1) **LEARNING** (immediate memory)…# trials to the criteria of 2 correct repetitions of memory items

“I’m going to give you three things to remember. Repeat them after me, and don’t forget them, because I’ll ask you to say them again later.” Give 3 paired items…e.g. red ball, white horse, gold key…and have the patient repeat them after you’re done. If the patient repeats them perfectly on the first attempt, have them say it one more. If they miss one or more items, give the 3 items again. Keep track of how many times you have to repeat the items before the patient says them a total of two times (not necessarily consecutively) without error or examiner prompting. If a 5th statement is required, have the patient repeat after each one of the paired items is given; on the other repetitions try to say all 3 of them before the patient repeats.

**SCORING (max 3 points):**

1 or 2 examiner statements of the items……………..0 points
3 times……………………………………………….1 points
4 times……………………………………………….2 points
Whether the pt succeeds on the 5th trial or not, score 3 points and move on

**LEARNING SCORE___________________________________**

2) **TEMPORAL ORIENTATION**

“Tell me today’s date, including the month and year.” You may prompt the pt if they omit part of the date. If it’s the first day of a new month and the pt gives the last day of the preceding month, or vice versa, score 0. Patients are allowed to self-correct. If the patient makes an alliterative error…e.g. gives the year as “202” instead of “2002,” or gives the previous year, you may repeat the patient’s erroneous response with a questioning voice, and if they self-correct to the correct year score as 0.

**SCORING (max 6 points) (each item...date, month, and year scored separately):**

Within 1 day of exact date……………………..0 points
2 or more days away from the date…………………...1 point
Incorrect month given (except if 1st or last day of month and pt is one day off (e.g. says June 1 for May 31 or June 30 for July 1) ………………………… additional 2 points
Incorrect year given……………………… additional 3 points

**TEMPORAL ORIENTATION SCORE___________________**

3) **VERBAL FLUENCY**

“I’m going to give you one minute, and I want you to tell me as many animals as you can think of. Basically anything that is alive and moves counts as an animal.” Write down the animals on the score sheet as the patient gives them. Put check marks by an animal name each time the patient repeats it. Use a stopwatch or second hand, and note the time the patient says the first animal as the beginning of the minute time period. It’s best to actually write down the time, e.g. :23, as otherwise there’s a tendency to forget exactly when you started. If the patient stops or is distracted prior to the minute being up, you may prompt by stating, “Keep going.” You may prompt the patient by repeating the task instructions if they pause. Count repetitions only if the pt does not self-correct, e.g. if they start off “cat, dog, horse, cow…(pause)...I said cat” that doesn’t count.

**SCORING (max 6 points):**

14 or more animals…………………………...0 points
10-13 animals………………………………. 1 point
6-9 animals…………………………………. 2 points
3-5 animals………………………………… 3 points
0-2 animals (or pt can’t understand the task). 4 points

2-3 uncorrected repeats…………additional 1 point
More than 3 repeats…………additional 2 points

**FLUENCY SCORE_________________**

**REPETITION SCORE_________________**

4) **UNCUED RECALL**

“What were the things I told you to remember.”

**SCORING (max 6 points):**

Recalls all 6 items …………………….0 points
Recalls 5/6 items ………………….. 1 point
Recalls 4/6 items ………………….. 2 points
Recalls 3/6 items ………………….. 3 points
Recalls 2/6 items ………………….. 4 points
Recalls 1 item …………………… 5 points
Recalls 0 items …………………… 6 points

**NOTE:** If pt gets the items mixed up…e.g. says “red horse” instead of “white horse”…score ½ point for each partially remembered correct item. So if the recall is “white ball, red key, gold horse” the score would be 3 points total.

**RECALL SCORE________________________________**

**FINAL SCORE (sum of scores from 1-4 above)_______________**

**Interpretation:**

0-2 Normal     3-4 Mild Cognitive Impairment vs early AD      5-8 Mild 9-14 moderate, >14 severe