

SEMH & Learning Team

Supporting children with memory difficulties at home



Memory

Memory impacts a person's ability to perform almost any activity.

Memory is how knowledge is understood, stored and later remembered. Even mild memory difficulties can impact a child's ability. There are different kinds of memory, including working memory, auditory memory, and visual memory.

Working memory

Working memory is the ability to hold in mind and mentally manipulate information over short periods of time. It is a temporary storage system and is vital for many day to day tasks (e.g. following instructions, responding in conversations, listening and reading comprehension, organisation).

Analogy: Working Memory is much like a bucket that you can keep filling up using a glass of water. Every drop that you add remains in the bucket unless over time memory evaporates through lack of repeated use. In children with poor working memory it is much like the bucket has a hole in the bottom. You can keep tipping in glasses of water (information/knowledge) but it continually drains out.

Working memory is important for putting information that we are learning together with our current knowledge base (i.e. long-term memory).



It is crucial for academic performance as it is an important part of executive functioning (e.g. planning, initiating, task monitoring, organisation). Many of the learning activities that children are engaged with, whether related to reading, maths, science or other areas of the curriculum impose quite considerable burdens on working memory.



What you might see at home if your child has poor working memory:

- **well-adjusted socially**
- **behave as though they have not paid attention**
- poor attention span
- **forgetful of instructions or messages or not seeing a task through to completion**
- **can be easily distracted and can lose their place during a task/instruction**
- **have difficulties with reading** (e.g. struggle to keep track of their place when reading, struggle to use contextual cues to support word prediction when reading, find it hard to break down sounds in words then unable to blend the sounds into the word accurately)
- **show slow academic progress despite working really hard** (i.e. it's not a problem of effort just that they can't hold onto information long enough to manipulate and process it)
- **find it difficult to wait for their turn** (e.g. will interrupt or ask a question and then forget what to say when called upon)

What can I do at home to help?

Memory games exercise the brain, making it sharper and more alert. It can help improve concentration and focusing ability. Memory games enhance other brain functions, such as attention level, and reading and reasoning skills.

- **Structure the environment** - this helps to reduce the amount of working memory overload (break large goals into smaller ones, simplify information, chunk it, slow down the delivery of the pace of information. Use verbal and visual cues to support routines

- **Encourage children to create a picture in their mind of what they've just read or heard** - for example, say you've asked your child to set the table for five people. Get them to imagine the table and the faces of the people sitting there and then as they become more accomplished, they can describe the image rather than drawing it
- **Make tasks multisensory** - using as many senses (seeing, listening, touching etc.) as possible can help keep the information in mind long enough to use it. Consider writing tasks down so your child can look at them, say them out loud so your child can hear them and walk through the house as you discuss them
- **Play card games** - such as Uno and Go Fish which are excellent to help children improve their working memory. Alternatively, several games of memory can be played with a regular deck of cards
- **Play 'Memory Master'** - provide the child or young person with a picture. Give them 60 secs to memorise details of the picture. Then ask the questions involving remembering details such as colour, amounts etc.
- **Play 'Simon Says' or other instructional games, increase the instructions and see if they can remember them** - for example, "Sit down, put your hands on your head and blink three times..."
- **Say the alphabet backwards, write your full name backwards**



Websites and apps:

www.understood.org/en/school-learning/learning-at-home/homework-study-skills/8-working-memory-boosters

<https://childmind.org/article/how-to-help-kids-with-working-memory-issues/>

CogMed

Memory!

Monster Hunt



Auditory memory

Auditory memory is our 'listening memory'; the ability to take in information that is presented orally (out loud), process it, retain it and then remember it. Auditory memory can also require working memory.

What you might see at home if your child has poor auditory memory?

This is when a child has trouble remembering auditory (heard) information such as instructions, directions, lists, or their learning. It can be immediate ("I can't remember it now") and/or delayed ("I can't remember it when I need it for later").

What can I do at home to help?

- **Make sure your child is listening before giving any instructions** (facing you, good eye contact and not distracted)
- **Slow down the speed of your talking for your child, think 'steady'.**
- **Allow extra time for your child to respond, especially to a question** - think about counting to 5 in your head after you've spoken, to give them processing time
- **Use short, simple instructions and breakdown longer instructions**
- **If possible, use pictures or gestures when giving instructions**
- **Give written or picture lists to support memory** - such as if you're going shopping. You could ask your child to make this for/with you

- **If your child has not understood then repeat the instruction in shorter bits** - e.g. change “After you finish your dinner place it in the sink and wash your hands” to “finish your dinner (pause), place it in the sink (pause) go and wash your hands”
- **Give instructions in the order they should be done** - it can also help to number them onto your fingers and ask your child to copy you

Here are some great games that will help auditory memory and, hopefully, will be fun for all the family!

