

Stereo Optical Company

Vision Tester Slide Package:

Ophthalmic Prescreening Slide Package

For complete vision screening needs, preschool through adult. Ideal for School, Athletic Physicals, Employment Physicals, F.A.A., and General Check-Ups.

- Slide # 1: 2000-003
- Slide # 2: 2000-010
- Slide # 3: 2000-007
- Slide # 4: 2000-012
- Slide # 5: 2000-025
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OPTICAL**

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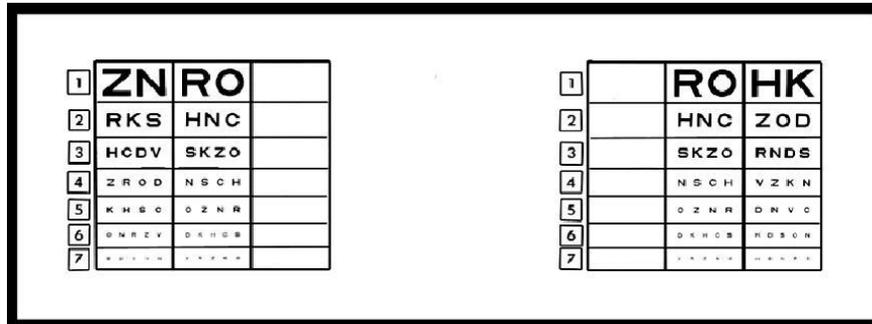
P/N 56198

Slide 2000-003 “FAR” VISUAL ACUITY LETTERS

1. Dial at 1 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye switches illuminated 



QUESTION: How many columns of letters do you see?

SCORING: The answer is 3. Ask the subject to read line 5 completely. If this is correct, proceed to line 6, if correct proceed to line 7, if correct, the subject has 20/20 vision or better, at FAR point for the right eye, left eye and both eyes together. The correct scoring key is printed on the record form.

Two or more letters incorrectly identified on any line (3 to 7) is considered a FAIL for that acuity level IN THAT COLUMN. A different acuity reading for each column is possible. The center column is critical because this is the binocular acuity test, while the right and left columns are monocular acuity tests.

Some binocular irregularities that can occur are:

1. Either right or left column appears fuzzy or blurred.
2. A complete lack of targets in either right or left column will indicate a vision problem.
3. An intermittent disappearance of targets in either the right or left column.
4. Failure to fuse the right and left eye area of the slide into three columns of letters.

A monocular acuity test can be administered on the right or left eye by switching off the eye not being tested. When testing only one eye, the subject will only see two columns of letters.

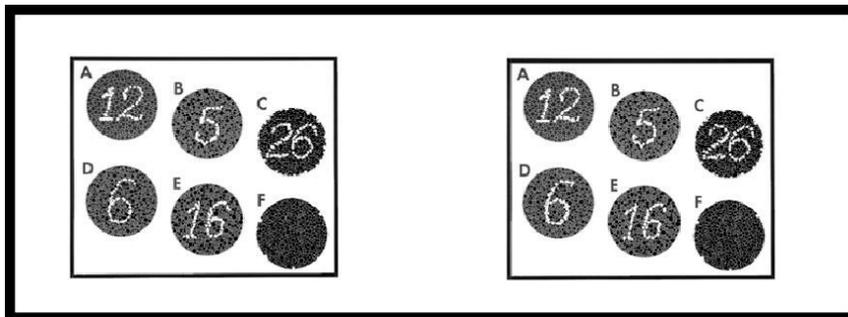
| LINE/ACUITY | LEFT EYE | BOTH EYES | RIGHT EYE |
|-------------|----------|-----------|-----------|
| 1 20/200 | ZN | RO | HK |
| 2 20/100 | RKS | HNC | ZOD |
| 3 20/70 | HCDV | SKZO | RNDS |
| 4 20/50 | ZROD | NSCH | VZKN |
| 5 20/40 | KHSC | OZNR | DNVC |
| 6 20/30 | ONRZV | DKHCS | KDSON |
| 7 20/20 | SDCHN | VRZKO | HSNRD |

Slide 2000-010 "FAR" COLOR PERCEPTION

1. Dial at 2 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye switches illuminated



This test is a screening for color perception. It will identify deficiencies, but it does not classify them. Six Pseudo-Isochromatic Ishihara Plates are accurately and authentically reproduced for this test. This test is set for a minimal visual acuity of 20/70. If a subject has 20/70 acuity or lower, the subject could fail the test because of low vision, not poor color perception.

