

# INCLUSION 2024

*LIVE*

29th January - 2nd February



# Sensory Circuits

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# SENSORY CIRCUITS

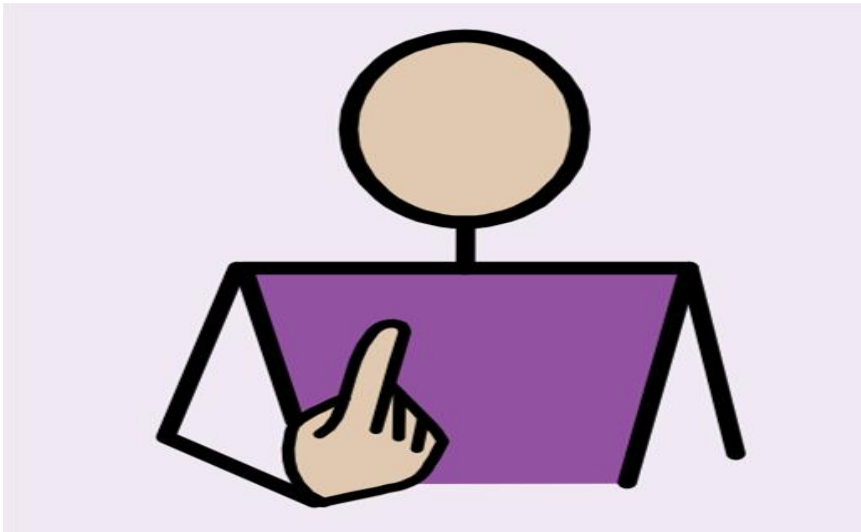


- Please mute yourself until the end and use the chat facility for questions

3:30-4:30pm



- Prepare to get active - doing is by far the best way to learn!



Includes links to the **'All About Autism, All About Me'** online training resource

# Let's get ready to learn!



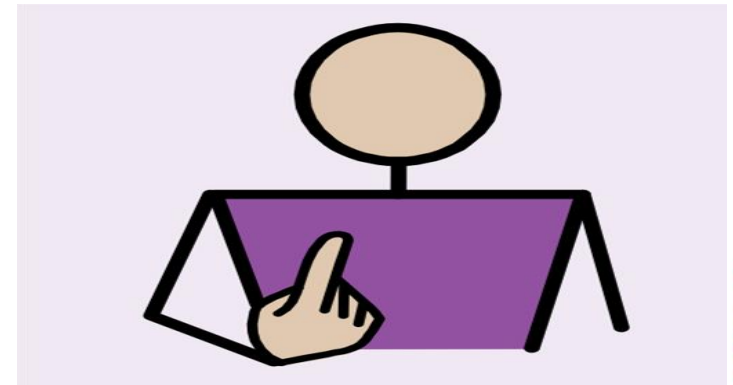
Wake up

Think

Calm

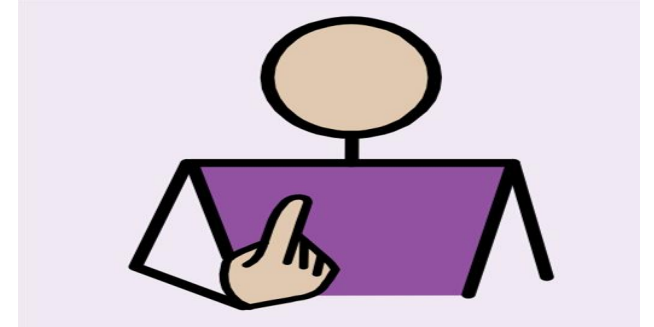
# Learning outcomes

1. Understand the potential needs of individuals with autism (ASC) and those who potentially have ASC.
2. Understand the basic theory of Sensory Circuits
3. Understand how to implement Sensory Circuits
4. Links to further training



# Why

- 120,000 school aged children diagnosed with ASC
- 1 in 100 children have ASC in the UK
- 73% are in mainstream schools
- 60% teachers feel they haven't adequate training to teach children with ASC
- 1% prevalence rate in UK which is 600,000 adults have diagnosable symptoms of autism but do not have a diagnosis.

