

MINI-MENTAL STATE EXAMINATION

Examination and Scoring Guide

Directions for Administration:

- The following equipment/items are required to administer the exam:
 - Mini Mental State Examination
 - A Watch
 - A Pencil
 - "CLOSE YOUR EYES" & Intersecting Pentagon Sheet (Print on cardstock or laminate for best use)
 - Extra piece of paper
- Each question and/or task can be repeated up to three (3) times, unless otherwise noted on the exam form.
- If the participant asks you to repeat a question, do not explain or engage in conversation. Merely repeat the question and/or the directions.
- If the participant answers incorrectly, accept the answer. Do not ask the question again, hint or provide any physical clues such as head shaking, etc.

Orientation to Time (Questions 1-5)

Read each question and record responses. One point is given for each correct response.

1. If the participant gives only the last two digits of the year, prompt by saying, "**What is the full year?**"
2. Some leeway is allowed for the correct response to season:
Winter: December, January, February, March
Spring: March, April, May, June
Summer: June, July, August, September
Fall/Autumn: September, October, November, December
3. If the month has just changed (or is about to change), it is correct to say either month (i.e., it is within one "day" of the correct month)
4. If the participant gives the date when prompted for the day, give credit for date (item 5) if the response is correct, and say: "**Good, and what day of the week is it?**"
5. The month and day are sufficient as the participant provided the year in Question 1.

Orientation to Place (Questions 6-10)

Read each question and record response. One point is given for each correct response.

6. Any version of United States of America, America, United States, US, USA, etc. is acceptable
7. Correct answer only – score for accuracy based on the location of the assessment.
8. Correct answer only – nearby cities or towns are to be considered incorrect.
9. If a generic or vague response is given (e.g., hospital), the examiner should prompt for a more detailed response, e.g., **“Can you tell me a more specific name for this place?”**
10. If at home, ask what room you are in at the time of the exam (kitchen, dining room, etc) An alternative question for home visits would be, **“Is this a one- or two-story house?”**

“Are we on the ground floor or higher floor of this building?” can be asked in the clinic, multi- level nursing home or long-term care facilities.

Registration (Questions 11-13):

Explain the rules as follows:

**“I am going to name three objects. After I have said all three words, I want you to repeat them all back to me.
Ready? Repeat these words after me: Apple, Penny, Table.
Please try to remember what they are, because I am going to ask you to name them again in a few minutes.”**

Score one point for each word repeated correctly on the first attempt. If the participant is unable to recall all three words, give 2 more trials until he/she correctly names all three.

If after 3 attempts (initial exposure plus 2 additional trials) the participant is unable to correctly repeat all 3 words, move on to the next question.

****In this case, items 24-26 (Recall) should not be asked and would be scored as “not attempted/refused.”**

Attention and Concentration (Questions 14-18):

Say: **"How do you spell the word, WORLD?"**

If the participant is unable to spell "WORLD" forward, prompt with **"It is spelled W-O-R-L-D"**.

Coach only once, then continue with the second part of the question, even if the performance in spelling forward is not perfect.

Ask the participant: **"How would you spell it backwards?"**

Score one point for each letter given in correct order. Allow additional attempts, if requested. If a letter is omitted, score a point for all letters in correct order.

Example: DROW would have 4 letters correctly placed. (L was skipped.) Subtract 1 point for each extra letter (i.e., over 5) provided. Example DLROWD would be scored as 4 correct, because an extra letter was added. Refer to the WORLD scoring sheet for specific scoring examples.

Naming (Questions 19-20):

19. Point to a pencil. Say: **"What is this called?"** Record whether response is correct or not.

20. Point to a wristwatch. SAY, **"What is this called?"** Record whether response is correct or not.

If the participant gives a function for either question (e.g., you write with it; you tell time with it), say: **"Yes, but what is it called?"**

Repetition (Question 21):

21. Say: **"Repeat this phrase after me: No ifs, ands, or buts."**

Record whether the participant correctly repeats the phrase. One point is given for an exact repetition of the phrase.

Writing (Question 22):

22. Give the participant a pencil and a blank piece of paper and have the participant write a sentence of his or her choice.

Say: **"Please write any complete sentence you can think of on this paper."**

Correct grammar, spelling, and punctuation are not necessary; score correct if the sentence contains a subject and a verb. Note dominant hand used.

