## Multicultural Cognitive Ability Test - Higher Level

## MCT-H

You will take different tests. Some tests consist of figures, others consist of English words or sums. For each test there is a predefined amount of time. This differs per test. Most people cannot answer all the questions within the given time frame. Perhaps you are somewhat tense or nervous while taking the test. This is absolutely normal. There is no need to worry, almost everyone feels a bit nervous. The testleader will explain the purpose prior to the test. We provided some examples below to let you get used to the sort of questions that will be asked. Try to make these examples yourself. If you don't understand a question, you can perhaps ask for help from your friends or relatives. You can find the answers to these practice questions on the last page.

## Test: ARITHMETICAL SKILLS

This test contains a number of arithmetic problems. Four possible answers are shown for each question. Only one answer is correct.
Examples:

|  |  | a | $\mathbf{b}$ | $\mathbf{c}$ | $\mathbf{d}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1) | $27+\ldots=73$ | 25 | 46 | 36 | 47 |
| 2) | $0,6-0,04=\ldots$ | 0,02 | 0,064 | 0,56 | 0,056 |

The correct answer for example 1 ) is $b(46)$. The correct answer for example 2$)$ is $c(0,56)$.
Below are three more examples to practice.

|  |  | a | b | c | d |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 3) | $\ldots+\frac{1}{3}=\frac{5}{6}$ | $\frac{12}{18}$ | $\frac{3}{6}$ | $\frac{4}{3}$ | $\frac{4}{12}$ |
| 4) | $0,16 \times \ldots=0,064$ | 6 | 4 | 0,4 | 0,8 |
| 5) | $0,57: 0,03=\ldots$ | 18 | 1,8 | 19 | 0,6 |

## Test: COMPONENTS

All the items in this test have a figure on the left side. This figure is split up in 2 (or more) parts. There are 6 figures on the right side ( $a, b, c, d$, e and f). Two of these figures are created by fitting together the 2 (or more) pieces from the figure on the left. It is up to you to find these two figures.

Examples:


If you fit together the pieces of the shape on the left side, for example 1) you can make the figures $b$ and $f$ and for example 2) you can make the figures $a$ and $c$.
Below are two more examples.



## Test: RELATED WORDS

Each assignment of this test contains four words. Try to find two words that either mean roughly the same, or the complete opposite.

Examples:

1) a. quick
b. fast
c. wet
d. nice
2) a. nice
b. young
c. big
d. old

In example 1) the words quick and fast have roughly the same meaning. The answer is thus a and $b$. In example 2) the words young and old have the opposite meaning. The answer is thus b and d.

Below are three more examples to practice.
3) a. high
b. right
c. wide
d. low
4) a. run
b. win
c. lose
d. stop
5) a. big
b. small
c. heavy
d. funny

## Test: NUMBER SEQUENCES

This test comprises sequences (rows) of numbers (digits). Every sequence has been compiled according to a certain rule. This means that the sequence can be continued by applying the same rule. Try to work out which number should replace the question mark following the last number. Every question shows five possible answers. Only one of them is correct. To find the right number, you must first try to discover the rule (or principle) behind the sequence.
Examples:

| $1)$ |  |  |  |  | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{c}$ | $\mathbf{d}$ | $\mathbf{e}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2) | 1 | 3 | 5 | 7 | 9 | $?$ | 11 | 8 | 6 | 13 | 10 |
| 3 | 6 | 12 | 24 | 48 | $?$ | 62 | 96 | 84 | 76 | 72 |  |

The rule of the sequence in example 1) is that two has been added to the previous number (i.e.: $1+2=3 ; 3+2$ $=5,5+2=7,7+2=9,9+2=11$ ). So the right answer to practice question 1 ) is 11 .
In example 2) the rule is that every number is twice the amount of the previous number (i.e.: $6=2 \times 3 ; 12=2 \times 6$; $24=2 \times 12 ; 48=2 \times 24$ and $96=2 \times 48$ ). So the answer to example 2 ) is 96 .

|  |  |  |  |  |  | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{c}$ | $\mathbf{d}$ | $\mathbf{e}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3)$ | 3 | 6 | 9 | 12 | 15 | 18 | $?$ | 23 | 21 | 22 | 25 | 33 |
| $4)$ | 6 | 5 | 7 | 6 | 8 | 7 | $?$ | 6 | 8 | 7 | 5 | 9 |
| $5)$ | 4 | 3 | 8 | 7 | 16 | $?$ |  | 14 | 9 | 15 | 23 | 24 |

## Test: WORD ANALOGIES

The following questions show three words followed by a question mark. Between the first and the second word there is a special link or relationship. A similar relationship exists between the third word and one of the five words below. Take a look at the following examples.
Examples:

1) $\quad$ arm - hand = leg - ?
a. foot
dark - light $=$ wet - ?
a. rain b. head
c. ankle
d. arm
e. leg
2) dark - light = wet - ?

In example 1) the relationship or link between arm and hand is the same as the relationship between leg and foot; a hand is connected to an arm and a foot is connected to a leg. Therefore foot is the right answer. In example 2) the link between dark and light is the same as the relationship between wet and dry; dark is the opposite of light and wet is the opposite of dry. Therefore dry is the right answer.
Below are three more examples to practice.
3) sea - water = land - ?
a. fire b. sky
c. soil
d. wind
e. city
4) airplane - airport $=$ train - ?
a. motorway b. shed
c. garage
d. station
e. runway
5) to receive - to give = to buy - ?
a. to take
b. to walk
c. to call
d. to pull
e. to sell

## Test: EXCLUSION

Every question in this test contains five shapes. Four of these shapes belong together and one does not. Try to find the shape that does not belong with the rest.
Examples:
1)

2)


In example 1) the link is the size of the figures. The size of figure $b$ is not the same as the other figures ( $a, c, d$ and $e)$. the figures $a, c, d$ and $e$ belong together because they are the same size. Figure $b$ does not belong to the other figures because the size is not the same as the other figures. The correct answer to example 1 ) is $b$, because figure b is a big square and the other four figures are smaller squares.
In example 2) the link is the shape of the figures. The shape of figure c (circle) is not the same as the shape of the other figures (rectangular). Figures a, b, d and e belong together because they are all rectangles. Figure c does not belong to the other figures because it is circle shaped. The correct answer to example 2 ) is c , because figure c is a circle and the other four figures are rectangles.

c
d e

5)


CORRECT ANSWERS PRACTICE QUESTIONS:
Arithmetical skills: 3) b, 4) c, 5) c; Components: 3) band e, 4) e and f; Related words: 3) a and d, 4) band c, 5) a and c; Number sequences: 3) b, 4) e, 5) c; Word analogies: 3) c, 4) d, 5) e; Exclusion: 3) e, 4) b, 5) d

