



DOWN SYNDROME
CHESHIRE

EDUCATION Booklet



**A RESOURCE FOR EDUCATION STAFF
TO SUPPORT LEARNERS WITH DOWN SYNDROME
2026**



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WHAT WE DO



We empower people with Down syndrome to live the life they choose.

Our aims:

- To provide a support network for parents and carers of learners with Down syndrome.
- To increase awareness of Down syndrome within the community.
- To unlock the potential of learners with Down syndrome by providing the best practice in training and education.

WHAT IS DOWN SYNDROME?

Down syndrome, also known as Trisomy 21, is a genetic condition occurring at conception. People with Down syndrome have three copies of the 21st chromosome. Around 1 in a 800 babies are born with Down syndrome in the UK.

Every person with Down syndrome is an individual; just like everyone else they will have things they are good at and things that they find harder. People who have Down syndrome will have some level of learning disability.

Like everyone, people who have Down syndrome have:

- Their own personalities
- Things they like and dislike
- Things that make them who they are

TERMINOLOGY

This is Libby. She is a girl with Down syndrome. **She is not a Down's girl.**

The correct terminology is a person with Down syndrome.

In the UK we use Down's syndrome or Down syndrome. The syndrome is named after Dr John Langdon Down, the person who first noticed similar traits in people who have the syndrome. Across the world it is referred to as Down syndrome or Trisomy 21.

Inappropriate terminology	Appropriate terminology
Suffers from OR is a victim of Down syndrome	Has Down syndrome
A Down's baby/person/child	A person/baby/child with Down syndrome or who has Down syndrome
Mentally handicapped/backwards	Learning disability or intellectual disability
Disease/illness/handicap	Condition OR genetic condition
Downs (as an abbreviation)	DS (as an abbreviation if necessary)



THE LEARNING PROFILE OF A CHILD WITH DOWN SYNDROME

Learners with Down syndrome have a unique learning profile. Understanding the challenges they may encounter and recognising how to use their strengths to support areas of difficulty, is essential. This approach helps ensure that the person with Down syndrome you are supporting can reach their full potential.

Individuals with Down syndrome are not intuitive learners and often need explicit teaching for most skills. They may find it difficult to transfer learning from one context to another. However, they are typically strong visual learners and are highly motivated by success.



STRENGTHS

- Kinaesthetic and visual learners - learn best from pictorial, concrete and practical materials
- Ability to learn and use sign, gesture and visual support
- Ability to read non-verbal communication such as body language, facial expressions and emotions
- Ability to learn and read the written word
- Keen to communicate and socialise with others
- Tendency to model behaviour and attitudes from peers and adults
- Enjoy structure and routine



CHALLENGES

- Auditory and visual impairment are more common
- Delayed fine and gross motor skills, due to hypotonia and hypermobility
- Speech and language delays/disorders
- Short term and working memory weaknesses
- Shorter concentration span
- Difficulties with consolidation and retention
- Difficulties with generalisation, thinking and reasoning
- Sequencing difficulties
- Experts at using avoidance strategies. A challenge for you!

SENSORY CONSIDERATION

EYES

Learners with Down syndrome have a higher likelihood of various eye conditions, including refractive errors such as short and long sightedness, squints, nystagmus (wobbly eyes), blepharitis (sore, crusty, itchy eyelids). It is vital they have regular eye checks to identify any issues.

Even when sight is corrected with glasses, they will still have poor visual acuity. Fine detail will be difficult to see and learners with Down syndrome focus very poorly at near vision.

To minimise the effort it takes to see any print, ensure it is big and bold.

Things to consider:

- Learners to use a bold pen rather than a pencil, as they may be working harder to see the pencil marks rather than focusing on the task
- Enlarge resources where there is fine detail or font smaller than 18 point
- Be cautious if using photocopied sheets as they can be too faint
- Use bold pens when scribing or tracing for a learner and avoid highlighter pens
- Use wide spaced writing books with bold lines
- Have individual resources available when tasks require a lot of refocussing such as copying and looking at information on the board or screen
- Consider positioning in the classroom as the learner will need to have good view of the teacher or the board
- Use a writing slope as this brings the line of vision higher and reduces eye strain
- Judging distances can be difficult due to depth perception; e.g. going down stairs
- Make sure glasses are clean and a good fit. An optician can ensure they do not slip down the nose



EARS

Learners are more likely to have a degree of hearing loss and will experience difficulties in the processing of auditory information, they might not hear the beginning or ending of words or all of a sentence. Due to narrow ear canals and nasal passages, a child may experience intermittent glue ear if they have a cold.

