on pages 51-54.</p> <p>Seek advice from an occupational therapist about implementation of the Wilbarger Protocol.</p>

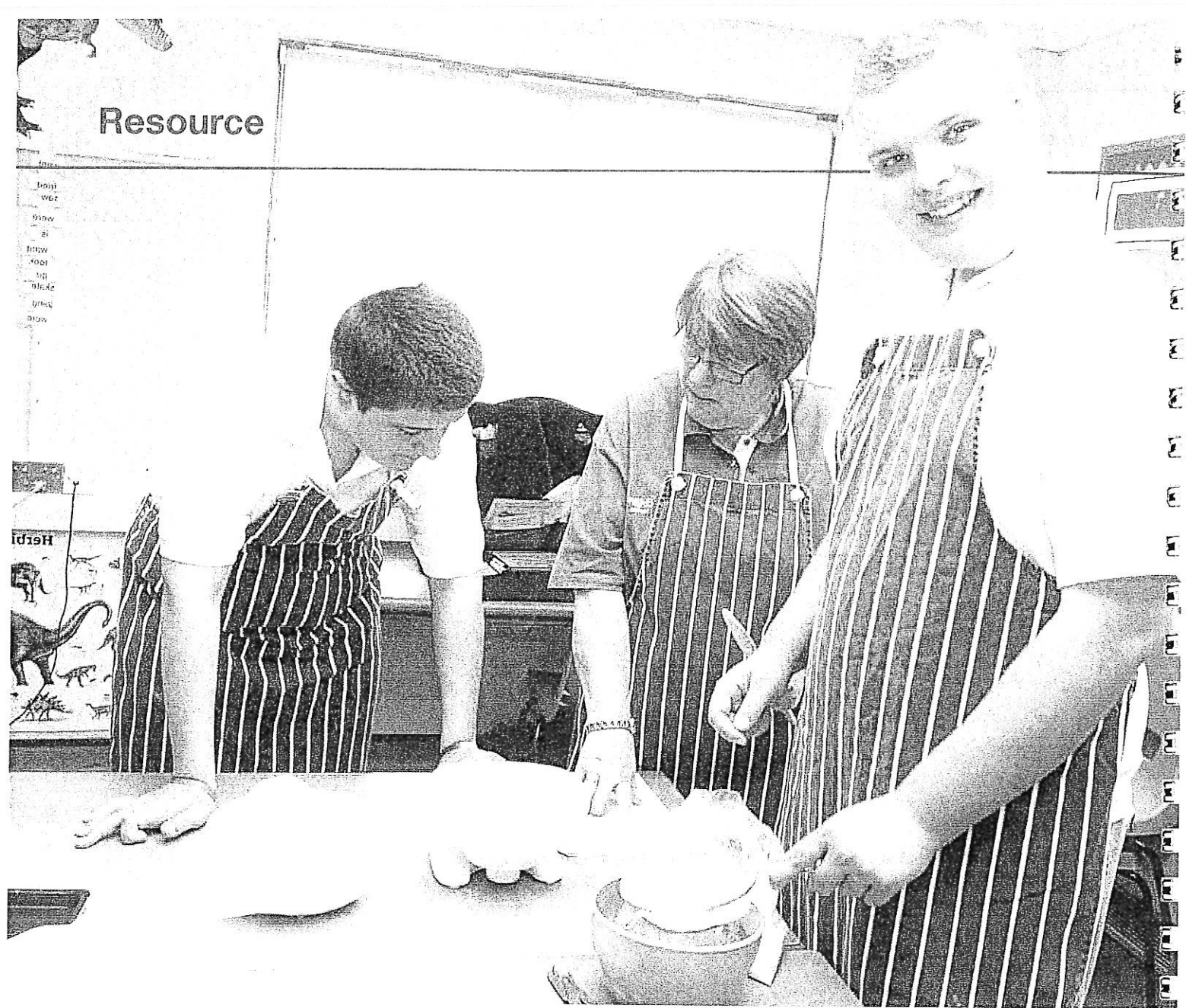
Messy play

Young people react differently to different textures, so be aware of your students' reactions. It is essential never to force a student; allow them to lead the activity so that they can gain in confidence. If we force a student, it may lead them to resisting and becoming more sensitive to a texture. Remember that some sensations may be physically painful, so it is important that students work at their own pace.

It is also important that we show students that we enjoy messy play. This will encourage our students to enjoy it too.

Suggestions for messy play materials

- > Dough, putty or scented dough. You can make these textured by adding sand and glitter.
 - > Coloured glue – sprinkle it with glitter using fingertips or a shaker.
 - > 'Gloop', which is home-made with corn starch and water.
 - > Finding objects buried in beans, rice or pasta (uncooked), or try sand or pebbles.
 - > Bubble play – blowing, catching, popping, etc.
 - > Coloured water play – use food colouring to change the colour of the water. Add bubbles, sand and/or scented oils, and make sure you have plenty of containers to pour water into, out of and through.
 - > Finger painting with finger-paints. You can also use wet mud, shaving foam, bubbles or squirty cream.
 - > Papier-mâché.
 - > If a student is in residential accommodation, use sponges, facecloths and loofahs in the bath. Allow the young person to wash themselves, dolls or bathroom tiles. This strategy can also be used at home.
 - > Feely bags or treasure baskets – place lots of different shapes and textures in a bag and ask the child to find a specific item... no peeking!
 - > Encourage messy play in the bath where something can immediately be washed off if it bothers the young person. Use body crayons, shaving foam or liquid soap.
 - > Pasta play – put some pasta onto a table or into an empty water tray for children to explore. Add toys to the pasta to add to their enjoyment and learning opportunities. You might use various shapes and sizes of containers, mega blocks or animals.
 - > Tactile path – place different textured food into large trays. Examples are wet pasta or spaghetti, dry pasta, rice and jelly. Have the students walk barefoot, or on hands and knees, through the trays.
 - > Mousse play – make up some mousse in a bowl, according to the instructions on the packet. Once the mousse has set, tip it onto a table or into a messy tray. Place toys into the mousse, for example tea sets, mega blocks or plastic animals. Allow the child to explore the mousse using these items, plus their senses of touch, smell and taste.
 - > Cooked pasta play – make large quantities of cooked spaghetti or other types of pasta, adding food colouring to the cooking water if you wish. Add small creatures; puzzle pieces, etc to the cooked pasta. Try making blue spaghetti, putting it in a paddling pool and adding sea creatures. Offer some kitchen tools and saucepans for pretend play and developing hand control: try strainers, tongs, spoons, tweezers, and pasta tongs. Alternatively, add spaghetti to a water tray and watch what happens as the pasta dissolves in water.
- See 'Food play' (overleaf) for more ideas.