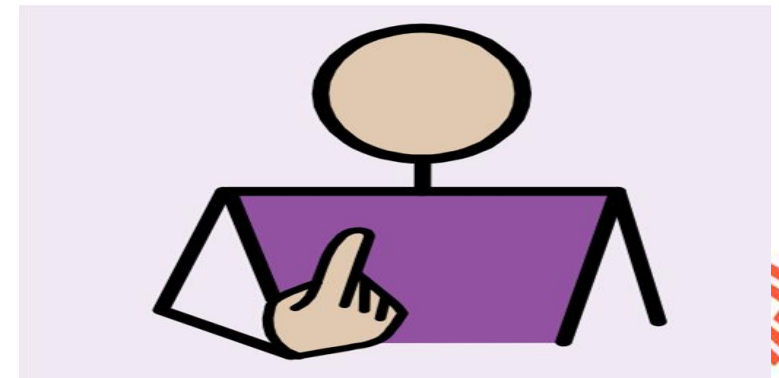



# An Introduction to Autism

The All About Autism, All About Me resources use the term **ASC (Autism Spectrum Condition)** to refer to students who have a diagnosis of autism, as well as those who present with Social Communication Difficulties but may not have a formal diagnosis of ASC.

It is important to recognise that autism is a spectrum and therefore children and young people on that spectrum present with a wide variety of needs and abilities.

Individuals first!





Within the spectrum of autism, children and young people with ASC may display difficulties across these four areas of need.

- Language and communication
- Social Interaction
- Flexibility of thought
- Sensory processing

### SENSORY PROCESSING

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Have you...

**adapted the environment to minimise sensory stressors?**

**assessed the child's sensory profile for activities they avoid or seek?**

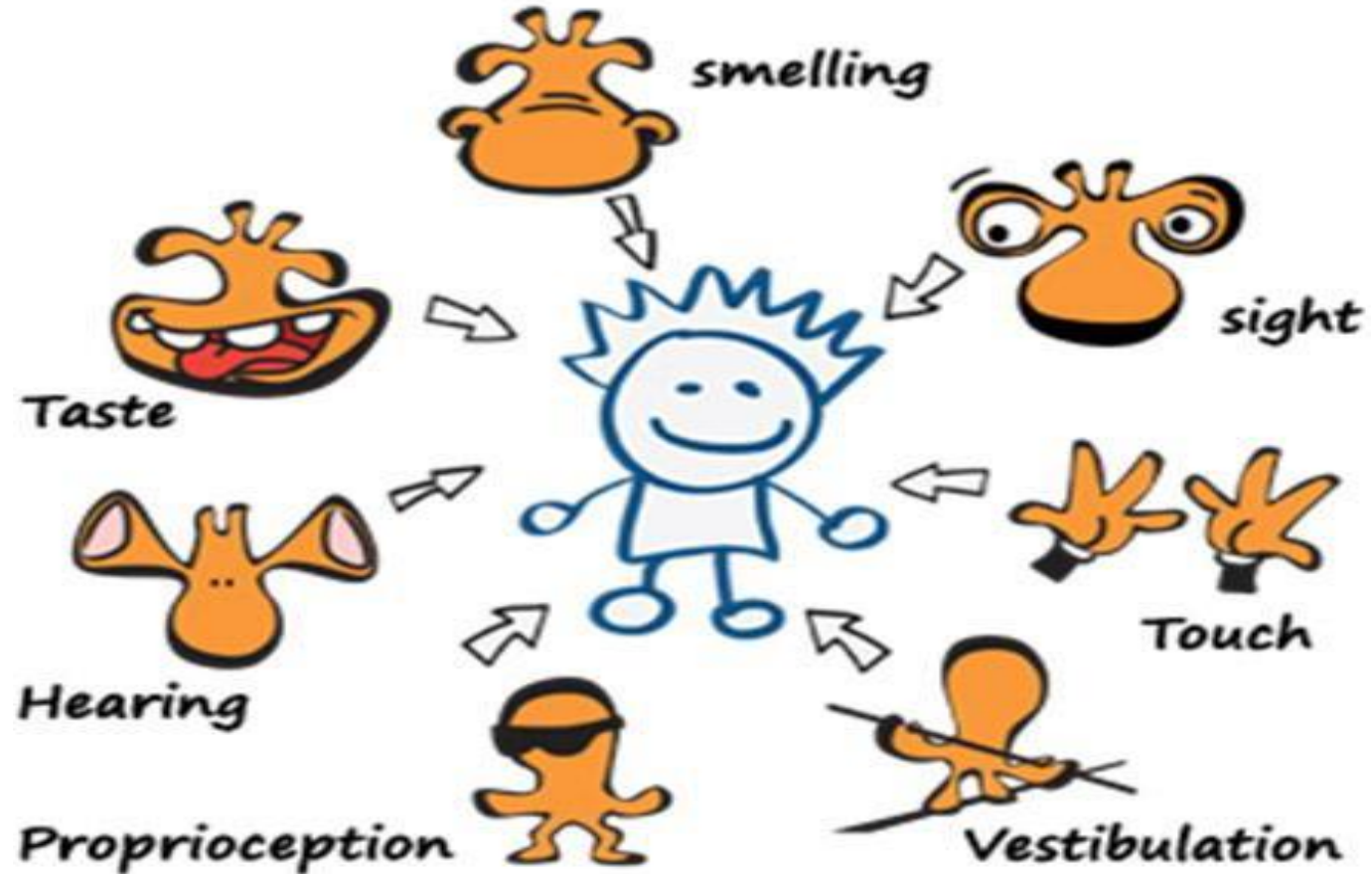
**used sensory activities as interventions to impact on behaviour and emotions?**

