## WORKING MEMORY: VISUOSPATIAL SKETCHPAD

## Worksheet

# WORKING MEMORY: VISUOSPATIAL SKETCHPAD <br> INTRODUCTION 

## Note for the administrator

## Principle of the task

Working memory refers to the brain's capacity for short-term abstraction and manipulation of information. It represents a fundamental neurocognitive process in various aspects of everyday functioning. Visuospatial sketchpad, a component of working memory, is primarily based on visual reception, manipulation and reproduction of seen information. In everyday life, for example, this involves perceiving that a seatmate in a car is sitting on the right side and wearing a yellow jacket. In contrast, the phonological loop stores heard information, e.g. what a seatmate says.

## Reasons for practice

Working memory contains thoughts which are made available to the mind just when they are needed to carry out a mental task or to solve a problem. The visuospatial sketchpad stores information that can be divided into separate visual, spatial, and possibly motor components, which are essentially represented in the right hemisphere. In a regular situation, one is able to recall even information only briefly seen thanks to the sketchpad.

## Information for the client

We use working memory in everyday situations without realising it. Have you ever been in a shop wondering what else you wanted to buy and could not remember? Or stopped in a room in your house and could not remember what you were going to get? Working memory training increases working memory capacity, which affects the level of storytelling, decision-making skills, the ability to think quickly and accurately, and organizational skills. Working memory training improves performance on tasks requiring attention and executive functions (planning, reasoning, etc.).

## Equipment

- Stationery
- Client Worksheet

■ Administrator Worksheet

Practiced cognitive skills
working memory
(visuospatial sketchpad), attention, executive functions

# WORKING MEMORY: <br> VISUOSPATIAL SKETCHPAD <br> TASKS 



1) Task
a)

Look carefully at the table of numbers. Notice especially which number is even and which is odd. After 30 seconds, I will cover the page and give you an empty table. In the table, write ANY odd numbers instead of even ones and the other way round. You are not allowed to make a note of the numbers.

## Practice:

Which of the two numbers 4 and 1 is even and which is odd?

Appendix 1/2
a)

b)

Look carefully at the table of numbers. Notice especially which number is even and which is odd. After 30 seconds, I will cover the page and give you an empty table. In the table, write ANY odd numbers instead of even ones and the other way round. You are not allowed to make a note of the numbers.

Appendix 2/2
b)

| 2 | 7 | 6 | 4 |
| :--- | :--- | :--- | :--- |
| 5 | 8 | 1 | 3 |

## 2) Task

a)

I will show you some pictures. For each picture, tell me what was in the picture you saw before the one just presented, i.e. one picture back.
b)

I will show you some pictures. If there is an animal in the picture, touch the picture. If there is none, do nothing.

$$
\begin{aligned}
& \text { Fh } \\
& \sqrt{H}=0 \\
& \text { \& } \pi
\end{aligned}
$$

Appendix 2/2

3) Task

There are pictures in the page in front of you. Your task is to look at these pictures for 30 seconds and memorize them. Then I will give you a sheet of paper. In the paper, circle the pictures that were on the previous sheet and cross out the ones that were not.

## Appendix 1/3



## Appendix 2/3:



Appendix 3/3: correct answers


## 4) Task

Try to remember all the pictures on the sheet. You have 30 seconds to do this, then I will hide the sheet and present you with another one. Your task is to show or name pictures that were not on the previous sheet.

Appendix 1/2


Appendix 2/2
Curniture

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REMEMBER TO REMEMBER