Food play

Food play sessions can help to reduce the fear of food. Let students work at their own pace and touch, sniff and explore the food as much as they want to. Never force a student to eat the food during these sessions. If a student does try to eat some of the food, this is seen as a bonus.

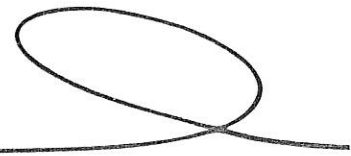
Ideas for food play

Custard, yoghurt or squirty cream play

Empty tins of custard (yoghurt and cream are good alternatives) into a water tray or smaller messy play trays. Allow the children to make a mess exploring the texture, taste and smell of the custard. Add toys for them to play with. Use your fingers to draw shapes, handprints and footprints.

Dry pasta or rice play

Put some pasta or rice onto a table or into a tray for children to explore. Add toys to the pasta to add to their enjoyment and learning opportunities, such as various shapes and sizes of containers, mega blocks or animals. Use this as a lucky dip or as a way of finding pieces to complete a jigsaw puzzle. Once children are happy to explore the dry food, wet their hands so pieces stick to them.



Ideas for food play

Corn flour 'gloop'

Make gloop by mixing corn flour and water together. This creates an amazing substance unlike any other! Put the gloop in large trays or onto a table and encourage students to play with it. They will enjoy just touching it, picking it up, moving it around, and letting it drizzle through their fingers. Gloop goes hard when you roll it into a ball and turns back to liquid once you keep it still.

Enjoy making patterns in the gloop and just watching them disappear. Add some food colouring for a different experience. Add sand for texture or scented oils. This is also great for practising letter formation.

Mousse play

Make up the mousse in a bowl, according to the instructions on the packet. Once the mousse has set, tip it onto a table or into a messy tray. Place toys in the mousse such as tea sets, mega blocks or plastic animals. Allow children to explore the mousse using these items, and their senses of touch, smell and taste. You could also use it as a lucky dip, or do handprints or footprints on large pieces of paper.

Tactile path

Place different textured food in large trays, for example wet pasta or spaghetti, dry pasta, rice and jelly. Have the students walk barefoot or on their hands and knees through the trays.

Cooked pasta play

Make large quantities of cooked spaghetti or other types of pasta, adding colouring to the cooking water if you wish. Add small creatures to the cooked pasta – try making blue spaghetti, putting it in a paddling pool and adding sea creatures.

Offer some kitchen tools and saucepans for pretend play. Try using strainers, tongs, spoons, tweezers and pasta tongs. Dip the cooked pasta in paint and trail it across a page, or walk in trays of cooked pasta.

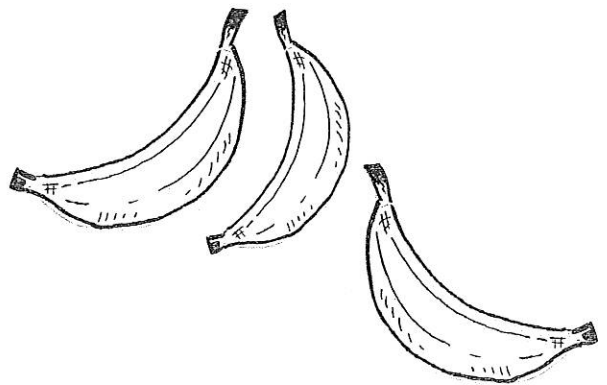
Cream or shaving foam

Choose allergen-free shaving foams and check that students are not dairy intolerant before using products such as instant or whipped cream. Place the substance on tables or upright surfaces such as mirrors, walls or windows. Draw shapes with fingers, or use the cream to decorate biscuits.

Alternatively, place foam in deeper trays and create a treasure hunt for children by hiding buttons, pebbles, coins, big beads, small figures and so on in the tray. Add texture by using glitter, pasta, lentils, sand or beads. Add colours (paint or food colouring) to explore colour mixing and colour changing.

Fruit and vegetable faces

Using a variety of fruits and vegetables (the more interesting shapes the better) carve, cut, slice and dice your way to making interesting faces, animals and other everyday items. Dip into paint to make pictures with the shapes. Dip into melted chocolate to add a different flavour.



Movement break ideas

We all have different levels of alertness and they impact on our ability to concentrate, listen to instructions and focus to complete our work. Following periods of seated work, students need a movement break to regulate and re-focus.

Choose an activity from the list below. Each activity should last for a minimum of **one to two minutes** to be effective.

