

# **N-back task**

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In this task, you will hear a sequence of letters presented one after another:

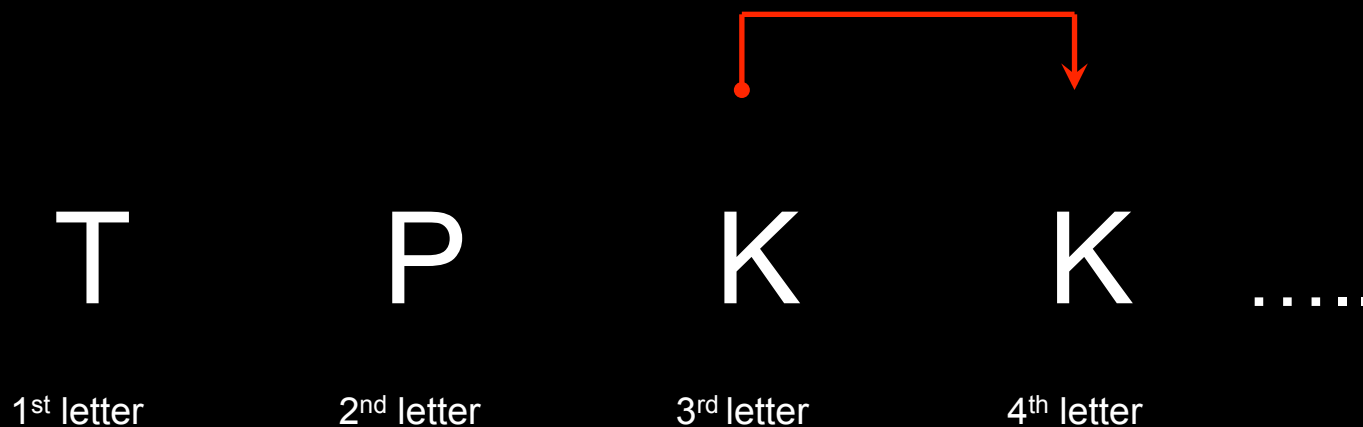
T                      K                      P                      K                      .....

1<sup>st</sup> letter                      2<sup>nd</sup> letter                      3<sup>rd</sup> letter                      4<sup>th</sup> letter

The presentation rate is quite fast; there is a new letter every 3 seconds.

Press enter to proceed to the next slide

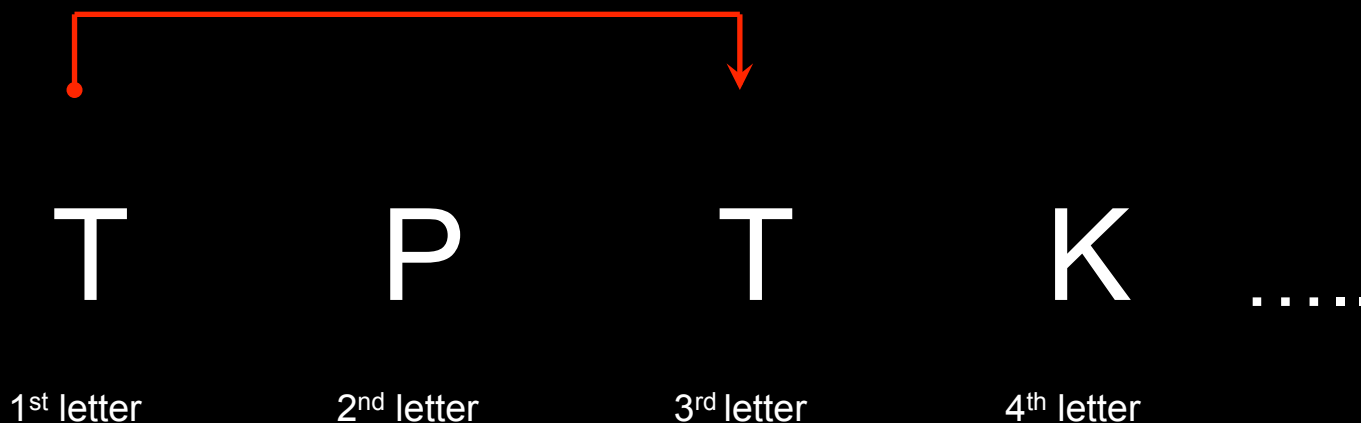
If you are asked to do a **1-back**, you have to press the key „L“ each time the current letter is the same as the one presented just before. Otherwise, do not respond:



Here, you have to **press „L“**, because the letter is the same as the one just before.

Press enter to proceed to the next slide

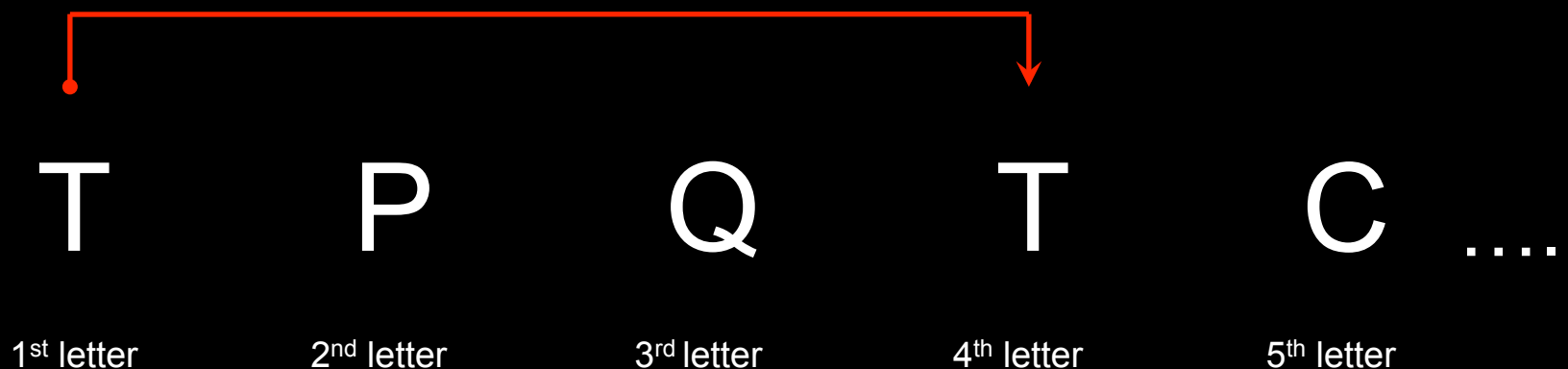
If you are asked to do a **2-back**, you have to press the key „L“ each time the current letter is the same as the one that was presented before last (i.e. 2 positions back in the sequence). Otherwise, do not respond:



Here, you have to **press** „L“, because the letter is the same as the one **before last**.

Press enter to proceed to the next slide

If you are asked to do a **3-back**, you have to press „L“ every time the current letter is the same as the one presented 3 positions back in the sequence. Otherwise, do not respond:



Here, you have to **press „L“**, because the letter is the same as the one **three** positions back in the sequence.

Press enter to proceed to the next slide

As you have probably noticed, the task gets harder the higher the number is.

The training will be adaptive, that is:

If your performance is 90% or above in one particular round, the level of the next round will be increased by one. If your performance is 70% or below in one particular round, the level of the next round will be decreased by one. Otherwise, the next level will stay the same.

You will get feedback concerning your performance after each round, followed by the instructions for the next round.