Things to consider:

- Consider which is the dominant ear / hearing aid side when thinking about positioning in the class or speaking to the learner
- Sit the learner close to the person speaking
- Reduce background noise in the environment when doing intervention work
- Avoid using “*Don’t*” in an instruction. The learner may only process or hear the word you want to avoid! Instead of saying “*Don’t run*”, tell the learner what you want them to do instead, “*Walk please*”
- Use visuals such as signs, symbols, visual timetables and pictures to reinforce the spoken word

MUSCLE TONE AND MOTOR SKILLS

Hypotonia (reduced muscle and ligament tone), affects every muscle in the body. As a result, physical developmental milestones may be delayed, and both fine and gross motor skills can be compromised. Learners may have reduced control of movement, slower reaction times, and find basic physical activities more demanding. Skills such as balancing and climbing may also be affected.

Crossing the body's midline is often difficult and may require additional practice. Handwriting can be challenging, and smaller hands and fingers can make manipulating objects more difficult. This may impact tasks such as holding a pencil, picking up counters, turning pages of a book, manipulating jigsaws and carrying out self-care activities like feeding, toileting, and dressing.

Things to consider:

- Sitting upright for long periods can be physically demanding and may make it more difficult for a learner to concentrate on tasks. This can be eased by ensuring the learner's feet are supported on the floor or by providing a specialised chair
- Provide rest breaks or a change of activity to give muscles a rest
- Encourage exercise to improve core stability and shoulder strength
- Consider how you can reduce the demands of a task, e.g if sitting independently on the carpet is challenging, provide physical support such as a wedge cushion or lean against support to reduce fatigue
- Allow more time for activities; e.g. getting changed for P.E. or transitioning between activities
- Use alternatives to writing to show understanding. Consider completing the activity practically or using technology to record evidence
- Use warm up exercises for the hands before writing.
- Use chunky writing implements or grips

- Additional support may be needed for toileting. If the child cannot hold a pencil then they will struggle to manipulate toilet paper, pull up clothing or get dressed
- Consider teaching touch typing as a life skill
- Be mindful of neck instability. https://www.downs-syndrome.org.uk/wp-content/uploads/2024/07/16.07.20204_Neck-instability-v9.pdf
- A toilet surround or toilet step may be needed to support the core muscles when seated on the toilet.



AUDITORY MEMORY

Learners with Down syndrome have poor auditory memory, they will need more time to process verbal information.

Learning from listening alone will be challenging without visuals and will affect the learner's concentration span.

Processing information takes much longer due to poor working memory, making abstract concepts such as those in numeracy particularly difficult.

Repetition and overlearning are key for consolidating information; without it, new knowledge may not be retained.

Things to consider:

- Give short verbal instructions in simple, sequentially correct sentences such as *"put your coat on, then go out to play"* rather than *"before you go out to play, put your coat on"*
- Allow extra time for responses, typically waiting at least ten seconds for a reply
- Do not rephrase the question, the learner may still be processing the first piece of information. Repeat, then simplify if you feel it has not been understood
- Support verbal information with visuals
- Use Makaton signing and/or symbols to make language visual and aid understanding
- Break learning into small steps with clear goals
- Practice sequencing skills
- Practice playing memory games
- Role learning can be a helpful way to learn key information like the alphabet, number bonds, and multiplication. It reduces the demands on working memory by making information more automatic
- Repetition and the regular revisiting of tasks are necessary to consolidate learning into long term memory

LANGUAGE

Learners with Down syndrome have a language disorder not a language delay, they should receive speech and language therapy from a qualified Speech and Language Therapist. The quantity and frequency of speech and language therapy should be quantified in Section F of the learner's EHCP, not Section G.

Speech production is difficult; this difficulty remains with them for the rest of their life. In times of emotional stress or excitement this may be exacerbated.