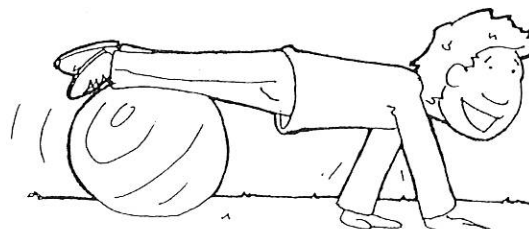
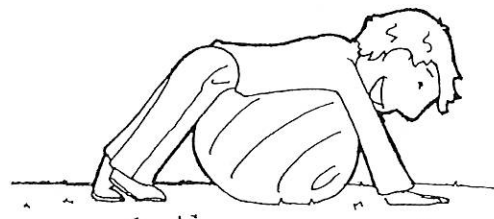
- > Run or jog around the playground.
- > Get students to carry heavy notebooks to the office or from class to class. Set up a fake reason for them to take books as far as possible around the school, then possibly swap with another teacher to bring books back.
- > Jump up and down on a trampoline or do star/jack jumps.
- > Bounce (seated) on a large ball. Bounce in a circle whilst seated, lift alternate legs, play throw etc.
- > Do Theraband exercises. See if a student can pull their hands away from each other, thereby placing resistance on the band. Then slowly release the tension on the band. Try for ten pulls. Then slowly release.
- > Try cross crawling. March on the spot, touching elbow to **opposite** leg as high as possible. Start with eyes open and then try with eyes closed. March on the spot and then try to turn in a circle.



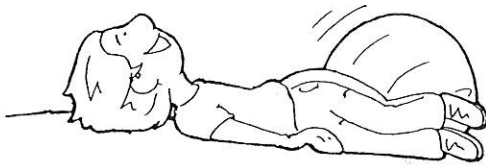
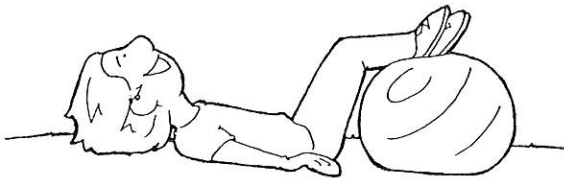
- > Do weight-bearing exercises for the arms, for example the wheelbarrow walk, crab walk or bear walk. Alternatively, use a ball as shown below: move forward and backwards over the ball using the arms. Play a game in this position.



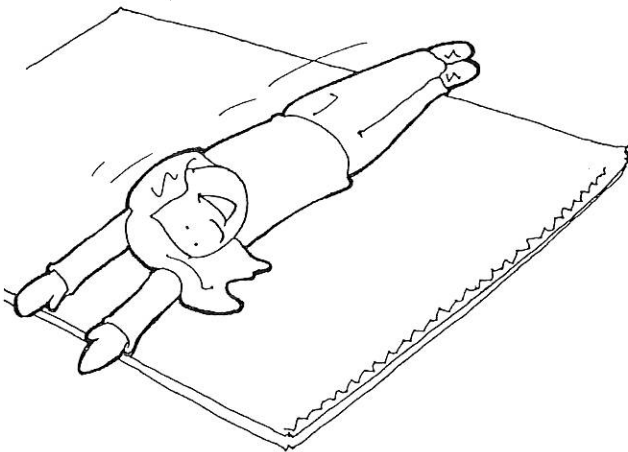
- > Get students to hold therapy balls with their arms and legs while lying on their backs. Tell them to hold on to the ball as hard as they can while you try to take it away.



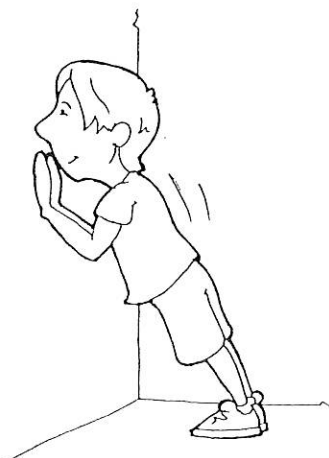
- > Move a ball slowly from side to side, forwards and backwards (see below).



- > Logroll: lying on the floor, roll across a mat while trying to keep the body in a straight line. Advance by extending arms above head, or extending the distance of the roll.



- > Wall pushes: do 20 push-ups against the wall. Make sure elbows are bending and straightening rather than the whole body.



- > Use weights: hold a small weight in each hand (you could use filled tins, water bottles, etc). Keep arms extended above the head and/or held parallel for as long as possible.



- > Steam roller: with a student lying down, roll a large ball up and down their body. Keep pressure firm.



Scooter board activities

- > Push a scooter board to, or from, a designated location (students can sit, or lie on their stomachs and propel themselves with their arms).
- > Students can try pulling themselves up a ramp while seated or lying on their stomachs on a scooter board.
- > Students can also try propelling a scooter board across a carpeted floor, alternating arms or using both arms together.
- > Have one student use a rope or plastic hoop to pull another student who is sitting or lying (on their stomach) on a scooter board and holding onto the other end of the rope or hoop.

Daily sensory sessions

Sensory input is a natural, calming drug for the brain. We all need sensory input to stay calm and focused; children with autism need more of it and more often.

Ideally, sensory sessions should run first thing each morning and after lunch breaks. **Sessions should take approximately ten to 15 minutes.** Set equipment up in sections: each child needs to complete one activity from each section in strict order.

You could try organising activities into three main sections: alerting, organising and calming. It's best to finish sensory sessions with calming activities. The ideas below are based on work by the occupational therapist **Jane Norwood**, as found in her book *Sensory circuits*.

Alerting

Jogging

Jog on the spot or inside a hoop. Advance by changing speed up and down, or jogging around a course of cones.

