

## **Lea Crowded Symbols Visual Acuity Test (Nurse Screener at 10 Feet)**

### ***What Are You Testing?***

Visual acuity testing tests how well the child sees small objects far away. For this test, the distance between the child and the object is 10 feet (3 meters).

### ***What You Need to Do the Test:***

1. The Lea Crowded Symbols Cards. Each card contains a line of 4 symbols (combinations of an apple, house, circle, and square) surrounded by a black crowding border (a line that forms a rectangle around the 4 symbols). Two sets of Lea Crowded Symbols cards will be used for screening. One set is for 3-year-olds and one set is for 4- and 5-year olds. Each set of cards has separate cards for the right and left eye, so children don't memorize the order of symbols.
2. A lap card that has each of the four symbols on it.
3. Single, large symbols (one each of the apple, house, circle, and square) for pre-training.
4. A card with 10/100 symbols (one each of the apple, house, circle, and square) surrounded by crowding bars.
5. Junior size eye patches (for example, Opticlude patches), or a gauze patch covered with micropore tape to occlude vision in the eye that is not being tested.
6. A hand-held mirror.
7. Two marks on the wall, 10 feet apart and at the same height. One mark indicates the location of the child's eyes and one mark indicates the location of the test card.
8. A data sheet and pen.

### ***Getting Ready:***

1. Turn the lamp on. Aim the lamp so it evenly lights the cards during testing.
2. Select the set of cards that is appropriate for the age of the child to be tested. The age of the child should be determined by viewing the age printed on the data sheet.

***How You Do the Test:***

1. If the child is wearing glasses, remove them prior to testing.
2. Position the child 10 feet from where the cards will be presented. Make sure the child's eyes are lined up with the mark on the wall. The child may sit or stand.
3. Show the child the Lea lap card either by giving it to him to hold or by showing him where the lap card is displayed. The symbols should be right side up as the child is looking at them.
4. Pre-train the child binocularly (using both eyes) to practice identification of the symbols and find out whether the child is able to perform the test.
5. Hold the single symbols about 3 feet (1 meter) from the child. Point to a symbol and ask the child to name or point to the matching symbol on the lap card. If the child uses the lapcard to identify the symbols, tell him/her to "touch" the symbol. Continue this procedure until all four symbols have been correctly named or matched. If the child cannot do the task by matching or naming, score the child as "Unable" on the score sheet.
6. Point to the child's left eye and tell the child to close that eye. Then cover the left eye with an eye patch.
7. If you have difficulty getting the child to wear the patch, you may hold the hand-held mirror in front of the child so that the child can admire himself/herself with the patch on. This may help to improve behavior and testability.
8. If the child refuses to wear the patch, the child may occlude his eye with the palm of his hand. The examiner must monitor the child carefully to make sure he/she is not peeking and that the palm is not pressing against the child's eye. Covering the eye with fingers is not allowed because peeking is too easy with only fingers in front of the eye.
9. Check the position of the child for testing. The child's eyes will need to be at the same height as the cards when held by the tester. It is important for the child to be able to look straight ahead at the cards and not be off to the side or lower than the cards.
10. Read the child's age from the VIP nametag.
11. Pick up the 10/100 card and the set of cards that corresponds to the child's age (3 dots on the set for 3-year-olds, 4 dots on the set for 4- and 5-year-olds) and move to the location (10 feet from the child) where the Lea cards will be presented.

12. Point to the first symbol on the 10/100 card. Use the top of a pen or a single finger to point to each symbol from below. **BE CAREFUL NOT TO TOUCH OR COVER THE CROWDING BAR.** Have the child name or match the symbol. Continue testing the next symbols as noted below:

- If the child correctly identifies the first 3 symbols, continue testing with the next card.
- If the child gets 2 of the 4 symbols wrong, stop the testing for that eye. Testing may stop as soon as there are two wrong symbols.
- If the child correctly identifies 2 of the first 3 symbols, ask the child to name or match the 4<sup>th</sup> symbol. If the child correctly identifies the 4<sup>th</sup> symbol (3 correct out of 4), continue testing with the next card.

**NOTE:** Simply stated, the above rules translate to “Continue to the next card if the child gets 3 out of 3 or 3 out of 4 correct.”

13. If the child gets 3 correct on the 10/100 card, go the test book for that child’s age. Begin testing with card 3R1 for 3-year-olds and with Card 4R1 for 4- and 5-year olds.

14. Continue testing with each successive card until a child gets 2 symbols wrong on a card or completes testing on both cards.

15. The child should be asked to use matching with the lap card if he/she responds with a symbol that is not one of the 4 on the chart.

16. If the examiner notices that a child gives a response while not paying attention to the VA task, that response should be ignored. The examiner should re-focus the child’s attention on the task and continue testing.

17. Provide positive comments about the child’s performance, regardless of whether the child identifies the symbol correctly or incorrectly.

18. After testing of the right eye has been completed, circle the number of the last card on which the child named or matched 3 symbols correctly. **Do not close the test booklet until you have circled the number.**

19. Remove the eye patch from the left eye and throw it away. Begin testing of the left eye by covering the right eye with a new patch. Repeat the testing procedure on the left eye by starting with the 10/100 card.

20. If the child gets 3 correct on the 10/100 card, go to the test book for that child’s age. Begin testing with card 3L1 for 3-year-olds and with card 4L1 for 4- and 5-year olds.

21. Continue testing with each successive card until a child gets 2 symbols wrong on a card or completes testing on both cards.
22. After testing of the left eye has been completed, circle the number of the last card on which the child named or matched 3 symbols correctly. **Do no close the test booklet until you have circled the number.**

***What You Tell the Child:***

1. Urge the child to keep naming or matching the symbols even if the child must guess.
2. Remind the child to stay in the same position and look straight ahead at the Lea card.
3. Encourage the child by saying “Good job!” even if the child names or matches the symbols incorrectly.

***What You Write Down:***

1. Indicate “Able” or “Unable” for the Lea Pretest.
2. Circle the result for the right eye in the column marked R and for the left eye in the column marked L. If the child’s age is 3, circle the results in the left column. If the child’s age is 4 or 5, record the results in the right column on the data sheet.
3. Indicate the best acuity value (e.g., 100, 32, 25, 20) for which the child correctly named or matched at least 3 of the 4 symbols.
  - a. If the child is 3, circle Unable, 10/100, 3R1, or 3R2 for the right eye and Unable, 10/100, 3L1 or 3L2 for the left eye.
  - b. If the child is 4 or 5, circle Unable, 10/100, 4R1, or 4R2 for the right eye and Unable, 10/100, 4L1, or 4L2 for the left eye.
4. If the test is interrupted or incomplete after the child completes the Pretest, check the incomplete box in the column that indicates for which eye the testing was incomplete. Check both boxes if both eyes are incomplete. Remember to indicate the best acuity value for the last symbol size that was successfully completed (3 of 4 symbols correctly identified).

***Remember!***

1. Maintain the distance during the test.

2. Make sure the eye patch or child's palm completely covers the child's eye (don't let the child peek).
3. Keep urging the child to name or match each symbol.
4. No more than one acuity value for each eye should be marked with an "X."
5. **Do not close the test booklet until you have written down the acuity result.**
6. Three out of 3 or 3 out of 4 correctly identified symbols are required to move onto the next level of the test.
7. **Do not tell the child he/she gave the wrong answer. Say "Good job!" no matter what the child answers.**