



Fun Frames style in Kit may vary

Near/Distance Vision Screening Kit with Tutorial DVD by AAPOS, Good-Lite & School Health

AAPOS, Good-Lite, and School Health Corporation created a Strategic Alliance Agreement to distribute a School Nurse Vision Screening Tutorial DVD, created by Kathy Lee, MD, PhD, within a kit that includes occluder glasses and distance and near visual acuity eye charts designed especially for School Nurses.

WHAT'S IN THE BAG:

You are receiving a Kit that AAPOS, School Health, and Good-Lite created to accompany the School Nurse Vision Screening Tutorial created by Kathy Lee, MD. This Kit includes the following items:

School Nurse Vision Screening Tutorial DVD

4 Double-Sided, 10-Foot Distance Eye Charts – 8 lines of optotypes – 20/100, 20/63, 20/50, 20/40, 20/32, 20/25, 20/20, and 20/16

- LEA Symbols
- LEA Numbers
- HOTV
- Sloan Letters

4 Double-Sided, 16-Inch Near Vision Charts – 10 lines of optotypes – 20/200, 20/100, 20/80, 20/63, 20/50, 20/40, 20/32, 20/25, 20/20, and 20/16

- LEA Symbols
- LEA Numbers
- HOTV
- Sloan Letters

Double-sided Response Panel for LEA Symbols and HOTV Optotypes for Matching

4 Double-Sided Individual Cards for LEA Symbols and HOTV Optotypes for Matching

Fun Frame Occluder Glasses

HISTORY OF THE SCHOOL NURSE VISION SCREENING TUTORIAL DVD

(www.aapos.org/ahp/resources_for_school_nurses)

AAPOS proudly partnered with the National Association of School Nurses (NASN) to develop resources to promote school vision screening and to disseminate information about common eye diseases in children.

Kathy Lee, MD, PhD, developed a School Nurse Vision Screening Tutorial for the American Academy of Ophthalmology's Leadership Development Program. The video is designed as a resource for school nurses about how to screen vision, the best practices in school vision screening, and why it's important.

Included on the School Nurse Vision Screening Tutorial DVD:

- Rationale for effective school vision screening
- Information regarding refractive errors, amblyopia, and strabismus
- Elements of a successful screening program
- Pearls and pitfalls of traditional vision screening
- Examples of preferred and non-preferred charts
- Demonstration of the proper use of objective vision screening devices (i.e., photorefractors)
- Presentation of other elements of vision screening including color, stereoacuity, and near vision
- Effective screening of children with disabilities

Dr. Lee spoke about *Efficient and Effective School Vision Screening* at the 2010 NASN Annual Conference. Download Dr. Lee's lecture from this link:

www.aapos.org/client_data/files/2011/_432_nasn1021.ppt

DIRECTIONS FOR DISTANCE VISION EYE CHARTS

LEA Symbols and HOTV:

Though these directions are for both LEA Symbols and HOTV optotypes, you need not complete both tests. You have the option of using LEA Symbols or HOTV optotypes.

Measure testing distance with 10 feet between the chart and the child's eyes.

Establish a method of communication, such as naming, signing, or pointing at the appropriate Response Panel or Individual Cards for matching.

Use the Response Panel close to the child to familiarize the child with the task. For LEA Symbols, decide with the child what names will be used to identify the optotypes. If using HOTV and the child does not know the letters, use the HOTV Response Panel for matching. Matching is an option for both LEA Symbols and HOTV. Another matching option is to place the 4 Individual Cards on the floor in front of the child and ask the child to step on the card that matches the optotype on your chart. Never use the Response Panel or the Individual Cards to assess visual acuity. If you use the Individual Cards for matching, place them in front of the child only when you are ready to screen vision.