QUESTION: Can you identify the numerals in each circle, starting with A?

SCORING: There are a total of 8 numerals in the six circles. For normal color vision, circle F has no numerals in it, color deficient will read a 5. Color-normal subjects will answer the 8 numerals correctly and state there is nothing in circle F. 5 out of 8 numerals correct is mild color deficiency.

For the F.A.A. examination class, I, II, and III the applicant must identify all 8 numerals correctly.

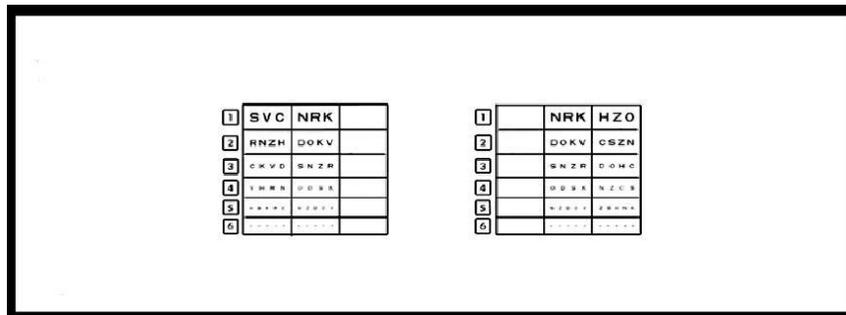
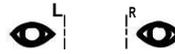
| | | | | | | |
|--------|--------|------|--------|------|-------|---------|
| TARGET | A= 1 2 | B= 5 | C= 2 6 | D= 6 | E=1 6 | F=Blank |
|--------|--------|------|--------|------|-------|---------|

Slide 2000-007 “NEAR” VISUAL ACUITY LETTERS

1. Dial at 3 (Blue) indicator.

2. Near Point switch illuminated 

3. Right and Left eye switches illuminated



QUESTION: How many columns of letters do you see?

SCORING: The Answer is 3. Ask the subject to read line 4 completely. If correct, proceed to line 5, if correct, proceed to line 6. If line 6 is correct, the subject has 20/20 vision or better at NEAR point for the right eye, left eye, and both eyes together. The correct scoring key is printed on the record form.

Two or more letters incorrectly identified on line (3 to 6) is considered a FAIL for that acuity level IN THAT COLUMN. A different acuity reading for each column is possible. The center column is critical because this is the binocular acuity test, while the right and left columns are monocular acuity tests.

Some binocular irregularities that can occur are:

1. Either right or left column appears fuzzy and blurred.
2. A complete lack of targets in either right or left column will indicate a vision problem.
3. An intermittent disappearance of targets in either the right or left column.
4. Failure to fuse the right and left eye area of the slide into three columns of letters.

A monocular acuity test can be administered on the right or left eye by switching off the eye not being tested. When testing only one eye, the subject will only see two columns of letters.

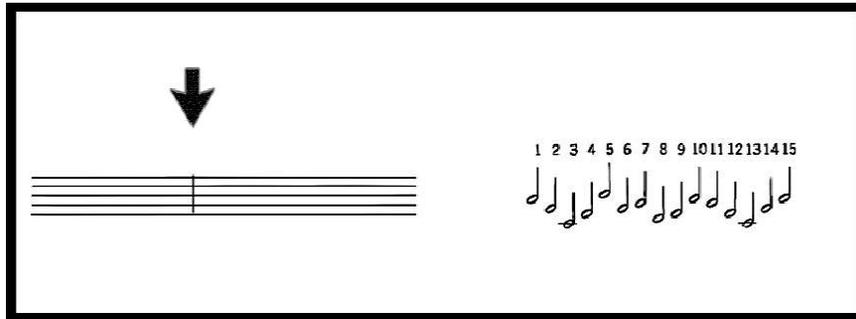
| LINE/ACUITY | LEFT EYE | BOTH EYES | RIGHT EYE |
|-------------|----------|-----------|-----------|
| 1 20/100 | SVC | NRK | HZO |
| 2 20/70 | RNZH | DOKV | CSZN |
| 3 20/50 | CKVD | SNZR | DOHC |
| 4 20/40 | VHRN | ODSK | NZCS |
| 5 20/30 | HSKRC | NZDOV | ZSHNK |
| 6 20/20 | ZONVR | HCSKD | VKCDS |