Star jumps

Start by doing arms and legs separately if coordination is poor. Advance by turning in circles, going side to side and/or counting while jumping.

Jack jumps

Jump from a crouched position with arms and legs out to the side, then return to the crouched position. Advance by combining with jogging.

Ball bounce

Bounce while seated on an exercise ball. Advance by bouncing for longer without stopping, bouncing while turning around on the ball, or throwing and catching items (such as a bean bag or a smaller ball) whilst bouncing.

Arm spinning

Stand with arms stretched out to the sides. Spin in a circle ten times one way and then reverse.

Trampoline

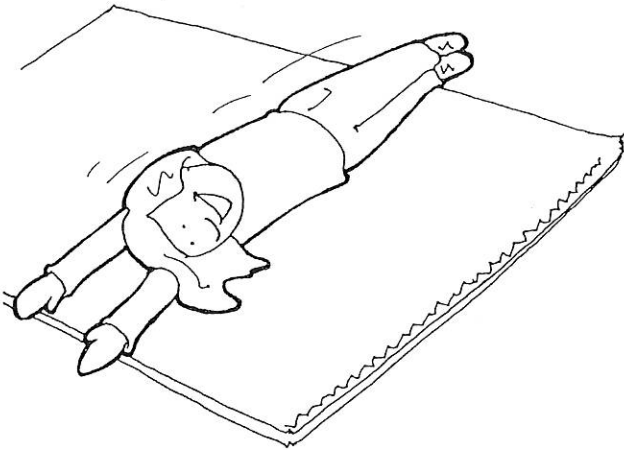
Bounce on the spot, around in circles, do star jumps.



Organising

Logroll

Lie on the floor and roll across a mat while trying to keep the body in a straight line. Advance by extending arms above the head, or extending the distance of the roll.



Cross crawling

March on the spot, touching elbow to **opposite** leg as high as possible. Start with eyes open and then try with eyes closed. March on the spot and then try to turn in a circle.



Juggling

Start with throwing and catching silk scarves as they move very slowly. Move onto beanbags and then juggling balls.

Commando crawling

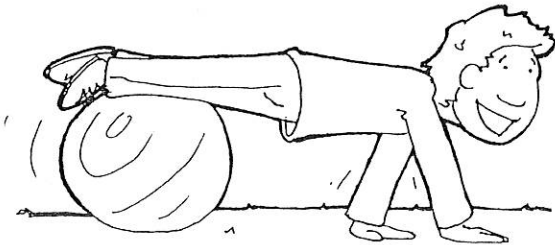
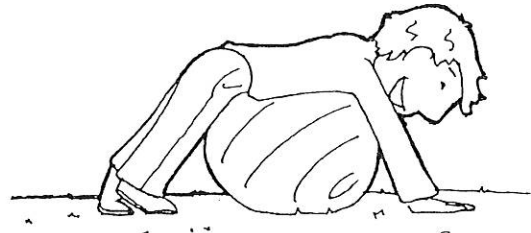
Lie on the stomach and crawl across the ground. Try having a race or crawling under blankets.

Oral motor

Blow whistles, blow feathers off your hand, play football by blowing a cotton ball or ping pong ball across a table (you score if you blow it off the other end).

Rolling over a ball

Lie on the stomach over a peanut ball and walk hands back and forth.



Lazy eight

Use ribbons or scarves, or use chalk on a large vertical surface to draw out figures of eight. Make sure that students cross their mid-line by keeping their hips still and facing frontwards.



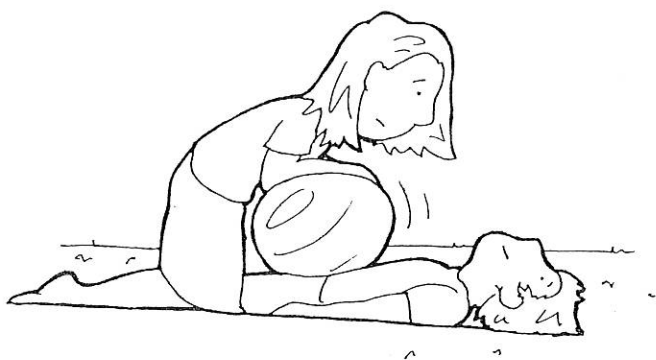
Balance obstacle course

Walk along a balance beam, bench, stepping stones or a line taped on the floor. Advance by walking backwards, stepping over objects along the way, bending down to pick up beanbags and throw at targets.

Calming

Ball squash

Students lie on their tummies while an adult rolls a large exercise ball slowly up and down them.



Massage

There are many forms of massage that can be calming and help students to re-focus. The Massage in Schools programme allows students to massage each other, which promotes self-esteem. See www.misa.org.uk for more details.

Press-ups



Wall pushes

Do 20 push-ups against a wall. Make sure that students' elbows are bending and straightening rather than their whole body. You can also try this with two students pushing against each other's hands or feet.



Using weights

Hold a small weight in each hand (you could use filled tins or water bottles, for example). Hold arms extended above the head or parallel for as long as possible.



Pushing or pulling weighted items

Try using a full wheelbarrow, filled bags, etc. Make this into a game by asking students to fetch certain items to fill the bag or barrow.

Pilates plank

Students lie on their stomachs on the floor, come up onto their forearms and onto their toes (stomach, thighs and chest off floor).