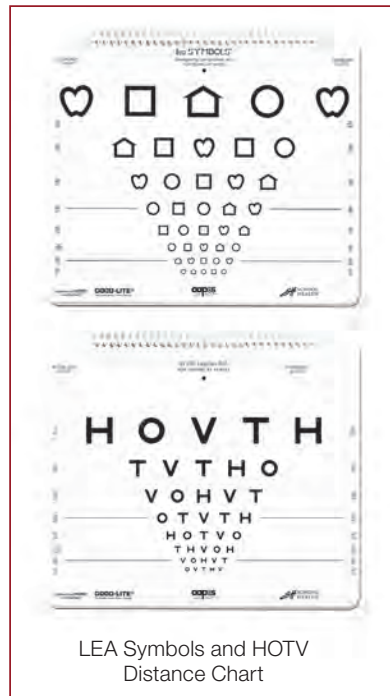
Occlude the child's eyes with Fun Frames Occluder Glasses. If child is wearing prescription spectacles, screen with glasses on, and occluder glasses over prescription glasses. While not required, most screening begins by occluding the left eye and testing the right eye first.

Begin screening by asking the child to identify, or match, the left optotype on the 20/100 line. Do not point to the optotype and hold the pointer near the optotype while waiting for the child to identify the optotype. You can point to the line of optotypes, or briefly point beneath the optotype you want the child to identify, and immediately remove the pointer.

Continue identifying the left optotype on each line down the chart until the child misses an optotype.

Return to the line above the missed optotype and ask the child to identify/match optotypes on that line.

Move to the next line down and ask the child to identify/match optotypes on each line until the child misses 3 or more optotypes.



- Passing = Identifying/matching correctly 3 of 5 optotypes.
- Not Passing = Missing 3 or more optotypes.

Visual acuity is recorded as the last line on which at least 3 of 5 optotypes were identified/matched correctly.

This is a 10-foot test. The number you record is the 20-foot notation in the right margin adjacent to the last line on which 3 of 5 optotypes were identified/matched correctly.

Referral criteria will depend on your guidelines. The American Academy of Pediatrics, the American Association of Certified Orthoptists, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology recommend that children ages 3, 4, and 5 should be able to identify 3 of 5 optotypes on the **20/40 line** and children ages 6 and older should be able to identify 3 of 5 optotypes on the **20/32 line**.

DIRECTIONS FOR DISTANCE VISION EYE CHARTS

LEA Numbers and Sloan Letters:

Though these directions are for both LEA Numbers and Sloan Letters, you need not complete both tests. You have the option of using either test.

Measure testing distance with 10 feet between the chart and the child's eyes.

Occlude the child's eyes. If child is wearing prescription spectacles, screen with glasses on, and occluder over prescription glasses. While not required, most screening begins by occluding the left eye and testing the right eye first.

Begin by asking the child to identify the left optotype on the 20/100 line. Do not point to the optotype and hold the pointer near the optotype while waiting for the child to identify the optotype. You can point to the line of optotypes, or briefly point beneath the optotype you want the child to identify, and immediately remove the pointer.

Continue identifying the left optotype on each line down the chart until the child misses an optotype.

Return to the line above the missed optotype and ask the child to identify optotypes on that line.

Move to the next line down and ask the child to identify optotypes on each line until the child misses 3 or more optotypes.



- Passing = Identifying/matching correctly 3 of 5 optotypes.
- Not Passing = Missing 3 or more optotypes.

Visual acuity is recorded as the last line on which at least 3 of 5 optotypes were identified correctly.

This is a 10-foot test. The number you record is the 20-foot notation in the right margin adjacent to the last line on which 3 of 5 optotypes were identified/matched correctly.

Referral criteria will depend on your guidelines. The American Academy of Pediatrics, the American Association of Certified Orthoptists, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology recommend that children ages 6 and older should be able to identify 3 of 5 optotypes on the **20/32 line**.

