

# INFOSHEET



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## Concussion aftercare: Working memory

Working memory is one of the brain's [executive functions](#). It is the ability to hold on to new information so we can turn around and use it. Working memory allows us to hold information without losing track of what we're doing. In some ways, working memory is like a temporary sticky note in our brain. It holds new information in place so the brain can work with it briefly and perhaps connect it with other information. ([Attention plays a big role in this process.](#))

Memory-boosting tricks and games are just some of the [ways to help your executive functioning issues](#). If you continue to have significant difficulties with working memory, it might be a good idea to get an [evaluation for possible attention issues](#). You may also want to explore [tips from experts](#) on topics like getting organised and managing attention.

Following a concussion, both working memory and attention can be affected. This is particularly an issue if you feel very tired. After a concussion, most people find that their memory returns to normal within a few weeks. In some people, memory may take a little longer to bounce back. If you are having ongoing issues with working memory, attempt the following activities by starting them slowly and minimising any background noise. They will help improve your working memory.

### Activity 1: Work on visualization skills.

Create a picture in your mind of what you've read or heard. For example, if you've been told to set the table for five people, come up with a mental picture of what the table should look like. Then set it that way.

### Activity 2: Teach someone something.

Being able to explain how to do something involves making sense of information and mentally filing it. If you are learning a skill, like how to dribble a basketball, try to teach it to your parent or friend. Teachers do something similar by pairing up students in class. This lets them start working with the information right away rather than waiting to be called on.

### Activity 3: Play games that use visual memory.

There are many matching games that can help you work on visual memory. You can read a magazine page and try to circle all instances of the word 'the' or the letter 'a' in one minute. You can also turn license plates into a game. Take turns with your parent or friend in the car reciting the letters and numbers on a license plate and then saying them backwards, too.

### Activity 4: Play cards.

Simple card games like Crazy Eights, Uno, Go Fish and War can improve working memory in two ways as you need to keep the rules of the game in mind, and also remember what cards you have and those others have played.

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### Activity 5: Active reading.

There's a reason highlighters and sticky notes are so popular! Jotting down notes and underlining or highlighting text can help keep the information in mind long enough to answer questions about it. Talking out loud and asking questions about the reading material can also help with this.

### Activity 6: Chunk information into smaller bites.

Ever wonder why phone numbers have hyphens in them? This is because it's easier to remember a few small groups of numbers than it is to remember one long string of numbers. Keep this in mind when you need to follow multi-step directions. Write them down or ask for them one at a time. You can also use [graphic organisers \(www.understood.org\)](http://www.understood.org) to help break writing assignments into smaller pieces.

### Activity 7: Make it multisensory.

Processing information in as many ways as possible can help with working memory and long-term memory. Write tasks down so you can look at them. Say them out loud so you hear them too. Toss a ball back and forth while you discuss the tasks you need to complete. Draw or carry out a task.

### Activity 8: Make connections.

Form associations that connect the different details that you are trying to remember. Find ways to connect information as this helps with forming and [retrieving long-term memory](#). It also helps with working memory, which is what we use to hold and compare new and old memories.

### Activity 9: Strategies for coping in the classroom.

- Ask for help: It is ok to ask for help or repetitions of information.
- Pair up with a friend: Ask to be paired up to share the load with instructions and completing tasks so you can get started straight away rather than wait for the teacher.
- Write/draw clues: write down verbal information or draw picture/take photos of important things you need to remember.
- Create a working memory folder of important information you can use at home or in the classroom to lessen the working memory load (eg: times tables, spelling rules, alphabet, numerical order 0-100 etc.)
- Stay calm: Learn self-calming strategies (eg. slow breathing, take a deep breath) when you are feeling overwhelmed or stressed. Stress and anxiety can significantly reduce working memory capacity.

### Take home points

- Working memory refers to how we hold on to and work with information stored in short-term memory.
- You use working memory to learn and follow directions.
- Working-memory boosters can be built into your daily life.
- Minimise your screen time and time on social media to limit distractions.