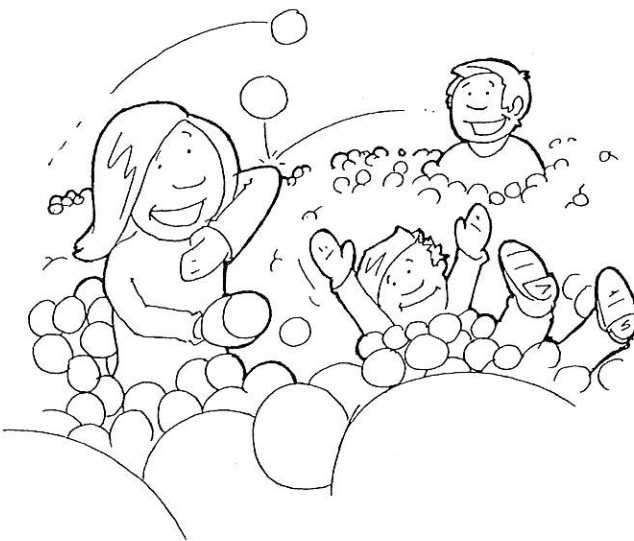


Proprioception - infant school students

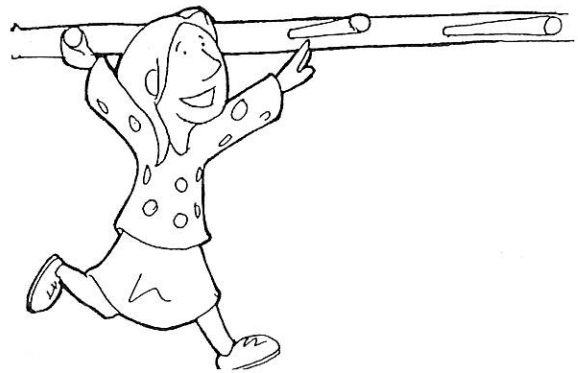
Proprioceptive input (sensations from joints, muscles and connective tissues that lead to body awareness) can be obtained by lifting, pushing, and pulling heavy objects, including one's own weight. Students can also stimulate the proprioceptive sense by engaging in activities that push joints together (such as pushing something heavy), or that pull joints apart (such as hanging from monkey bars).

Carry out two activities from the ideas on pages 51-53 at the beginning of each school day, after playtime and throughout the day if necessary to calm and focus students.

Play in a ball pool



Monkey bars or climbing frames



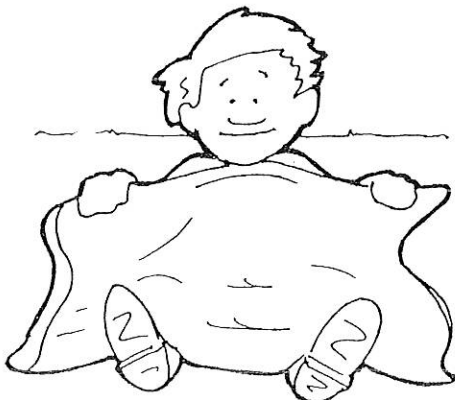
Steam roller

With students lying down, roll a large ball up and down their bodies. Keep pressure firm.



Lie under blankets and cushions

Always make sure that students can move freely and that their heads are not covered at any time.



Resource

Weights

Hold a small weight in each hand (could use filled tins or water bottles, for example). Hold arms extended above the head or parallel for as long as possible. Lift bottles filled with water up, and down to shoulders, 15 times.

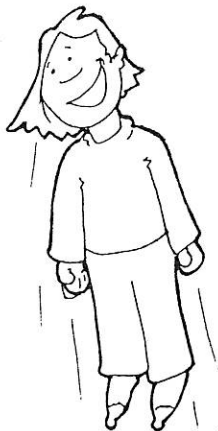


Gym ball

Bounce up and down, bounce around an obstacle course, lie over the ball and play a game.



Trampoline



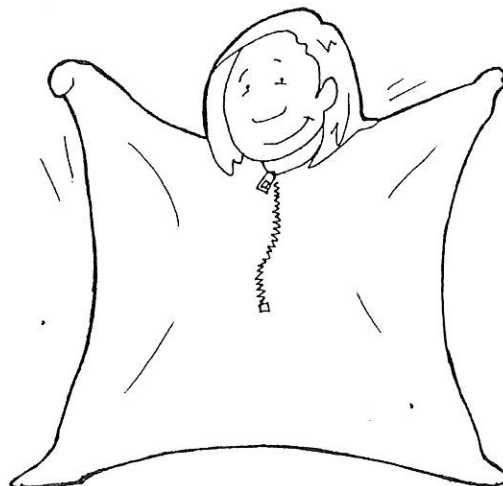
Arm circles

Ten each way – keep arms straight!



Lycra body sox

While in the body sox, do relay races, jack jumps, crawling, etc.

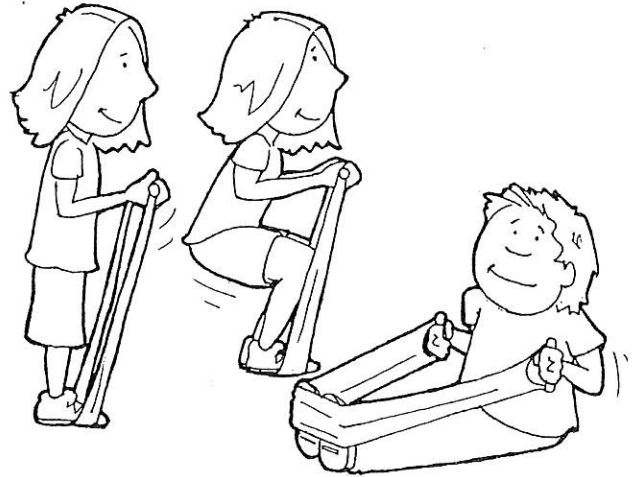


Wheelbarrow walks



Theraband activities

Do each exercise ten times.