DIRECTIONS FOR NEAR VISION EYE CHARTS

LEA Symbols and HOTV:

Though these directions are for both LEA Symbols and HOTV optotypes, you need not complete both tests. You have the option of using LEA Symbols or HOTV optotypes. If you choose to begin near visual acuity screening with binocular testing, follow the directions for monocular testing below.

Testing distance is 16-inches between the chart and the child's eyes. Use attached cord to measure distance.

Establish a method of communication, such as naming, signing, or pointing for matching.

Use the 4 large optotypes at the bottom of the chart to familiarize the child with the task. For LEA Symbols, decide with the child what names will be used to identify the optotypes. Matching is an option for both LEA Symbols and HOTV optotypes.

Occlude the child's eyes with Fun Frames Occluder Glasses. If child is wearing prescription spectacles, screen with glasses on, and occluder glasses over prescription glasses. While not required, most screening begins by occluding the left eye and testing the right eye first.

Begin by asking the child to identify, or match, the left optotype on the 20/200 line. Do not point to the optotype and hold the pointer near the optotype while waiting for the child to identify the optotype. You can point to the line of optotypes, or briefly

point beneath the optotype you want the child to identify, and immediately remove the pointer.

Continue identifying the left optotype on each line down the chart until the child misses an optotype.

Return to the line above the missed optotype and ask the child to identify/match optotypes on that line.

Move to the next line down and ask the child to identify/match optotypes on each line until the child misses 3 or more optotypes.

- Passing = Identifying/matching correctly 3 of 5 optotypes.
- Not Passing = Missing 3 or more optotypes.

Visual acuity is recorded as the last line on which at least 3 of 5 optotypes were identified/matched correctly.

This is a 16-inch test. The number you record is the 20-foot notation in the right margin adjacent to the last line on which 3 of 5 optotypes were identified correctly.

Referral criteria will depend on your guidelines. Referral criteria for near vision screening typically follows that of distance visual acuity screening. For distance visual acuity screening, the American Academy of Pediatrics, the American Association of Certified Orthoptists, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology recommend that children ages 3, 4, and 5 should be able to identify 3 of 5 optotypes on the **20/40 line** and children ages 6 and older should be able to identify 3 of 5 optotypes on the **20/32 line**.

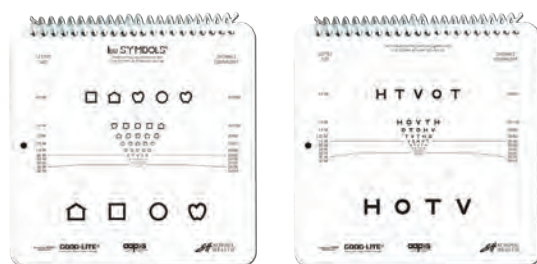
DIRECTIONS FOR NEAR VISION EYE CHARTS

LEA Numbers and Sloan Letters:

Though these directions are for both LEA Numbers and Sloan Letters, you need not complete both tests. You have the option of using either test. If you choose to begin near visual acuity screening with binocular testing, follow the directions for monocular testing below.

Testing distance is 16-inches between the chart and the child's eyes. Use attached cord to measure distance.

Occlude the child's eyes. If child is wearing prescription spectacles, screen with glasses on, and occluder over



LEA Symbols and HOTV Near Vision Chart



LEA Numbers and Sloan Letters Near Vision Chart

prescription glasses. While not required, most screening begins by occluding the left eye and testing the right eye first.

Begin by asking the child to identify the left optotype on the 20/200 line. Do not point to the optotype and hold the pointer near the optotype while waiting for the child to identify the optotype. You can point to the line of optotypes, or briefly point beneath the optotype you want the child to identify, and immediately remove the pointer.

Continue identifying the left optotype on each line down the chart until the child misses an optotype.

Return to the line above the missed optotype and ask the child to identify optotypes on that line.

Move to the next line down and ask the child to identify optotypes on each line until the child misses 3 or more optotypes.