**used sensory resources to aid concentration and attention?**




The three senses which have the most impact on the central nervous system (and therefore affect output and behaviour) are:




- touch
- vestibular
- proprioception

# PYRAMID of LEARNING



# Sensory Circuit





# Why Sensory Circuits?

- 
- EHCP targets
  - Proactive behaviour management
  - Supports academic learning
  - Supports posture for learning
  - Links with Sensory Diets and Zones of Regulation



# Proprioceptive

The proprioceptors located in muscles, connective tissue and joints and helps the brain regulate arousal.

- Limb Position
- Body position in space
- Contraction and stretch of muscles
- Force and effort required within an activity



## Examples of proprioceptive activities:

- Climbing
- Crawling
- Jumping or skipping
- Carrying
- Gardening
- Zumba
- Football
- Fitness suite
- Trampolining
- Bouncing on a trampette

**Effects can last up to two hours.**

# Vestibular

The vestibular sense is located in the inner ear.

- Position of head in relation to Gravity
- Motion/Rest
- How fast and direction of movement

It can be stimulated with linear movements (backwards and forwards), which are relaxing, and by rotary movements (spinning), which are arousing.

**The effects of these can last up to four hours.**



## Examples of linear vestibular activities:

- Rowing machines
- Punch bags
- Trampoline
- Exercise ball
- Kicking football
- Throwing balls at a target or bucket
- Resistance bands

# Touch / Tactile

The sense of touch is located in the skin and mouth.

- Texture
- Temperature
- Shape
- Weight
- React appropriately to pain

It can be stimulated with deep pressure (which is relaxing) or light touch (which is arousing).

**Effects can also last up to two hours.**



**Examples of tactile/deep pressure activities:**

- **Weighted rucksack\***
- **Weighted jacket\***
- **Weighted blanket\***
- **Blow up jacket**
- **Ankle weights**
- **Tight lycra vests**
- **Therabands**
- **Theraputty**



## ALERTING SECTION

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Within the **alerting section**, repetitive activities from the vestibular and proprioceptive sections above should be used to stimulate within a controlled setting. Examples include bouncing on a trampoline or skipping.

## ORGANISING SECTION

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In the **organising section**, activities which involve some kind of sequencing should be selected - for example, walking along a balance beam or throwing bean bags into a bucket.

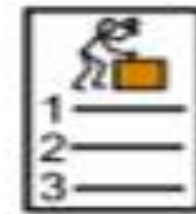
## CALM SECTION

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The final section should help to **calm** the student to prepare them for moving to another activity. Activities from the tactile/ deep pressure list can be used to input.



