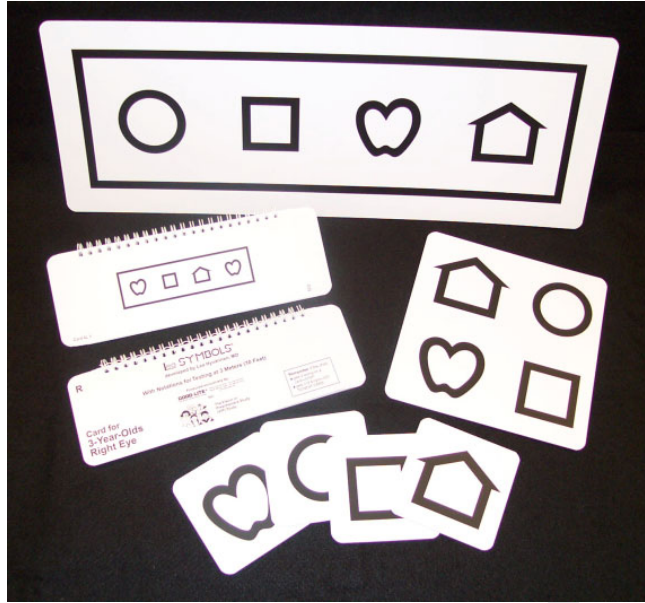


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## **Lea Crowded Symbols Visual Acuity Test (Nurse Screener at 10 Feet)**



### ***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 baseline card with symbols (one each of the apple, house, circle, and square) surrounded by crowding bars.

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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. Occluder glasses.
7. A hand-held mirror.
8. One mark on the wall, 10 feet from the stand on which the cards will be placed and at the same height as the cards on the stand. This mark indicates the location of the child's eyes.
9. Measuring tape and masking tape.
10. A light meter.
11. A lamp stand and wedge.
12. An extra bulb for the lamp in the stand.
13. Chairs for the child and the screener.
14. A data sheet, ID labels, an electronic time stamp, and pen.

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

1. Turn the lamp on.
2. Use the light meter to check the cards. Hold one of the cards as it will be held when testing. Place the light meter on the card with the white sensor facing out (toward where the child would be sitting). Look at the reading on the light meter. Write the number on the set-up data sheet. Remember the number. The number on the light meter should be above 297 lux.
3. Select the child's ID label and place it on the data sheet.
4. 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 name tag. If the child is three, circle the area for three-year-olds data on the left side of the data sheet. If the child is four or five, circle the area for four-and five-year-olds data on the right side of the data sheet. This will make recording in the correct area easier during testing.

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

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1. If the child is wearing glasses, remove them prior to testing.
2. Stamp the start time with the electronic stamp in the appropriate box on the data sheet when you start the Lea pretest. Press firmly and let go when the stamp stops printing by itself.
3. 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.
4. Show the child the Lea lap card either by giving it to him/her to hold or by showing him/her where the lap card is displayed. The symbols should be right side up as the child is looking at them.
5. 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.
6. 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 lap card to identify the symbols, tell him/her to "touch" the symbol. Continue this procedure until all four symbols have been correctly named or matched up to a maximum of 2 presentations for each symbol. If the child cannot do the task by matching or naming, mark the child as "Unable" on the data sheet. If the child is able to do the task by matching or naming the symbols, mark the child as "Able."
7. Note: Other names for the symbols are acceptable as long as the child uses them **consistently**. For example, the child may call the apple a heart or the circle an "O" or the rectangle a window. However, if the child ever starts using a new name or there is ever any question about which symbol the child is referring to, the child should be asked to point to the symbol on the lap card.
8. Point to the child's left eye and tell the child to close that eye. Then cover the left eye with an eye patch.
9. 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.
10. If the child refuses to wear the patch, place the occluder glasses on the child
11. If the child refuses to wear the occluder glasses, the child may occlude his/her eye with the palm of his/her hand or an assistant may occlude the child's eye with the palm of his or her 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. The box on the data form should be checked to indicate that a patch was not used. Covering the eye with fingers is not allowed because peeking is too easy with only fingers in front of the eye.

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12. Check the position of the child for testing. The child's eyes will need to be at the same height as the cards. 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.
13. Read the child's age from the VIP nametag.
14. Pick up the baseline 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 place the baseline card in front of the wedge on the stand.
15. Point to the first symbol on the baseline 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 and record "no card read" in the right eye column on the data sheet. Testing should stop as soon as there are two wrong symbols.