- Passing = Identifying/matching correctly 3 of 5 optotypes.
- Not Passing = Missing 3 or more optotypes.

Visual acuity is recorded as the last line on which at least 3 of 5 optotypes were identified correctly.

This is a 16-inch test. The number you record is the 20-foot notation in the right margin adjacent to the last line on which 3 of 5 optotypes were identified correctly.

Referral criteria will depend on your guidelines. Referral criteria for near vision screening typically follows that of distance visual acuity screening. For distance visual acuity screening, the American Academy of Pediatrics, the American Association of Certified Orthoptists, the American Association for Pediatric Ophthalmology and Strabismus, and the American Academy of Ophthalmology recommend that children ages 6 and older should be able to identify 3 of 5 optotypes on the **20/32 line**.

Purchase the Near/Distance Vision Screening Kit with Tutorial DVD from either of these companies.

Good-Lite: www.good-lite.com/visionkit
Part Number: 110. \$60.00

School Health: www.schoolhealth.com/visionkit
Part Number: 52842 \$60.00

Additional Resources

American Association for Pediatric Ophthalmology and Strabismus
www.aapos.org

AAPOS Resources for School Nurses
www.aapos.org/ahp/resources_for_school_nurses

The Good-Lite Company
www.good-lite.com

The Good-Lite Company's site for the School Nurse Community
www.good-lite.com/communities/schoolnurse.cfm

School Health Corporation
www.schoolhealth.com

School Health Corporation Vision Screening Resources for School Nurses
www.schoolhealth.com/visionscreening



GOOD-LITE®



lea-numbers®
Developed by Lea Hyvärinen, M.D.
FOR TESTING AT 16 INCHES (40 CM)

| LETTER SIZE | | DISTANCE EQUIVALENT |
|-------------|-----------|------------------------|
| 4.0 M | 9 5 6 8 5 | 20/200 |
| 2.0 M | 6 9 5 8 5 | 20/100 |
| 1.6 M | 9 6 8 5 9 | 20/80 |
| 1.25 M | 5 9 6 9 8 | 20/63 |
| 1.0 M | 6 8 9 6 5 | 20/50 |
| .80 M | 8 9 8 5 6 | 20/40 |
| .63 M | 9 8 5 6 9 | 20/32 |
| .50 M | 8 9 6 5 8 | 20/25 |
| .40 M | 5 6 9 8 6 | 20/20 |
| .32 M | 6 5 8 9 8 | 20/16 |

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SLOAN LETTERS
FOR TESTING AT 16 INCHES (40 CM)

| LETTER SIZE | | DISTANCE EQUIVALENT |
|-------------|-----------|------------------------|
| 4.0 M | K C R H N | 20/200 |
| 2.0 M | R H S O N | 20/100 |
| 1.6 M | K S V R H | 20/80 |
| 1.25 M | H N K C D | 20/63 |
| 1.0 M | N D V K O | 20/50 |
| .80 M | D H O S Z | 20/40 |
| .63 M | V R N D O | 20/32 |
| .50 M | C Z H K S | 20/25 |
| .40 M | O R Z S K | 20/20 |
| .32 M | S C N D Z | 20/16 |

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Developed by Lea Hyvärinen, M.D.
FOR TESTING AT 16 INCHES (40 CM)

LETTER SIZE

DISTANCE
EQUIVALENT

| | | | | | |
|--------|---|---|---|---|---|
| 4.0 M | □ | △ | ♥ | ○ | ▽ |
| 2.0 M | ♥ | □ | ○ | △ | ▽ |
| 1.6 M | △ | ○ | ♥ | ▽ | □ |
| 1.25 M | ○ | ♥ | △ | □ | ▽ |
| 1.0 M | ♥ | ○ | ▽ | △ | □ |
| .80 M | □ | ♥ | ○ | △ | ▽ |
| .63 M | ○ | △ | □ | ♥ | ▽ |
| .50 M | △ | ♥ | ▽ | ○ | □ |
| .40 M | □ | △ | ○ | ♥ | ▽ |
| .32 M | ○ | □ | ♥ | △ | ▽ |

