

Working Memory – Parent handout

Strategies to improve Working memory

1. Teach visualization skills.

Encourage your child to create a picture of what they have just read or heard. For example, if you've told them to set the table for five people, ask them to come up with a picture in their head of what the table should look like. Then have them draw that picture. As they get better at visualizing, they can start describing the image to you instead of drawing it.

2. Have your child teach you.

Being able to explain how to do something involves making sense of information and mentally filing it. If a child is learning a new skill, for instance how to dribble a football, ask them to teach it to you after it has been explained to him.

3. Play cards.

Simple card games like Crazy Eights, Uno, Go Fish and Happy Families improve working memory in two ways. Your child has to keep the rules of the game in mind, but also has to remember what cards they have and which ones other people have played.

4. Make up category games.

When words and ideas are put into categories, they're easier to remember. Playing games in which you name as many animals as you can think of can eventually lead to playing games with more complicated concepts. For example, you may ask your child to name as many clue words for addition as she can (such as "altogether," "total" and "plus").

5. Number your directions.

Beginning a sentence with words like, "I need you to do three things..." can help your child keep all of the different points in their head. You can do the same thing with other information, too, like shopping lists ("We need to buy these five items...").

6. Connect emotion to information.

Processing information in as many ways as possible can help your child to remember it. Help them to connect feelings to what they are trying to remember. For instance, if they are learning about how the pyramids in Ancient Egypt were built, ask them to think about what it would have felt like to have to climb to the top of a pyramid pulling a heavy stone in the hot sun.

7. Help make connections.

Connections are the relationship between things. Finding ways to connect what your child is trying to remember with things they already know can help them learn the new material. For instance, show them that the two times table is the same as doubling, so for instance $4 \times 2 = 8$ and $4 + 4 = 8$.

Other fun games to support memory development

Kim's game

Kim's game is used across a number of subjects, particularly modern foreign languages, to test children's memory. A selection of objects, numbers or words are displayed before the objects are covered up and children are asked which item has been removed. This can continue indefinitely with different combinations of objects.

Strategies to support this include memorizing an objects' position relative to other objects (e.g. the pin is next to a needle and both are found in a sewing basket), looking at initial sounds (e.g. there are 4 objects on the tray beginning with the letter p and 2 with the letter m), or making links between common features of objects (e.g. 3 objects are red).

Matching Pairs games

Many games can be bought ready made, or you can make your own. You need a selection of pictures/words/numbers on individual cards, with two copies of each. Turn them all face down in random order, then take turns to turn over a pair. If you find a pair you keep it, if they are not a matching pair return them to the same place. Play continues until all the pairs have been found. Start with a smaller number of pairs to find, and gradually build up. Pairs games can also be found online, for example on the cbcc and cbeebies websites, or on www.primarygames.com/puzzles/match_games.php There are also numerous free apps available to download for tablets.

I Packed My Suitcase...

I Packed My Suitcase is a classic memory game. The first player thinks of a word beginning with the letter "a" and then says, for example:

"I packed my suitcase with an apple"

The next player repeats the sentence and adds something beginning with "b", for example:

"I packed my suitcase with an apple and a banana".

The next player adds a word beginning with "c":

"I packed my suitcase with an apple, a banana and a canary."

Play continues until someone can't remember the list or makes a mistake. Depending on their age, you can either prompt them or disqualify them! Keep going until all players except one are disqualified, or until you reach the end of the alphabet.

Variations

If playing with young children, it helps to make the words as silly and colourful as possible - they are more likely to remember them!

If playing with older children, you can make the game even more difficult by choosing a noun and an adjective for each letter of the alphabet. For example,

"I packed my suitcase with an active antelope, a brown bear and a chilly chicken".

Variations - I went to the supermarket/I went on holiday/I went to school/I went to the moon

Story Telling

One way to remember the information you need to commit to long-term memory is to make up a story that "connects" the items or facts you need to remember, thus making them easier to recall. The idea here is that it's easier to remember more information when one fact or item connects to another.

While making up the story, create a strong mental image of what's happening. This helps to "connect" the data to an image and better cement it in your long-term memory.

It's fun to practice using this technique in a group. Practice by laying out 20 or more objects on the table and trying to remember them. Each member of the group takes his or her turn to add to the story by including another object.

If the first three objects are an apple, a key and a mobile phone, here's how the story might start:

Person 1: In the orchard, ripe apples were falling from the trees.

Person 2: But the gate to the orchard was locked and John had brought the wrong key.

Person 3: So he called Sue from his mobile phone to see if she could help....

Once all the objects have been included in the story, remove them all from the room. See who can remember the most items. Now tell the story again as a group, taking it in turns. The group will probably be able to remember the whole story and so recall all the items.

'Blind' Jigsaw Puzzles

Another fun and inexpensive way to give your concentration and memory a boost is a jigsaw puzzle. Playing it 'blind' means without referring back to the picture on the box!

First, look at a picture of the completed puzzle. Give yourself a few minutes to commit it to memory.

Next, mix up the pieces to the jigsaw puzzle.

Now, work to put it back together without looking at the picture of the completed puzzle again!

Trivia Quizzes

A great way to improve how well you recall information is to play trivia quizzes. Whilst you can easily purchase trivia quiz board games and books, you can also make up your own questions when you are playing in a group.

Each person submits a list of questions (and answers!) and then to 'quiz master' takes questions from each person's list in turn.

When you play with a new set of trivia questions, you rely on your recall of prior knowledge and experience to find the answers. If you play with the same questions in a few days or weeks later, you will also rely on memory of playing the game last time. Both new questions and re-runs are good for building you memory skills.

Strategies to support children with memory difficulties in daily activities

1. Simplify instructions as much as possible. Break instructions into small steps and number them
2. Use prompts such as 'now' and 'next' cards
3. Write instructions down
4. Ask the child to repeat an instruction back to you
5. Use visual reminders, such as drawings, photographs, or colourful pictures, for sequential tasks - visual timetables
6. Use visual prompts to support with homework, e.g. word lists, number lines, multiplication squares. This allows the children to focus on HOW to solve a problem and not get bogged down with remembering the facts needed to solve it
7. Try using acronyms to help remember key facts e.g. CFSS - 'always check for capital letters, full stops, spellings and sense in sentences.'
8. Encourage children to note down their own strategies for remembering spellings. See also separate handout on strategies to develop spellings.