Receptive skills are greater than their expressive language, do not underestimate understanding, learners with Down syndrome are very good at interpreting non-verbal language such as facial expressions, body language and visual cues.



Things to consider:

- Allocate time daily for delivery of the recommendations of the Speech and Language Therapist
- Those who have little speech are often spoken to less. Resist the urge to ask questions, instead give a running commentary, describe actions, objects, what they are doing or what's happening around you instead
- Provide alternative ways to demonstrate understanding that aren't reliant on speech e.g. using pictures, printed words, numeracy equipment such as Numicon or technology
- Create opportunities to use language e.g. role play
- Allow extra time for responses, typically waiting at least ten seconds
- Support confidence when learners are speaking by listening with interest
- Ensure you know the learner's speech and language targets and support with appropriate interventions
- Use Makaton as it acts as a visual support for understanding, even after language skills have developed

MAKATON

Makaton is a communication programme that uses symbols, signs and speech to enable people to communicate. Many people with Down syndrome use Makaton to support their communication.

It supports the development of essential communication skills such as attention and listening, comprehension, memory and organisation of language and expression. Makaton helps to make language visual as it provides extra clues about what someone is saying.

Makaton allows learners to understand concepts and gives an alternative way for the learner to communicate their thoughts, feelings, needs and wants. It also offers an opportunity for the learner to show their understanding if their reading and writing skills are compromised. This can reduce frustration and promote inclusion and independence. It is very important for staff to attend Makaton training so they can support the learners communication and understand what the learners are signing.

STRENGTHS VISUAL AND LONG TERM MEMORY

Learners with Down syndrome are strong visual learners. Once they have acquired a skill, they have very good recall from their long term memory.

Supporting their learning with visuals helps to reinforce information and understanding. If they can see it or do it, then the learner is much more likely to retain the information.

Learners with Down syndrome work well with structure and consistent routines, this helps the learning of everyday procedures and important life skills.



SOCIAL SKILLS

People with Down syndrome enjoy social interactions and are usually good at getting their message across despite any language barriers they may have. With their great visual skills they are excellent at reading non-verbal communication and will observe and copy behaviour. Learners with Down syndrome won't always learn instinctively, their generalisation skills are poor and they may not transfer skills easily, most skills will need to be modelled and taught.

Things to consider:

- Learners with Down syndrome should be included in class as much as possible, participation helps them develop social skills, understand classroom routines, and build confidence, while also promoting a sense of belonging and inclusion
- Use positive role models for the learner to observe and copy
- Rules may need to be taught as learners may not instinctively know what is expected
- Create opportunities for social interactions with peers
- Consider play time arrangements, ensure the learner has opportunities to get actively involved with other learner's play. This may require some adult instigation, such as leading a game
- Learners with Down syndrome will be more vulnerable, as they may have limited awareness of risks such as stranger danger
- Learners may need more support at mealtimes to ensure they can cut up their food and choose healthy options
- Use an errorless learning approach and praise success, learners with Down syndrome often have a fear of failure and need motivating if they perceive a task to be a challenge

HEALTH ISSUES

Cardiac issues: Congenital heart disease (CHD) of various types complicates up to 50% of people with Down syndrome.

Respiratory issues: More vulnerable to having frequent respiratory infections, such as pneumonia.

Gastrointestinal issues: More prone to conditions that affect the stomach and digestive system.

Endocrine conditions: More prevalent among people with Down syndrome than the wider population. This includes hypothyroidism (an under-active thyroid), which may cause symptoms such as:

- Tiredness
- Slowing of growth
- Weight gain
- Constipation

Immune function: May experience an increased risk of infection, and these infections can be more difficult to treat.

Dental issues: Common in people with Down syndrome, may be more prone to gum disease. This includes differences in the development and structure of teeth, which can lead to differences in oral and dental health.

Cancers and blood disorders: higher risk of developing blood disorders, including leukaemia (blood cancer).

Feeding, diet, weight gain and growth: may experience challenges with growth and short stature. There is also a high prevalence of being overweight and of obesity among people with Down syndrome. This can be due to both environmental and biological factors.

Sleep: Many learners with Down syndrome have challenges sleeping.