If needed, prompt by saying: **"Write a sentence about the weather"**.

Score 1 point if the participant is able to write a complete sentence (even if not about the weather). A sentence with an implied subject (e.g., "close the door") is acceptable. If the sentence is illegible, asked the participant to read it aloud for scoring.

Drawing (Question 23):

23. Give the participant a pencil, a piece of paper, and the example card with the overlapping pentagons. The card should be oriented in the same direction as the drawing shown on the MMSE form.

Say: **"Here is a drawing. Please copy the drawing on this piece of paper."**

Allow 1 minute for copying. Note dominant hand used for the drawing task.

Score 1 if all sides and angles are preserved and two five-sided figures intersect to form a four-sided figure. Ignore tremor, rotation, minor gaps, and self-correction.

Recall (Questions 24-26):

Say: **"Now, what were those three objects I asked you to remember?"**

Score 1 point for each word that were correctly recalled. No hints are given.

Comprehension (Questions 27-29):

*Recall dominant hand used for the drawing task.

Say: **"Listen carefully, because I'm going to ask you to do something."** Hold up a piece of paper in plain view of the participant but out of reach.

"Take this paper in your <non-dominant > hand (pause), fold it in half (pause), and put it on the floor"

Substitute **"Hand it back to me,"** if the participant is disabled or bed-bound or otherwise unable to reach the floor.

After saying the entire command, hold the paper within reach of the participant (but not in favor of either hand). Do not repeat any individual part of the command. One repetition is permitted at the participant's request, but the entire command must be repeated verbatim. If the participant reaches for the paper immediately after hearing the first portion of the command, move your hand away so that the paper is out of reach and continue to state the next two parts of the command without interruption.

27. Score 1 point if the participant takes paper in non-dominant hand.
28. Score 1 point if the participant folds the paper in half.
29. Score 1 point if the participant places the paper on the floor.

Reading (Question 30):

30. Display example card containing the sentence command 'CLOSE YOUR EYES'.

Say: **"Please read this sentence out loud and then do what it says."**

The participant can be reminded not just to read a sentence, but to perform the action. If the participant is unable to read, read the sentence out loud.

Score 1 point only if the participant closes his/her eyes.

Scoring (Questions 31-32)

The score is calculated as follows:

- One point is scored for each correct answer
- Zero points are scored for Incorrect or “don't know” responses
 - Items that were not attempted or refused due to task difficulty (i.e., due to cognitive impairment); these should be marked as “incorrect.”
 - Items that are not attempted/refused due to any reason other than cognitive impairment (e.g., vision or hearing problems, language or educational barriers, etc) are marked as “not attempted/refused”.
- Add all of the points and enter the total.
- Count the number of questions that were “not attempted/refused” and enter the total.
 - If none, enter N/A or 0
- Subtract the total of “not attempted/refused” from the “total test score” to determine the adjusted score.

Adjusting Scores:

- It is important to score the test as fairly as possible for everyone. Participants who have physical, non-cognitive disabilities, or educational/language barriers should not score lower just because they are physically unable to perform certain tasks.
- For questions that were not attempted or refused due to non-cognitive disabilities, you will need to adjust/prorate their scores:
 - Take the adjusted score, multiple by 30, then divide by the participant’s maximum obtainable score (the total points that a participant can physically complete is the maximum obtainable score).
 - Example:
 - Due to blindness, the participant is unable to read “Close your eyes”, write a sentence, or copy the two five-sided figures. You would “not attempt” or omit questions 22, 23, and 30 from the MME. Therefore, the maximum obtainable score for the participant would be 27, instead of 30.
 - The participant’s total score is 15. Multiply 15×30 and Divide by 27. $15 \times 30 / 27 = 16.66$. Round up to 17. The participant’s adjusted score would be 17.

Interpretation of Results:

Score	Degree of Impairment
25-30	Normal
24-21	Mild Cognitive Impairment
20-10	Moderate Cognitive Impairment
9-0	Severe Cognitive Impairment

Resources:

ARIC Neurocognitive Battery and Summary Form

ARIC Mini Mental Status Exam

Cognitive Impairment – Recognition, Diagnosis and Management in Primary Care:

Standardized Mini-Mental State Examination (2014)

Standardized Mini-Mental State Examination – Guidelines for administration and scoring instructions. Dr. D. William Molloy (2014)