Alert



Organise





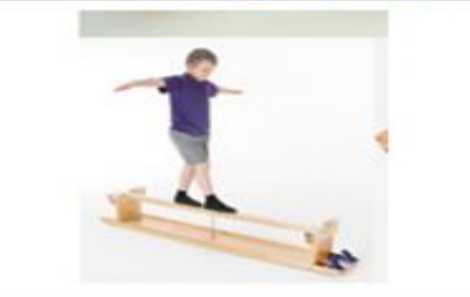
Calm



# Sensory Circuit Example




## Balance Beam

Equipment: Bench

<b>Emerging</b> <ul style="list-style-type: none"><li>Slide / crawl along the bench</li></ul>	
<b>Developing</b> <ul style="list-style-type: none"><li>Walk along wide side of the bench</li><li>Balance on the bench</li><li>Walking sideways/backwards</li></ul>	
<b>Secure</b> <ul style="list-style-type: none"><li>Walk along the narrow edge of the bench</li><li>Walk backwards/sideways</li><li>Balance on the bench 1 leg</li></ul>	

## Rolling Ball

Equipment: Gym Ball and maybe Gym Mat

<b>Emerging</b> <ul style="list-style-type: none"><li>Adult supports when on the ball</li><li>Supports weight on arms</li></ul>	
<b>Developing</b> <ul style="list-style-type: none"><li>Moves independently</li><li>Increased repetitions</li><li>Walks hands forward and backward</li></ul>	
<b>Secure</b> <ul style="list-style-type: none"><li>Collect a bean bag and throw it at a target when fully extended</li></ul>	