If the child correctly identifies 2 of the first 3 symbols (i.e. misses one of the three), 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."

16. If the child gets 3 correct on the baseline card, pick up the test book for that child's age. Begin testing with card 3R1 (the first card for the right eye) for 3-year-olds and with Card 4R1 (the first card for the right eye) for 4- and 5-year olds.
17. Continue testing with each successive card until a child gets 2 symbols wrong on a card or completes testing on all three cards.
18. 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.
19. 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.
20. Provide positive comments about the child's performance, regardless of whether the child identifies the symbol correctly or incorrectly.

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21. After testing of the right eye has been completed, place an X or a check on the data sheet beside 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.**
22. 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 baseline card.**
23. If the child gets 3 correct on the baseline card, go to the test book for that child's age. Begin testing with card **3L 1** for 3-year-olds and with card **4L 1** for 4- and 5-year olds.
24. Continue testing with each successive card until a child gets 2 symbols wrong on a card or completes testing on all three cards.
25. 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.**
26. Clean the lap card with an antibacterial wipe as needed.

***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. Stamp the start time with the electronic stamp in the appropriate box on the data sheet when you start the Lea pretest.

Start Time Stamp
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**2. Mark “Able” or “Unable” for the Lea pretest.**

**Lea Pretest::**

Unable ( )<sub>0</sub> (STOP! Go to next page.)

Able ( )<sub>1</sub>

3. If the child’s age is 3, mark the results on the left side of the data sheet. If the child’s age is 4 or 5, mark the results in the right side of the data sheet.
4. Mark the result for the right eye in the column marked R and the result for the left eye in the column marked L.
5. Mark the best acuity value (baseline or better) for which the child correctly named or matched at least 3 of the 4 symbols.
  - a. If the child is 3, mark Unable, baseline, 3R 1, 3R 2, or 3R 3 for the right eye and Unable, baseline, 3L 1, 3L 2, or 3L 3 for the left eye.

Record results here if child is

3 years old

<u>Right Eye</u>		<u>Left Eye</u>	
No card read	( ) <sub>0</sub>	No card read	( ) <sub>0</sub>
Baseline	( ) <sub>1</sub>	Baseline	( ) <sub>1</sub>
3R 1	( ) <sub>2</sub>	3L 1	( ) <sub>2</sub>
3R 2	( ) <sub>3</sub>	3L 2	( ) <sub>3</sub>
3R 3	( ) <sub>4</sub>	3L 3	( ) <sub>4</sub>
<input type="checkbox"/> <sub>1</sub> Incomplete		<input type="checkbox"/> <sub>1</sub> Incomplete	

- b. If the child is 4 or 5, mark Unable, baseline, 4R 1, 4R 2, or 4R 3 for the right eye and Unable, baseline, 4L 1, 4L 2, or 4L 3 for the left eye.

Record results here if child is

4 or 5 years old

<u>Right Eye</u>		<u>Left Eye</u>	
No card read	( ) <sub>0</sub>	No card read	( ) <sub>0</sub>
Baseline	( ) <sub>1</sub>	Baseline	( ) <sub>1</sub>
4R 1	( ) <sub>2</sub>	4L 1	( ) <sub>2</sub>
4R 2	( ) <sub>3</sub>	4L 2	( ) <sub>3</sub>
4R 3	( ) <sub>4</sub>	4L 3	( ) <sub>4</sub>
<input type="checkbox"/> <sub>1</sub> Incomplete		<input type="checkbox"/> <sub>1</sub> Incomplete	

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6. If the test is interrupted or incomplete after the child completes the pretest, mark the incomplete box in the column that indicates for which eye the testing was incomplete. Mark 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. Make sure you put the ID label on the form.
2. Make sure you stamp the start time and end time on the form.
3. Make sure that the light meter reading is above 297 lux.
4. Maintain the distance during the test.
5. Make sure the eye patch, the occluder glasses, or child's palm completely covers the child's eye (don't let the child peek).
6. Keep urging the child to name or match each symbol.
7. No more than one acuity value for each eye should be marked with an "X."
8. **Do not close the test booklet until you have written down the acuity result.**
9. Three out of 3 or 3 out of 4 correctly identified symbols are required to move onto the next level of the test.
10. **Do not tell the child he/she gave the wrong answer. Say "Good job!" no matter what the child answers.**