Slide 2000-012 “FAR” LATERAL PHORIA

1. Dial at 4 (Yellow) Indicator.

2. Far Point switch illuminated 

3. Right eye switch illuminated



This test measures the relative posture of the eyes in the lateral plane. The left eye sees a musical staff with a prominent arrow. The right eye sees numbered notes. With both eyes open, the subject will fuse the notes onto the staff. The arrow should point to the musical note #8.

QUESTION: Do you see a series of musical notes? If yes, ask how many.

SCORING: The answer is 15. Tell the subject that a musical staff with a white arrow will appear. Simultaneously, turn the LEFT eye switch ON and ask which note the arrow is pointing to. The subject's initial response is the answer you are looking for. The arrow pointing to #8 is ideal, or orthophoric, pointing between 3.5 and 12.5 is the accepted norm. 1 to 8 indicates esophoria, 8 to 15 indicates exophoria. Each number represents one prism diopter of power.

NOTE: This test cannot be given to a subject with vision in only one eye. This is a binocular test only.

Slide 2000-025 “FAR” VERTICAL PHORIA

1. Dial at 5 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right eye switch illuminated 



This test measures the relative posture of the eyes in the vertical plane. Musical notes are seen with the right eye, the series of red dashes with the left. Record the number of the notes through which the red line passes. The note precisely across from the red line is #4.

QUESTION: Do you see a series of musical notes? If yes, ask how many?

SCORING: Get the subject's initial response. The answer is 7. Tell the subject a red broken line will appear. Simultaneously turn the LEFT eye switch ON.

QUESTION: The line crosses the round part of which note?

SCORING: The subject's initial response is the answer you are looking for. The red broken line passing through note #4 is ideal or orthophoric. Anywhere from 2.5 to 5.5 is the accepted norm. If the subject complains of movement, ask where the line was first seen. Each number represents one half prism diopter of power, 1 to 4 indicates left hyperphoria, 4 to 7 indicates right hyperphoria.

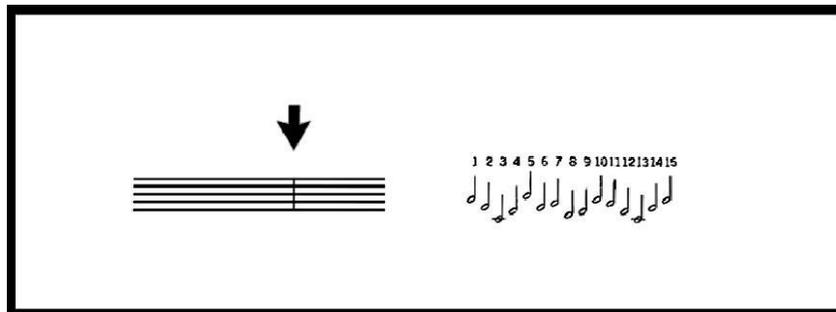
NOTE: This test cannot be given to a subject with vision in only one eye. This is a binocular test only.

SLIDE 2000-013 “NEAR” LATERAL PHORIA

1. Dial at 6 (Blue) Indicator.

2. Near Point switch illuminated 

3. Right Eye switch illuminated 



This test measures the relative posture of the eyes in the lateral plane. The left eye sees a musical staff with a prominent arrow. The right eye sees numbered notes. With both eyes open, the subject will fuse the notes onto the staff. The arrow should point to the musical note #8.

QUESTION: Do you see a series of musical notes? If yes, ask how many?