# Sensory Circuit Example in School

## FITNESS SENSORY CIRCUIT

Rotate each section before moving to the next

### Alerting Activities

1. Space race
2. Trampoline bounce
3. Hurdle Jumps
4. Run through ladders
5. Step-ups

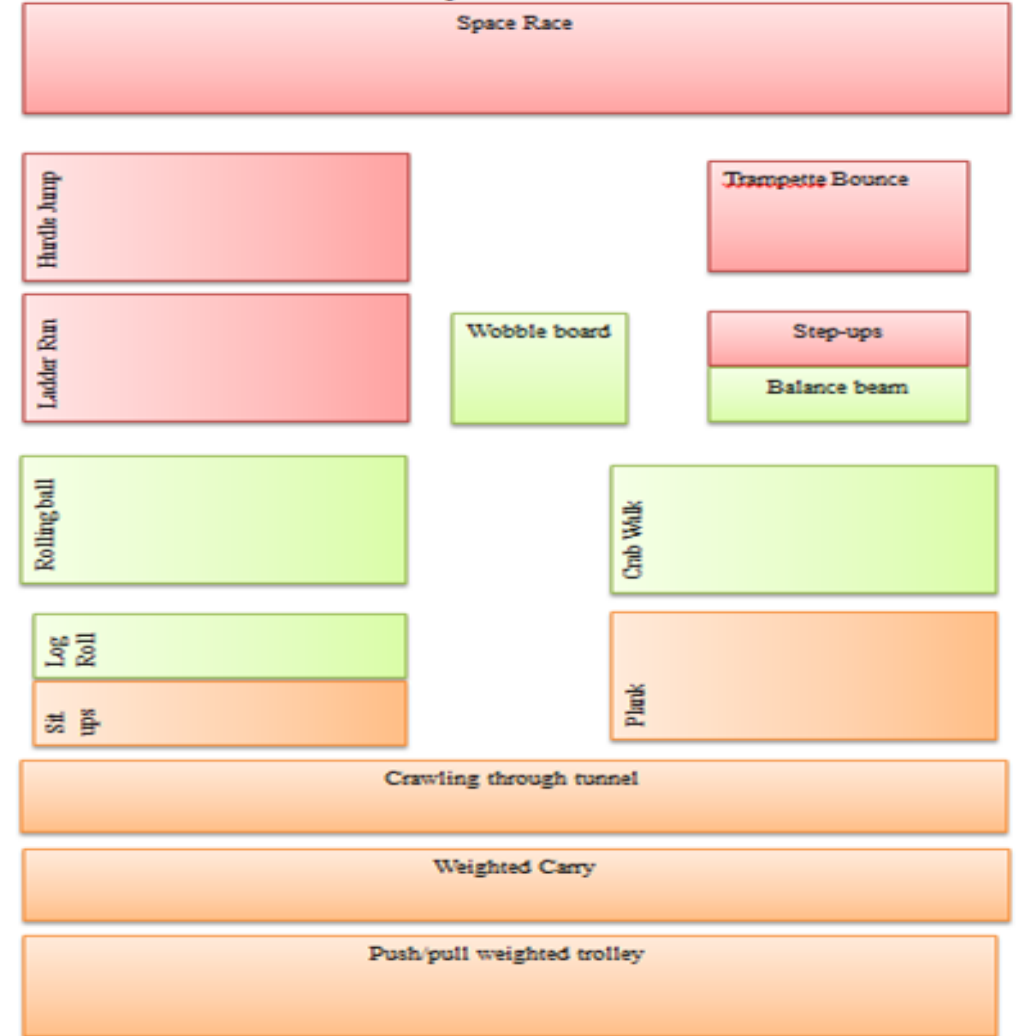
### Organising Activities

6. Log Roll
7. Crab Walk
8. Rolling Ball with Bean Bags
9. Balance Beam
10. Wobble Board

### Calming Activities

11. Push/Pull (Weighted trolley)
12. Crawling (through tunnel)
13. Weighted Carry
14. Plank
15. Sit-ups

## Sensory Circuit Plan





# Sensory Circuit Key Equipment



Wobble Road  
Wobble Board  
Spinning Seat (Gonge Carousel)



Trampette



Peanut Ball  
Scooter Boards



Slam Balls

# Sensory Circuit Example at home or in the classroom






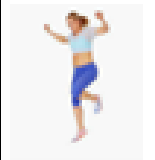










# Sensory Circuit Example at home or in the classroom






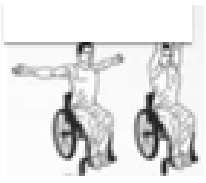






Activities -	Wheelchair
<p>Proprioception: Alerting</p> <ol style="list-style-type: none"><li>1. Step Ups</li><li>2. Star Jumps</li><li>3. Figure of 8 run both directions</li></ol> <p>Vestibular: Organising</p> <ol style="list-style-type: none"><li>4. Step on cushions</li><li>5. Spin 10 times each way</li><li>6. Transfer socks from R-L/L-R using 1 hand</li></ol> <p>Tactile: Calming</p> <ol style="list-style-type: none"><li>7. Egg Roll</li><li>8. Squeeze hands together for 10 seconds</li><li>9. Plank</li></ol>	<p>Proprioception: Alerting</p> <ol style="list-style-type: none"><li>1. FW Punch, Upwards Punch repeated</li><li>2. Star Jump arms</li><li>3. Move a sock right to left, left to right and/or behind body</li></ol> <p>Vestibular: Organising</p> <ol style="list-style-type: none"><li>4. Balance an object on a pan</li><li>5. Side Twists</li><li>6. Transfer socks with 1 hand</li></ol> <p>Tactile: Calming</p> <ol style="list-style-type: none"><li>7. Shoulder Press</li><li>8. Squeeze hands together for 10 seconds</li><li>9. Cross Hold</li></ol>



# Alerting Stage Activities

 = Level 1
  = Level 2
  = Level 3

 Run on the spot		 Hop	
 Star Jumps		 Mountain Climbers	
 Spotty Dog		 Burpee	
 Bunny hops/2 footed jumps		 High jumps	
 Jump FW/BW/sideways			

 Forward punches	
 Punch to the sky	
 Star jump arms	
 Breast stroke arms	
 Front crawl arms	
 Pass object between hands (wide)	





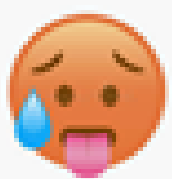
- Choose 3 exercises from each section:  
**ALERTING / ORGANISING / CALMING**
- Perform each exercise for 1 minute
- You can change 1 exercise each week
- All pupils can therefore be doing Sensory circuits at the same time but be doing different exercises
- There are different levels of difficulty to help you guide the pupils



= Level 1







= Level 2



= Level 3



Sensory Circuit for \_\_\_\_\_

 <p><b>Alerting Stage</b></p> <p>Choose 3 exercises</p>	 <p>Punch to the sky</p>
 <p><b>Organising Stage</b></p> <p>Choose 3 exercises</p>	
 <p><b>Calming Stage</b></p> <p>Choose 3 exercises</p>	



# Sensory Circuit Example with 1 piece of equipment - Gym Ball

## Alerting Stage:

1. Sitting and bouncing on the ball
2. Hop, jump or run around it

## Organising Stage:




3. Rolling over the top - walking hands forwards and backwards whilst your legs are supported by the ball
  - Move objects right and left using 1 hand
4. Bouncing the ball on the floor
5. Upside Down - careful with this one
6. Rolling the ball at a target or another person
7. Sitting on top of the ball and balancing
  - Can you take your feet off the ground?