Crawling

Crawl under blankets, through tunnels and under beanbags. Try crawling on stomachs, on all fours, or like a crab.



Blowing bubbles



Manipulating putty

Hide objects in putty, or enjoy pulling and twisting it around.



Proprioception - junior school students

Proprioceptive input (sensations from joints, muscles and connective tissues that lead to body awareness) can be obtained by lifting, pushing, and pulling heavy objects, including one's own weight. Students can also stimulate the proprioceptive sense by engaging in activities that push joints together (such as pushing something heavy), or that pull joints apart (such as hanging from monkey bars).

Carry out two activities from the list on pages 54-56 at the beginning of each school day and after playtime if necessary, to calm and focus students.

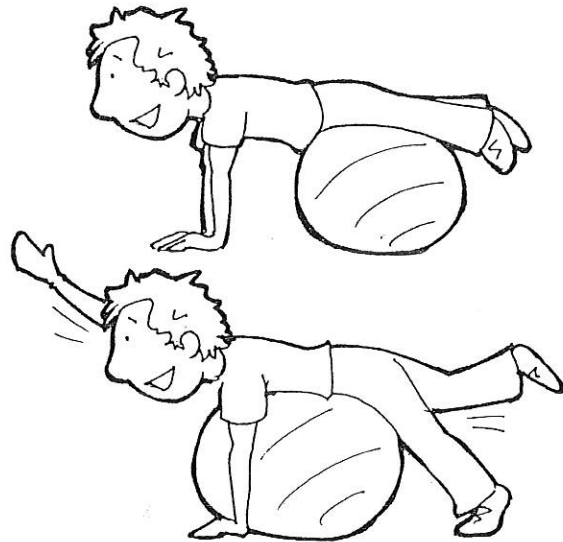
Heavy lifting

Without straining, students can lift free weights. Start with 0.5 kg. Lift above the head ten times, so the bicep curls ten times.



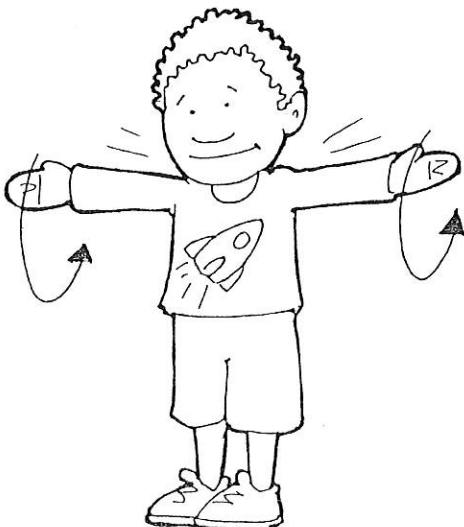
Push-ups and stabilization

Do ten push-ups. Carry out in four-point kneeling if it is too difficult over a ball. Try doing ten opposite leg/arm lifts.



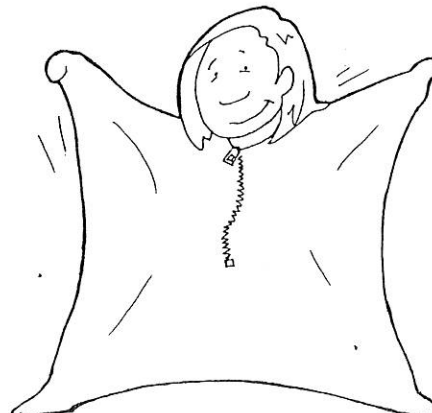
Arm circles

Ten each way - keep arms straight!



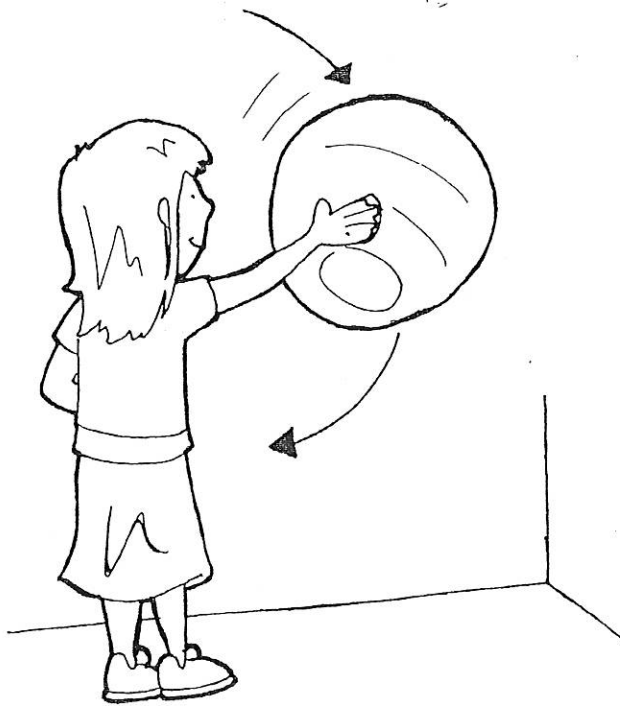
Lycra body sox

While in the body sox, do relay races, jack jumps, crawling, etc.



Push a gym ball up and down the wall

Carry out with each arm and then with the back.
Don't let the ball drop! Move the ball up and down
the wall five times.