Sensory issues: May have difficulties with sensory processing, such as:

- Hypersensitivity to noise and touch
- Seeking out sensory stimulation
- Engaging in repetitive behaviours

NUMERACY

- Numeracy is difficult for learners with Down syndrome as it is an abstract concept
- Difficulties with working memory and language processing make it more challenging to answer worded problems
- Concrete resources such as Numicon are critical to success as they attach a meaning to numbers
- Learners will find visual concepts such as graphs and shapes easier to understand as they are visual
- Pre number skills such as simple comparisons, matching and categorising can be taught from a very early age
- Learners need solid understanding of numbers before progressing to more complex numeracy skills. i.e. one to one correspondence, cardinality and recognising and knowing the value of numbers 0-10 before attempting basic addition and subtraction
- Number processes can be learned without understanding their meaning, so they should be taught in a practical way
- Money is a difficult concept and often uses numeracy skills, such as subtraction with double digits or decimal points, that are beyond the learners skills. Monetary value is hard to understand, so use real money and connect them to real-life prices
- Teach time using a digital clock, as this is most useful for life skills. Use digital time language even with an analogue clock. Focus on now and next, how long 20 minutes is, and use a calendar to show days, months, and years
- Use a calculator to check answers, as this is also a life skill
- Use resources designed for our learners like Numicon or Maths for Life

Maths For Life - A Differentiated Approach®

The Maths For Life programme provides a differentiated approach to the maths curriculum that lays down solid foundations, is framed in practical understanding, and delivers the essential maths needed for life.

Founder & Author - Karen McGuigan, Education Consultant.

NUMICON

The Numicon approach enables learners to see how numbers work by using:

Action, Imagery & Conversation...

Action: By handling shapes learners can imagine they are actually handling numbers

Imagery: Developing mental images supports mental calculation

Conversation: Encourages discussion that uses mathematical language

- Numicon promotes self esteem and confidence
- It is easier for the learner to see their own mistakes and self-correct
- It is easier for adults to understand what is causing difficulties by watching the learner make their mistakes, thus enabling you to correct and explain by demonstration
- The learner can demonstrate what they understand without having to use language



READING

Things to consider:

- Reading is generally a strength for learners with Down syndrome as reading makes language visual
- Reading can help develop speech, build vocabulary, and teach grammar and sentence structure
- Sight word, or whole word reading, is often a strength for learners with Down syndrome
- The **match, select and name strategy** should be used to introduce words and concepts. This can begin at an early age when a child understands approximately 50 words
- Applying phonics skills to decode words is more challenging because it requires recalling speech sounds and holding them in memory to blend together, which is difficult with poor working memory
- Learners should continue to be included in phonics lessons, as these also support speech production. While sight reading may develop first, learners typically apply their phonetic knowledge at a later stage as an additional strategy for decoding unfamiliar words
- Support comprehension at all stages as learners can learn to read a word without any knowledge of what it means. Comprehension may lag behind, using two books may be useful, one for reading and one for comprehension at the appropriate levels
- Learners who have no or little speech can develop their reading skills by using Makaton.