- **Treasure Hunt** - hide items around the home. Give your child instructions e.g. ‘walk to the kitchen, turn to the left, check under the bowl’. You can start with short, simple instructions and make the instructions harder as you go. This will help develop your child’s ability to follow instructions, which will definitely help in class
- **Shopping Lists** - children love playing shops! When playing, ask your child for a list of items. You could start with two e.g. ‘can I have a banana and an apple?’ Again, as your child progresses make the lists longer e.g. ‘can I have a banana, an apple, a tin of beans, chocolate and bread’. This helps children to listen to and recall instructions as they gather the items. This could progress to your child helping when you do go to a shop
- **Sentence Strings** - this game can be played anywhere. Start a sentence such as ‘I went to the zoo and I saw ... , my Grandma went to the market and bought...’ and then you and your child list items. This helps auditory memory and vocabulary development, so it is both a fun and useful game
- **‘Fetch me’** - give children simple jobs/ tasks beginning with one step and building up
- **Ask your child to recount (remember) their weekend/holiday/ evening/dinner/birthday etc.** - this is a good one for bedtime,

when they can talk about what they remember from their day. Encourage them to remember events in sequence if they can

- **‘Simon Says’** - beginning with 1 and building to 2 and more instructions when they are confident
- **Ask a child to ‘instruct’/teach you a simple task/activity, encouraging the correct sequence**
- **Sound chains** - clap/beat a simple rhythm and ask pupils to mirror this. Begin very simply with 1-2 sounds
- **Listening walks** - when you are out walking, ask your child to list to you what they can hear
- **Story time** - when you read a story to your child, after you have closed the book, ask them to tell you what they can remember
- **Can you...** - use a page from a colouring book, catalogue, comic or magazine and ask your child to follow your instructions; such as can you circle the TV, colour the dog red etc.
- **Chinese whispers** - tell your child a short message or sentence and then they must remember it and pass it on to someone else

Websites and apps:

www.twinkl.co.uk

www.learninggamesforkids.com

www.superduperinc.com

www.mentalup.co/memory-games

www.dreamenglishkids.com (This is a good website for using songs to remember basic concepts such as days, months etc)

The Auditory Memory Ride

Auditory Memory Club

Auditory Memory for Quick Stories

Visual memory

The term visual memory is quite self-explanatory.

We can recall something we've seen, including activities, pictures or words. It is one of the most basic ways we learn. We see something, and we learn from it. Visual memory has a big impact on learning. As much as 80 percent of what we learn is visual.

What you might see at home if your child has poor visual memory/ how does it affect learning?

Visual memory difficulties can impact on both reading and spelling ability. A child with poor visual memory will find it difficult to develop a good sight vocabulary as they have difficulty remembering the overall visual appearance of words. They may remember the letters but often cannot remember their order

Visual memory is also key to memorising maths facts.

Visual memory becomes increasingly important in subjects like geometry, algebra, and science, where you need to remember patterns, shapes and diagrams of multi-step processes.



What can I do at home to help?

- **Snap** - simple snap games require holding pictures in the short term memory and improving recognition/reaction times
- **Dobble** - players compete with each other to find the one matching symbol between two cards. It can be played with up to 8 players and there are lots of different versions available
- **Spot the difference, finish the picture, dot to dot, mazes, jigsaws, etc.** - many of these activities can be found in activity books available from newsagents
- **Play Matching Pairs** - start with 6-8 pairs of cards initially. The child turns over two cards at a time and tries to find the matching pairs. There are lots of these available commercially. Ravensburger Memory Games are inexpensive and durable and come in several themed variations but there are also printables online. Orchard Games make versions which help develop other literacy skills e.g. Slug in a Jug is a matching game which also supports rhyming skills. Online versions are also available
- **Kim's game** - place objects, letters, pictures, words on a tray (or table), show them to your child, cover them up and get them to name the objects. The number of objects can be increased depending on the age/memory capacity of the child. Alternatively, you can remove one, two, three etc. The child has to guess what has been removed
- **A variation is 'What moved?'** - a spot the difference type activity in which the child looks at an arrangement of items and after turning their back for a moment, looks again and says which item has been moved to a different position



Useful websites and apps:

<http://eyecanlearn.com/>

www.echalk.co.uk/amusements/Games/Simon/simon.html

www.ot-mom-learning-activities.com/visual-memory-activities.html#KidsStruggleVisualMemory

www.braincurls.com/mm/meadowMinesAdap.html

www.braincurls.com/butterflyMem/butterflyMems.html

Look again! Lite

Pick up Sticks Casual

Monster Hunt

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