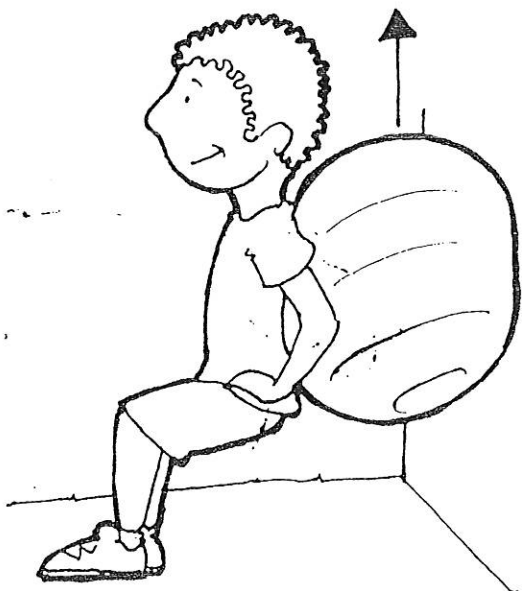
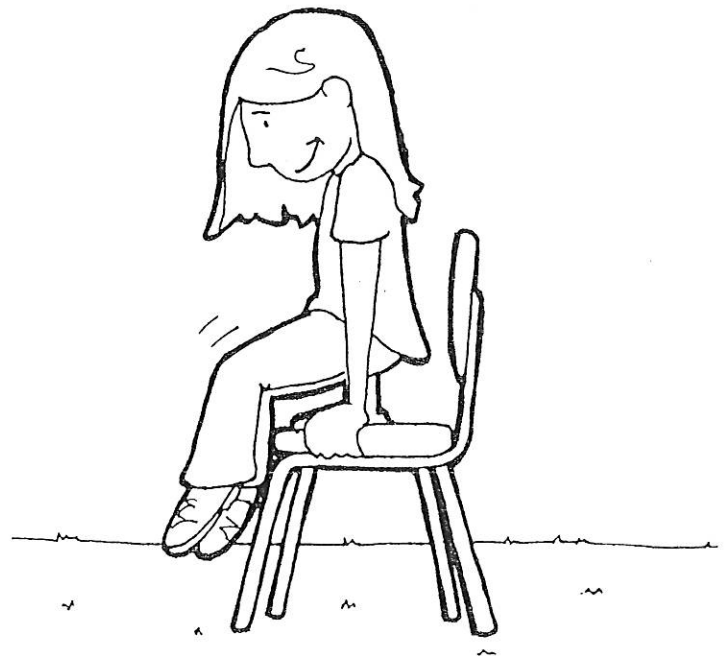
Wall pushes

Do ten pushes. Keep feet flat!



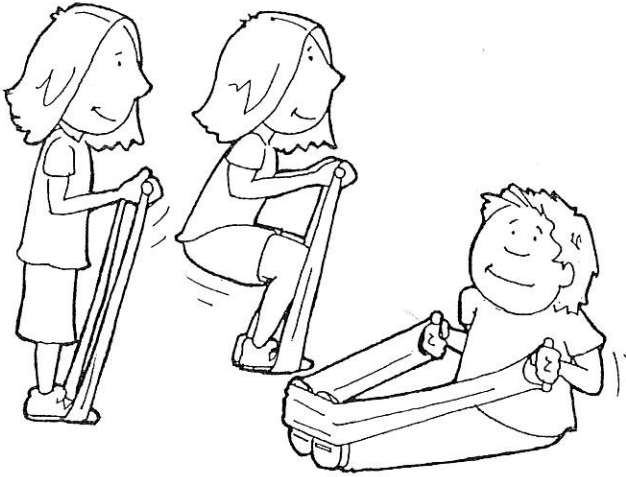
Chair push-ups

Do ten push-ups while seated on a chair.

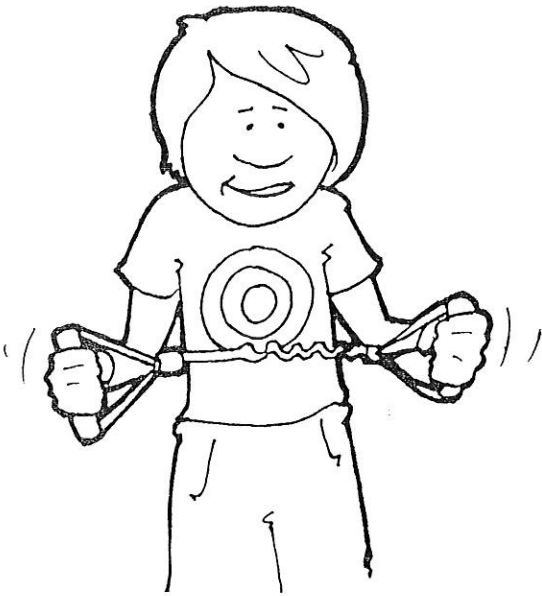


Theraband activities

Try ten of each exercise.

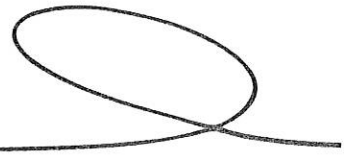


Hit a punch bag



Other suggested activities include:

- > riding a bike
- > hanging from monkey bars
- > lying under heavy or weighted blankets
- > bouncing on a gym ball
- > having a tug o' war
- > wrapping up tightly in a blanket, duvet or sleeping bag.



Vestibular activities

Activities that are vestibular in nature increase input to the vestibular system and help to increase students' arousal levels.

The general rule is that linear movement (side to side, up and down) is calming and rotary movement (round and round) is alerting. It's a good idea for students to have movement breaks before they settle to academic tasks.

Allow students to stand as much as possible when working on activities that require periods of concentration. This requires greater movement, which in turn will activate brain stem activity.