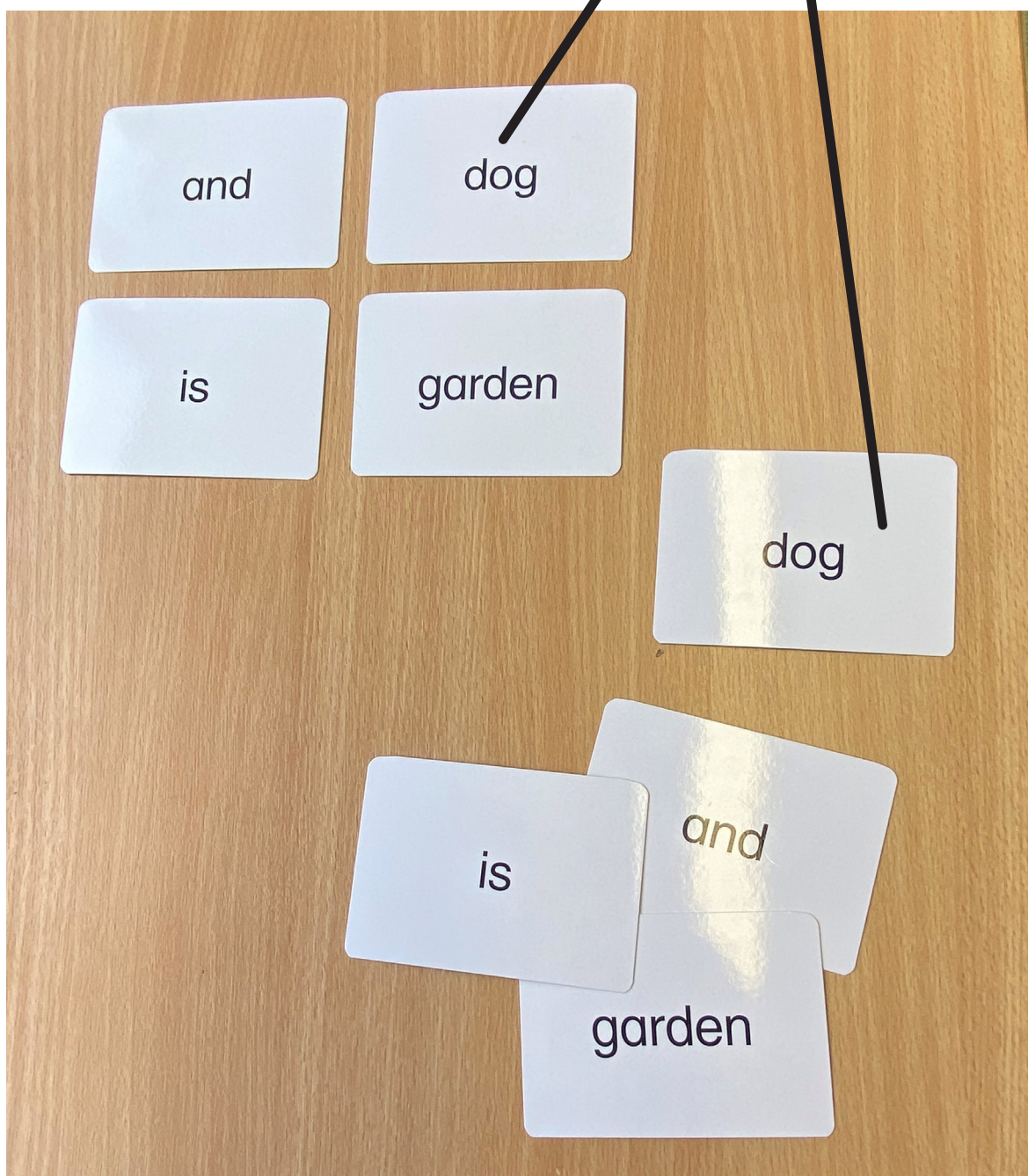


MATCH, SELECT AND NAME

MATCH Word to word

SELECT Finding dog out of the choice of words

NAME Reading (say or sign) each one



MATCH

- Matching is a good way of introducing new vocabulary
- Initially you may need to match picture to picture to ensure comprehension before moving on to matching word to word
- Choose four words for matching. If this is too challenging, start with two or three. Apply errorless learning by guiding the learner to the correct choice, helping them to succeed
- Refrain from asking which word/concept is the same. We need to repeat the word. *"Can you put dog with dog?"*

SELECT

- Children select the correct answer.
Ask, *"Which one says...?"* and have the child choose the correct answer from two or four options

NAME

- Once the learner is selecting the correct word accurately then you can move onto name
- *"What does this say?"* Learners could say or sign the word
- The learner may need additional processing time to recall the answer. Learners who are preverbal can use Makaton to demonstrate their understanding

TIPS:

- It is useful to have a box of words I know and words I am learning
- This strategy can be used to teach many concepts such as learning shapes, numbers and prepositions

BEHAVIOUR

Behaviour difficulties are not part of the specific learning profile for pupils with Down syndrome nor are there any behaviour problems unique to pupils with Down syndrome.

It is important to remember that all behaviour is a form of communication and behaviours are learnt.

Many unwanted behaviours will be related to a child's frustration in not being able to communicate their needs and wants and also related to their level of development. A learner may display behaviours if their needs are not being met, or if they are avoiding something they perceive to be a challenge.