## Calming:

8. Deep Pressure - Rolling the ball over the top of your back whilst lying down
9. Wall Squats with the ball going against the wall
10. Lay on your back and press the ball up (like a bench press)
11. Push the ball around and up a wall - use a line so they follow the trail

## Bounce on a Ball Alerting

Equipment: Large fit ball and hoop

<b>Emerging</b> <ul style="list-style-type: none"><li>• Sit on the ball and balance with feet on the floor</li></ul>	
<b>Developing</b> <ul style="list-style-type: none"><li>• Sit on the ball and bounce up and down.</li><li>• Bounce all the way round the ball and back again without stopping</li></ul>	
<b>Secure</b> <ul style="list-style-type: none"><li>• Sit on the ball and bounce up and down whilst throwing and catching a ball</li><li>• This can be done with a partner who throws the ball or one their own by throwing the ball up and catching it, possibly alternating hands</li><li>• Bounce whilst copying actions</li></ul>	

# Sensory break within a classroom



Pupils to have their own box (Sensory Snack Box).

This includes activities that they feel they can use to help calm them down or alert them (as needed) This links in with the Zones of Regulation that we use at The Parkside School as well as EHCP's

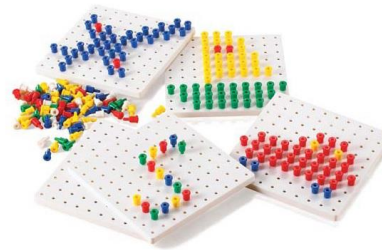
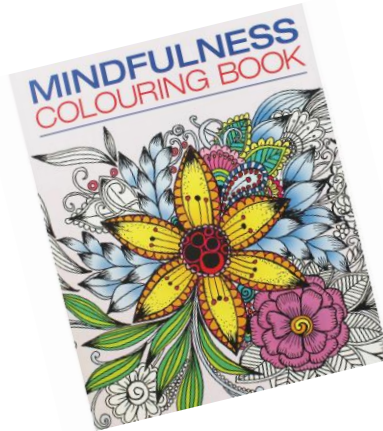
# Sensory Snack Ideas to use within a classroom

## Alerting

- This will probably be done as a whole class or pupils taken out to do things by a TA. Otherwise it can become quite disruptive within the classroom.

## Organising

- Dexterity tasks: tweezers etc
- Drawing
- Colouring book
- Peg Boards
- Lego
- Textured playdo
- Threading beads, buttons
- Pipe Cleaners - twist around pencils, make shapes/animals, Push through buttons, colander
- Stretching rubber bands - stretch over a cylinder (bottle) or over a peg board



# Sensory Snack Ideas to use within a classroom

## Calming

- Weighted Blanket
- Gloop / bubble timers
- Touch Board
- Touch Massage - Self hand massage or massage tool
- Foam Roller
- Deep Breathing - Finger breathing/Figure of 8
- Slime
- Playdo
- Chew Toy



# Sensory Snack Ideas to use away from the classroom

Ideas for this can be taken from the Sensory Circuit ideas shown earlier

## Alerting

- Hurdle Jumps
- Trampoline jumping
- Going for a run
- Playing 'IT'
- Playing football



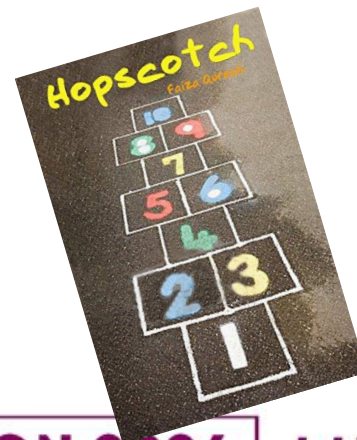
## Calming

- Climbing equipment
- Crab walk
- Crawling
- Deep pressure massage with a peanut ball
- Wrap up in a mat



## Organising

- Hop Scotch
- Throw and catch
- Throwing or kicking at a target



## FINE MOTOR BOX IDEA

Why not have a box filled with fine motor practice? Children could each have their own box with activities they have to do daily as part of lessons, or there could be a big box for the whole class.