SCORING: The answer is 15. Tell the subject a musical staff with a white arrow will appear. Simultaneously, turn the LEFT eye switch ON and ask the test subject which note the arrow is pointing to. The subject's initial response is the answer you are looking for. The arrow pointing to #8 is ideal, or orthophoric, pointing between 3.5 and 12.5 is the accepted norm. 1 to 8 indicates esophoria, 8 to 15 indicates exophoria. Each number represents 1.5 prism diopter of power.

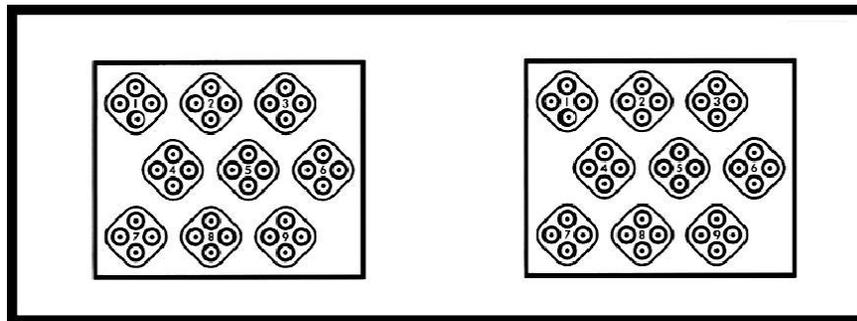
NOTE: This test cannot be given to a subject with vision in only one eye. This is a binocular test only.

Slide 2000-024 “FAR” STEREO DEPTH PERCEPTION

1. Dial at 7 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye switches illuminated



This test measures binocularity. In order to perceive depth perception, both eyes are required to work together. Omit this test if there is little or no vision in one eye. The ability to judge relative distances without the aid of monocular clues is the goal of this stereotest. The difficulty in identifying the “floating” ring increases in each of the nine steps in this series.

QUESTIONS: Study target #1. Does the bottom ring seem to be floating toward you? If the answer is YES, proceed with: In target #2, which ring is floating toward you? #3, #4? This test requires a little extra time, so being patient is extremely important. On occasion, the subject with good acuity scores will fail to fuse the left and right eye patterns and experience an overlapping of images. Turn the dial back to a test where the subject can stabilize fusion, then proceed.

SCORING: Reading all the circles correctly through #9 is normal depth perception. Correctly answering the circles through #5 is acceptable depth perception. When the subject misses two consecutive circles, use the last correct answer as the score.

STEREO DEPTH KEY

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | TARGET |
|-----|-----|-----|----|----|----|----|----|----|--|
| B | L | B | T | T | L | R | L | R | |
| 400 | 200 | 100 | 70 | 50 | 40 | 30 | 25 | 20 | Angle of Stereopsis in seconds of arc |
| 15 | 30 | 50 | 60 | 70 | 75 | 82 | 90 | 95 | Shepard-Fry Percentages |

The angle of Stereopsis: A defined depth, the greater the number, the more obvious the stereopsis.

Shepard-Fry Percentages: The amount of visual efficiency required to determine a particular angle of stereopsis-85% is considered average.

Slide 2000-087 “FAR” FUSION TEST

1. Dial at 8 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye Switches illuminated



QUESTION: How many boxes do you see?

SCORING: Left eye sees a red box and a white box. Right eye sees a white box and a blue box. Together, both eyes should see THREE boxes. Red on top, white in the middle, and blue on the bottom.

Any other combination is a “FAIL”.

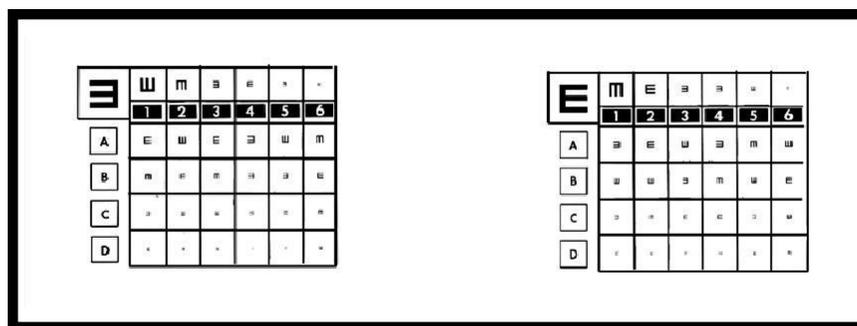
Slide 2000-004 "FAR" VISUAL ACUITY TUMBLING "E"