Tips To Support Positive Behaviour:

- Refer back to learning profile often and think about the demands of the task
- Notice positive behaviour and comment on it. Learners with Down syndrome respond best to a lot of frequent praise
- Give immediate praise or small rewards for positive behaviour. They do not need to be big—what matters is noticing and reinforcing the behaviours we want to see repeated
- Tasks need to be motivating for the learner, appropriate for their development and short enough to maintain their focus.
- Give choices whenever possible. Shall we do this or this first? This gives the learner some control over what is happening to them
- Using visuals for instructions and learning activities will reduce demands on memory and avoid misunderstandings
- Teach replacement behaviours – What do we want the learner to do instead? If a learner displays a disruptive or harmful habit, we can teach them a more appropriate replacement behaviour instead; this is usually more successful than attempting to stop the behaviour altogether
- Ensure expected behaviour or rules are clearly understood by child; don't assume they understand or have remembered what to do

- Adults and peers should model positive and expected behaviours. Sitting learners with or near peers displaying appropriate behaviour allows them to copy and learn expected and age appropriate behaviours
- Use errorless learning when teaching new skills as this helps to reduce anxiety and promote confidence and success
- Working-for boards are an effective way to motivate learners during a task, as activities can be shortened or extended as needed depending on the learners engagement
- Now and Next boards help learners understand what is happening now and what will happen next, reducing anxiety and demand-avoidant behaviours
- Traffic light system will work well for transitioning between activities so learners know when an activity starts, when it is nearly finished and when it is time to move on
- Always end work sessions on a positive note as this helps build confidence and encourages learners to try again next time



BEHAVIOUR STRATEGY

INTERUPT, IGNORE, REDIRECT, REWARD

The recommended strategy for positively reinforcing behaviour is interrupt, ignore, redirect and reward.

1

INTERUPT

Do the minimum to manage the behaviour to prevent injury to others. Do not reprimand the person.

2

IGNORE

Ignore the behaviour, not the learner. Continue as if the behaviour has not taken place. Do not mention the behaviour in any way. Unwanted behaviour should not be rewarded with attention.

3

REDIRECT

Your message is "do this instead". Distract the learner by moving on to another activity. The unwanted behaviour has not been effective in gaining your attention.

4

REWARD

Behaviour is likely to happen again if it is rewarded. Reward positive behaviour with praise as it occurs.

WHAT TO DO NEXT

Ask what do we want the learner to do instead? Do you need to teach any skills to behave in a more appropriate way?

- Teach and practice replacement behaviours to help the learner respond to situations
- Use social stories to reinforce the behaviour you want to see. Do not include the unwanted behaviour, keep social stories positive
- Have a behaviour plan to teach peers and inform other staff how to react in a situation
- Give praise as soon as possible to encourage positive behaviour, recognise good listening, sitting, looking, or any other expected behaviours
- Be consistent with rewards and management strategies. These should be immediate rewards as the learner is unlikely to make the link otherwise
- Be prepared for an initial increase in the frequency of the behaviour, as the learner may try harder to gain attention. Consistency is essential, everyone must avoid giving attention for unwanted behaviour
- Continue to record the frequency of the behaviour. Even if it still seems frequent, records can show progress, so stay consistent with the plan
- Review the behaviour plan on a regular basis

For more information on promoting positive behaviour and paperwork to support a behaviour plan, go to the Down Syndrome Association's website page on understanding behaviour.

<https://www.downs-syndrome.org.uk/about-downs-syndrome/life-journey/understanding-behaviour/>

MAGIC BAG - MOTIVATORS

Sometimes our learners will finish their work quickly or just need to move on so it is a good idea to have a bag of resources to hand. Here are some suggestions of things to include:

- Plastic letters; option to have vowels in red and consonants in blue
- Post it's; you or the learner can write or draw on them and label things
- Dry white board and markers for copying an image from the board or drawing some Makaton symbols as a visual aid to reduce working memory demands
- Words I am learning or high frequency words
- Stickers and rewards, motivation is the key
- Spring loaded scissors to assist cutting
- Number line, 100 square, beads or counters on string
- Post box or feely bag, a task is more exciting if you can post it
- Bubbles for practising crossing the midline or counting
- Light scarf for slow throwing
- Speech sounds you are working on
- Dice for a counting game