Sample fine motor box:

- 1 x recycled shoe box/ ice cream box/ large zip lock bag
- 1 x plastic tub with lid (cut a slit) filled with bottle tops/ coins
- 5 x pegs
- 1 x small box of marbles/ beads/ dry pasta
- 1 x button activity fabric strip
- 1 x jar or pegboard
- 1 x set of elastic bands
- 1 x small ball of play dough

# Sensory Box

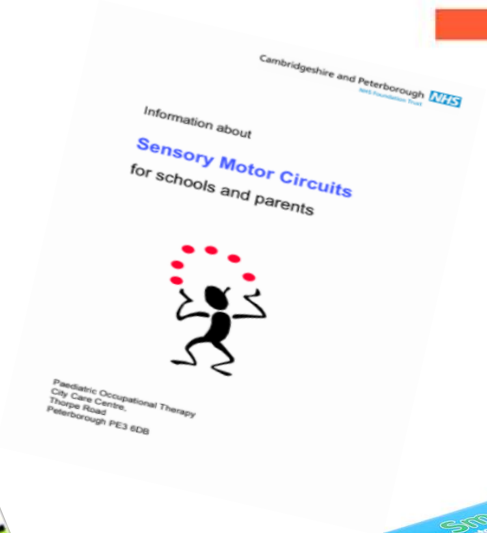
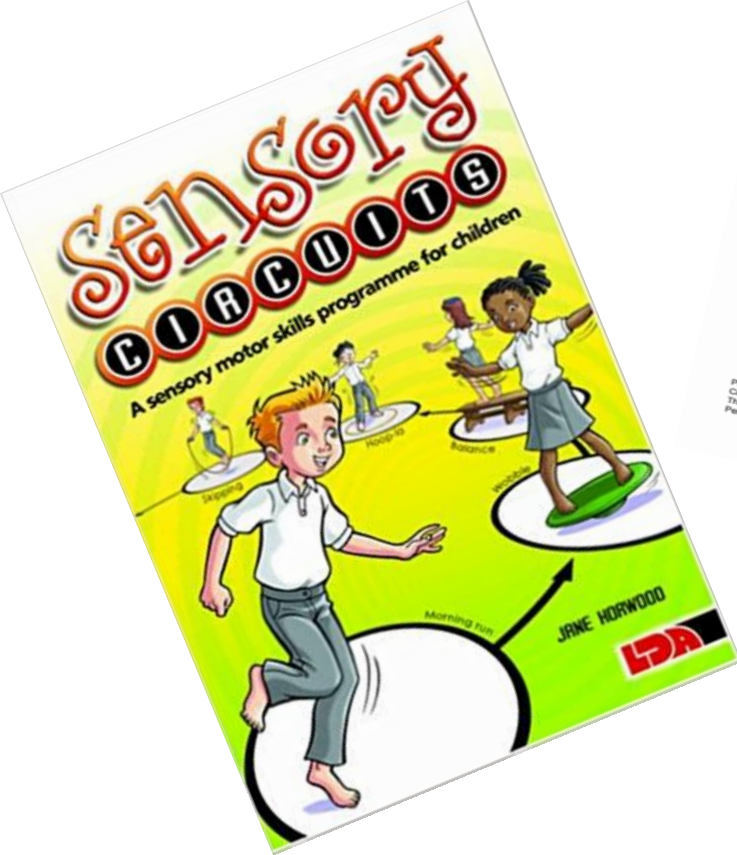


30 MATERIALS & ACTIVITIES	
that promote FINE MOTOR SKILLS	
what to use	what to do
POW POPS	SEWING
BUTTONS	WEAVING
PAPER CLIPS	LACING
CLOTHESPINS	BEADING
RUBBER BANDS	SHADOWING
TWISLERS	SPOONING
PIPE CLEANERS	PAINTING
STRAW	TRACING
PLAY DOUGH	PINCHING
NUTS & BOLTS	THREADING
STICKERS	MAKE THINGS SMALL
WIRE PUNCH	CUTTING
SPRINKLES	SORTING
EYE SHOPPERS	POURING
KITCHEN TONGS	BUTTONING
TOOTHPICKS	





# Sensory Circuit Support



# Next Steps

- Autism Training and resources: <https://www.youthsporttrust.org/all-about-autism-all-about-me>
- Go to [www.topsportsability.co.uk](http://www.topsportsability.co.uk) to register and sign in to access loads of inclusive resources:

Registration access code: **Please contact your local YST Lead Inclusion School for the code**

# • Q&A

