## LEA SYMBOLS ${ }^{\circledR}$ Flash Cards

Part Number: 252700


This set of LEA SYMBOLS ${ }^{\circledR}$ Flash Cards for testing visual acuity at distance was designed for children and adults who have difficulty being tested with a visual acuity chart, the Crowded Symbol Book test or even with the Single Symbol Book test.

## Testing Procedure

Before testing be sure to take into consideration the child's developmental level and response patterns. This testing procedure may need to be adapted.

- Present the cards one by one in order of decreasing symbol size. The child responds by naming or matching. For matching use either the Response Key Card (\#251701), the Flash Cards (\#251800) or the LEA 3-D PUZZLE ${ }^{\text {TM }}$ pieces (\#251600).
- Present two cards in the child's best visual location utilizing a "two alternative forced choice" technique. Use one of the following pairs of cards: circle/apple, house/square, circle/house.
- The child's task is to indicate the location of the specified card (i.e. apple). He/She may respond in one of several ways.
a) Pointing toward the requested symbol
b) Looking toward the requested symbol
c) Utilizing a 'yes' response. Ask the child "Is this the apple?" while pointing to the card.

This test is often used at a distance other than 3 meters ( 10 feet). Measure and record the viewing distance and the symbol size (the M value) or the visual acuity value printed on the card with the smallest symbols identified correctly.

To determine the visual acuity use one of the following formulas:

$$
V A=\frac{\text { Viewing Distance Used (meters) }}{M \text {-value }}
$$

OR

$$
V A=\frac{\text { Viewing Distance Used (meters or feet) }}{3 \text { meters }(10 \text { feet })} \times \text { VA value for } 3 \text { meters (10 feet) }
$$

.Note that it is incorrect to report ' V.A. 20/25 at 2.5feet' if the child could read the 20/25 (10/12.5)-line (3.8M -line) at 2.5 feet. Visual acuity is in that case: $2.5 / 10^{\prime} \times 20 / 25=1 / 4 \times 20 / 25=20 / 100$. (When using the British notation: $6 / 9$ line at 75 cm equals: $0.75 \mathrm{~m} / 3 \mathrm{~m} \times 6 / 9=1 / 4 \times$ $6 / 9=6 / 36$. When using the decimal notation 0.8 line at 0.75 m equals $0.75 \mathrm{~m} / 3 \mathrm{~m} \times 0.8=1 / 4 \times 0.8=0.2$ )

When the distance is one half (or one fourth) of the standard distance, also the visual acuity value is one half (one fourth) of the value printed next to that line.

If you do not want to do the calculations, report the result as M -value, i.e. in the previous case 3.8 M at 2.5 feet ( 0.75 m ).

## Examples:

If the viewing distance used was 6 feet ( 180 cm ) and the smallest optotypes correctly recognized were on line 20/50 (0.4).

$$
V A=\frac{6 \text { feet }}{10 \text { feet }} \times \frac{20}{50}=\frac{6 \times 2 / 5}{10}=\frac{12 / 5}{10}=\frac{12}{50}=\frac{12 / 1.2}{50 / 1.2}=\frac{10}{42} \approx \frac{20}{80}
$$

OR

$$
V A=\frac{1.8 \mathrm{~m}}{3 \mathrm{~m}} \times 0.4=\frac{1.8 \times 0.4}{3}=0.24
$$