Ideas for vestibular activities

- > Playground swing: if students propel these themselves, this is 'heavy' work and therefore calming.
- > See-saws.
- > Slides, whether sitting, lying down or going head first.
- > Zip wires.
- > Trampolines: bouncing is good and you can add an alerting component by asking students to bounce around in circles.
- > Rocking chairs can be useful in the corner of a classroom for calming.
- > Hanging upside down over balls or from playground equipment.
- > Hammock swings.
- > Dancing to music.
- > Somersaulting and general gymnastic movements.
- > Rolling or somersaults: spin on the stomach or upright on a computer chair.
- > Balancing, seated, on gym balls and reaching for objects. Slowly increase the reaching distance. Encourage students to reach in the air, to either side and from the ground to stimulate their vestibular systems.

Scooter board activities

- > Using a scooter board, have students become animals while lying forward on the board. Then ask students to be animals lying on their backs, using scooter boards to get around.
- > Lie on scooter boards and negotiate a coned path. Collect beanbags on the way.
- > Ask students to lie or sit on the board and hold onto a rope or plastic hoop. Pull them along yourself or have other students pull them.

Inner tube activities

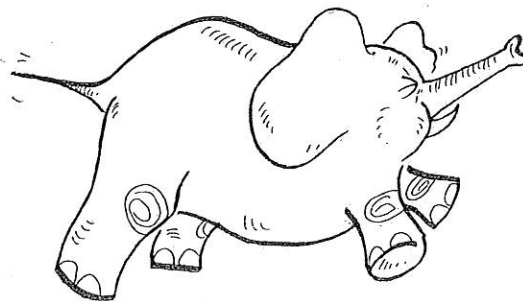
- > Use an old tyre inner tube (tractor tyre inner tubes are perfect) and have students sit on the tube and bounce. While they are sitting, throw beanbags into a target.
- > Suggest that students jump in and out of the tube, or practise their balancing by walking around the edge of the tube.

Logrolls

- > Lying on the floor, roll across a mat while trying to keep the body in a straight line. Advance by extending arms above the head or extending the distance of the roll.
- > Trampolines: have a small indoor trampoline on which students can jump, twist and catch or throw balls. Get students to sit on the trampoline and bounce on it. Bounce from standing to sitting and vice versa; you can also try jogging on the spot and turning around.

Calming activities

- > Bounce around a coned course on a Space Hopper or gym ball. Ten to 15 trips should take all the 'aggressiveness' out of students and allow them to focus on the task in hand.
 - > Push a large therapy ball across or around a room (you can buy weighted therapy balls). An adult or another pupil can add resistance by pushing lightly in the opposite direction.
 - > Play catch with a heavy ball or medicine ball. Bounce and roll the ball.
 - > Push a wheeled stool while someone is sitting on it. If necessary, the person on the stool can help by 'walking' with their feet.
 - > Use a Theraband or tubing attached to a door and pull it, then let it snap.
 - > Two children can play tug o' war together using a skipping rope.
 - > Play jumping games, such as hopscotch and skipping.
 - > Rub out chalk or pen from boards in the classroom.
 - > Ask students to help rearrange desks or chairs in the classroom. Alternatively, stack chairs.
 - > Carry books with both hands, hugging books to the chest.
 - > Use squeeze toys that can be squeezed quietly on students' laps under their desk, so that the class isn't disturbed.
 - > Do chair push-ups.
 - > Jump on a trampoline.
 - > Do press-ups against a wall. Make sure that students' feet are flat on the ground and movement is coming from bending elbows.
 - > Carry heavy items, such as a washing basket, shopping bags or buckets of water.
 - > Rake grass or leaves, push a wheelbarrow, dig soil or wash the car.
- > Try animal walks.
 - > **Frog jump:** squat on the floor, placing hands on floor in front. Move both hands forward, then bring feet up to hands in jumping motion (remain in squatting position).
 - > **Bear walk:** with hands and feet on floor, move right arm and leg forward simultaneously, then move left arm and leg. If this is too difficult, try it on hands and knees.
 - > **Caterpillars:** squat on floor with hands in front. Keeping feet stable, walk hands forward as far as you can so that you are stretched out. Then keep hands stable and walk feet up to hands back to squatting position.
 - > **Kangaroo jump:** squat on floor, hands at sides, raise up and jump forward, sinking back into squatting position as you land.
 - > **Crab walk:** lean back and put hands on floor (supine with buttocks off floor); walk backwards using hands and feet alternately.
 - > **Duck walk:** squat on floor with hands at sides. Remain in position while walking (waddling) forward.
 - > **Elephant walk:** bend over with arms dangling toward floor. Clasp hands together to form trunk. Maintain position while walking and swinging trunk from side to side.



Fidget toys

Many students who are easily distracted seek out sensation and need to fidget to maintain focus and attention.

Providing a 'fidget toy' can provide this input in a non-distracting way. By using a fidget toy, students can filter out the extra sensory information.

The majority of students with ADHD, autism and sensory processing disorders are prone to be both distracted and distractible. A fidget toy for the classroom needs to be quiet, inexpensive and safe. Students should be allowed to choose their own fidget toy as only they know exactly what will satisfy that need to fidget.

Ideas for fidget toys

- > Blu-Tack.
- > Retractable key fobs.
- > Pieces of string or ribbon.
- > Paperclips slotted together.
- > Bubble wrap.
- > Stress balls.
- > Bumpy shells.
- > Smooth stones.
- > Beads.
- > A rubber band ball.
- > Putty.
- > Bendable dolls.
- > Stretchy people or animal figures.
- > Sand timers.
- > Bendy straws.
- > Bean bags.
- > A rubber band around a pencil.
- > Tangle toys.
- > Rubber charity bracelets.

Consider students' safety when choosing a fidget toy as some toys could be a choking hazard.



Selected references

Selected references

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