



# Handy Handouts®

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Number 469

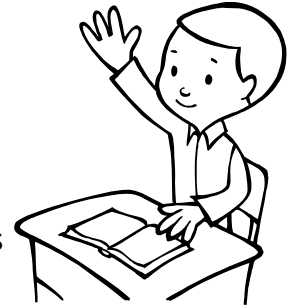


## Working Memory

by Kevin Stuckey, M.Ed., CCC-SLP

### What is Working Memory?

Working Memory is the ability to store information temporarily for immediate recall for a short time. This is important when children are trying to remember a story, complete math word problems, or follow multi-step directions, etc. We have two kinds of working memory: auditory memory and visual-spatial memory. Auditory memory records what we're hearing, while visual-spatial memory captures what we're seeing. Effective working memory is key to learning. Here are ways children learn using working memory.



### Working Memory and Accessing Information

Unlike short-term memory, working memory isn't stored for later use but accessed immediately—even while the addition of relevant information is taking place. Children with weak working memory skills have difficulty grabbing and holding on to complex, incoming information.

**Tip: Work on visualization skills.** - Encourage your child to practice creating a picture in his mind of what he just read or heard. For example, if you've told him to set the table for five people, ask him to make a mental picture of what the table should look like. Then, have him draw that picture. As he gets better at visualizing, he can describe the image to you instead of drawing it.

### Working Memory and Remembering Instructions

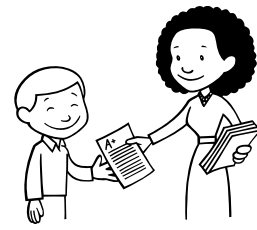
To perform an activity, children rely on both incoming information and information stored in working memory. This can make it challenging to follow multi-step directions. Children with weak working memory skills have difficulty keeping in mind what comes next, while they're doing what comes now.

**Tip: Have your child teach you.** Being able to explain how to do something involves making sense of information and mentally filing it. If your child is learning a skill, ask him to teach it to you or repeat the directions of the task. This gives the child an opportunity to practice the skill of remembering a sequence of steps while explaining each step, one at a time.

### Working Memory and Paying Attention

The part of the brain responsible for working memory is also responsible for maintaining focus and concentration. Working memory skills help children pay attention to what they

need to remember. Two examples are recalling facts from a presented story and following multi-step directions. Children use working memory to remember not only the sequence of events in the story but to remember and retain the relevant details. Children with weak working memory skills have trouble staying on task. With multi-step directions, children may remember the first or last direction but not the directions in between.



**Tip: Play Cards and Games** - Simple card games like Crazy Eights, Uno, and Go Fish can improve working memory in two ways: the child has to remember the cards he has, as well as keep the rules of the game in mind at the same time. Games such as Simon Says can also improve the skill of following directions.

## Working Memory and Learning to Read

Working memory is responsible for many of the skills children use to learn to read as they sound out words and begin to recognize words by sight. Auditory working memory helps children remember the sounds letters make as they sound out new words. Visual working memory helps children remember what those words look and sound like. When these skills are working effectively, children will not have to sound out every word, allowing them to read with less hesitation and, therefore, becoming more fluent readers.

**Tip: Suggest games that use visual memory** - Playing memory matching card games can help children work on visual memory. Other activities include using a magazine page and asking the child to circle all instances of a specific word in one minute. You can also use flash cards with words printed on them. Have the child take a moment and look at several word cards, and then turn them over and ask the child to recall the words printed on the cards.

"8 Working Memory Boosters" by Amanda Morin (2015) Retrieved 1-16-17 from:

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

"5 Ways Kids Use Working Memory to Learn" by Amanda Morin (2015) Retrieved 1-16-17 from [https://www.understood.org/en/](https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/5-ways-kids-use-working-memory-to-learn)

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*Webber Problem Solving Photo Lotto*

[Item #BGO-176](#)

*Big Vocabulary Nouns Photo Cards*

[Item #BIG-753](#)

*Webber Photo Cards Function Pair-Ups*

[Item #WFC-62](#)