

Gertrude Gettinger

Mini-Mental State Examination (MMSE)^{1,2*}

Make the patient comfortable and establish rapport. Ask questions in the order listed. Total possible score is 30.

03/27/07

Maximum Score Score

- ORIENTATION**
- 5 (5) 1. "What is the (year) (season) (date) (day) (month)?"
 - 5 (5) 2. "Where are we?" (state) (county) (town or city) (hospital) (floor).

- REGISTRATION**
- 3 (3) Ask the patient if you may test his/her memory. Then say the names of 3 unrelated objects, clearly and slowly, about one second for each (eg, "apple," "table," "penny"). After you have said all 3, ask him/her to repeat them. This first repetition determines the score (0-3), but keep saying them until he/she can repeat all 3, up to 6 trials.

- ATTENTION AND CALCULATION**
- 5 (3) Ask the patient to begin with 100 and count backwards by 7. Stop after 5 subtractions (93, 86, 79, 72, 65). Score the total number of correct answers. If the patient cannot or will not perform the serial 7s task, ask him/her to spell the word "WORLD" backwards. The score is the number of letters in the correct order (eg, DLROW = 5, DLRW = 4; DLORW, DLW = 3; OW = 2; DRLWO = 1).

- RECALL**
- 3 (3) Ask the patient to recall the 3 items repeated above (eg, "apple," "table," "penny").

- LANGUAGE**
- 2 (2) **Naming:** Show the patient a wristwatch and ask him/her what it is. Repeat for pencil.

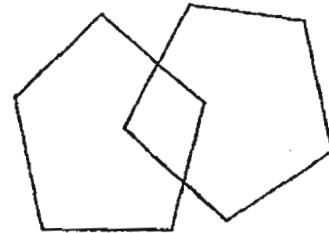
- 1 (1) **Repetition:** Ask the patient to repeat the phrase "No ifs, ands, or buts" after you.

- 3 (3) **3-Stage Command:** Give the patient a piece of blank paper and ask him/her to "take a piece of paper in your right hand, fold it in half, put it on the floor." Score 1 point for each part correctly executed.

- 1 (1) **Reading:** On a blank piece of paper, print the sentence "CLOSE YOUR EYES" in letters large enough for the patient to see clearly. Ask him/her to read it and do what it says. Score 1 point only if he/she actually closes his/her eyes.

- 1 (1) **Writing:** Give the patient a blank piece of paper and ask him/her to write a sentence. Do not dictate a sentence, it is to be written spontaneously. It must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary.

- 1 (1) **Copying:** Ask the patient to copy the figure of intersecting pentagons exactly as it is. All 10 angles must be present and 2 must intersect to form a 4-sided figure to score 1 point. Tremor and rotation are ignored.



Maximum Total Score	Total Score	Suggested guideline for determining the severity of cognitive impairment:
30	(28)	Mild: MMSE ≥ 21 Moderate: MMSE 10-20 Severe: MMSE ≤ 9
Expected decline in MMSE scores in untreated mild to moderate Alzheimer's patient is 2 to 4 points per year. ^{1,4}		

* Adapted from Folstein et al¹ and Cockrell and Folstein² © 1975, 1998 Mini Mental LLC. Used with permission

References: 1. Folstein MF, Folstein SE, McHugh PR "Mini-Mental State": a practical method for grading the cognitive state of patients for the clinician *J Psychiatr Res* 12:129-138 1975. 2. Cockrell JR, Folstein MF Mini-Mental State Examination (MMSE). *Psychopharm Bull* 1980;24:689-692. 3. Becker JT, Huff FJ, Nebes RD, Holland A, Boller E Neuropsychological function in Alzheimer's disease: pattern of impairment and rates of progression *Arch Neurol* 1988;45:263-269 4. Mortimer JA, Ebbitt B, Jun S-P, Finch MD Predictors of cognitive and functional progression in patients with probable Alzheimer's disease *Neurology* 1992;42:1689-1696