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HOTV NEAR VISION CHART IN LogMAR SIZES
FOR TESTING AT 16 INCHES (40 CM)

LETTER SIZE

DISTANCE
EQUIVALENT

| | | | | | |
|--------|---|---|---|---|---|
| 4.0 M | H | T | V | O | T |
| 2.0 M | H | O | V | T | H |
| 1.6 M | O | T | O | H | V |
| 1.25 M | T | V | T | H | O |
| 1.0 M | V | O | H | V | T |
| .80 M | O | T | V | T | H |
| .63 M | H | O | T | V | O |
| .50 M | T | H | V | O | H |
| .40 M | V | O | H | V | T |
| .32 M | O | V | T | H | V |

lea-numbers®
Developed by Lea Hyvärinen, M.D.
FOR TESTING AT 10 FEET

| ACTUAL SIZE | | DISTANCE EQUIVALENT |
|----------------|-----------|------------------------|
| 10/50 | 6 9 5 8 9 | 20/100 |
| 10/32 | 5 9 6 9 8 | 20/63 |
| 10/25 | 6 8 9 6 5 | 20/50 |
| 10/20 | 8 9 8 5 6 | 20/40 |
| 10/16 | 9 8 5 6 9 | 20/32 |
| 10/12.5 | 8 9 6 5 8 | 20/25 |
| 10/10 | 5 6 9 8 6 | 20/20 |
| 10/8 | 6 5 8 9 8 | 20/16 |

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SLAON LETTERS IN LogMAR SIZES
FOR TESTING AT 10 FEET

| ACTUAL SIZE | | DISTANCE EQUIVALENT |
|----------------|-----------|------------------------|
| 10/50 | K C R H O | 20/100 |
| 10/32 | H V O R K | 20/63 |
| 10/25 | R S H O N | 20/50 |
| 10/20 | O K S V Z | 20/40 |
| 10/16 | K S N H O | 20/32 |
| 10/12.5 | H O V S N | 20/25 |
| 10/10 | V C S Z H | 20/20 |
| 10/8 | C Z D R V | 20/16 |

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The Quality Always Shines Through

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Training, Equipment, and Supplies

**SH SCHOOL
HEALTH®**

Lea SYMBOLS®
Developed by Lea Hyvärinen, M.D.
FOR TESTING AT 10 FEET

| ACTUAL SIZE | | DISTANCE EQUIVALENT |
|----------------|-----------|------------------------|
| 10/50 | ♥ □ ◻ ○ ♥ | 20/100 |
| 10/32 | ◻ □ ♥ □ ○ | 20/63 |
| 10/25 | ♥ ○ □ ♥ ◻ | 20/50 |
| 10/20 | ○ □ ○ ◻ ♥ | 20/40 |
| 10/16 | □ ○ □ ♥ ◻ | 20/32 |
| 10/12.5 | ○ □ ♥ ◻ ○ | 20/25 |
| 10/10 | ◻ ♥ □ ○ ♥ | 20/20 |
| 10/8 | ♥ ◻ ○ □ ○ | 20/16 |

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HOTV NEAR VISION CHART IN LogMAR SIZES
FOR TESTING AT 10 FEET

| ACTUAL SIZE | | DISTANCE EQUIVALENT |
|----------------|-----------|------------------------|
| 10/50 | H O V T H | 20/100 |
| 10/32 | T V T H O | 20/63 |
| 10/25 | V O H V T | 20/50 |
| 10/20 | O T V T H | 20/40 |
| 10/16 | H O T V O | 20/32 |
| 10/12.5 | T H V O H | 20/25 |
| 10/10 | V O H V T | 20/20 |
| 10/8 | O V T H V | 20/16 |