1. Dial at 9 (Yellow) indicator.

2. Far Point switch illuminated 

3. Left eye switch illuminated 

20/200
20/100
20/70
20/50
20/40
20/30
20/20



20/50
20/40
20/30
20/20

Left Eye

| L | T | B | L | R | L | T |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| A | R | T | R | L | T | B |
| B | B | R | B | L | L | R |
| C | L | T | T | L | R | B |
| D | R | L | T | L | B | T |

Top

| R | B | R | L | L | T | B |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| A | L | R | T | L | B | T |
| B | T | T | L | B | T | R |
| C | L | B | R | R | L | T |
| D | R | T | R | L | T | B |

QUESTION: Ask the subject to identify the direction the E's are pointing: Top, Bottom, Right or Left, in the top line, starting with the largest E. Confirm the last correct answer by having the subject read the corresponding line A,B,C, or D.

For example: The subject has read through #4 correctly, 20/40 vision. The subject should then read line B (20/40)

SCORING: The correct reading of four of the six symbols confirms 20/40 vision. Proceed to line C, a correct reading of four of the six symbols will confirm 20/30. Then proceed to line D with the same format. If read correctly, the subject has 20/20 vision.

1. Dial at 9 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right eye switch illuminated 

Proceed as in Left Eye Testing

THE PLUS LENS SYSTEM

(for Slide 2000-004 "FAR" VISUAL ACUITY TUMBLING "E")

ACUITY LEFT EYE THROUGH PLUS LENS "FAR"

1. Dial at 9 (Yellow) indicator.

2. Far Point switch illuminated 

3. Left eye switch illuminated 

4. Insert PLUS LENS into the slot on top of vision tester.

QUESTION: Ask the subject to read line D (20/20).

SCORING: If read correctly it is a FAIL, if it cannot be read correctly it is a PASS.

ACUITY RIGHT EYE THROUGH PLUS LENS "FAR"

1. Dial at 9 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right eye switch illuminated 

4. Insert PLUS LENS into the slot on top of vision tester.

Repeat the same procedure as Left Eye Plus Lens Test.

The plus lens system tests for excessive farsightedness (hyperopia). The plus lens system supplied with the "OPTEC Vision Tester" is a plus +1.75 Diopter Lens. *A subject scoring 20/40 or poorer on the Right and Left eye test should **NOT** be given the plus lens test.*

Insert the lens into the slot at the top of the vision tester with the label away from the subject. A subject with normal vision will **NOT** be able to read the 20/20 line through the plus lens, a PASS. If the subject **CAN** read the 20/20 line through the plus lens, they then FAIL the test. The ability to clearly read 20/20 through the plus lens is abnormal and could indicate excessive farsightedness.

This test is very important for school age children.

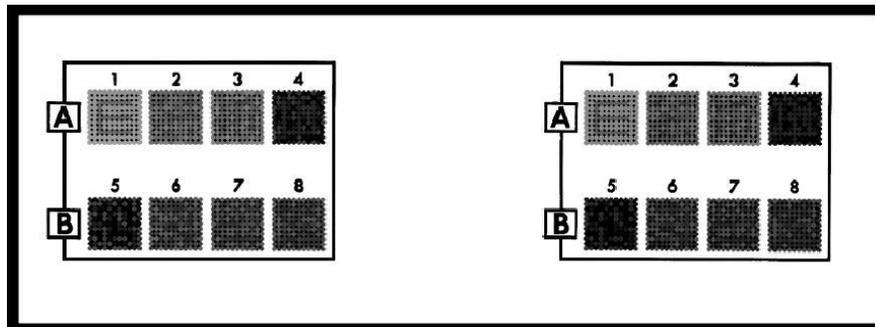
NOTE: REMEMBER TO REMOVE THE PLUS LENS BEFORE STARTING THE NEXT TEST.

Slide 2000-019 “FAR” TUMBLING “E” Color Perception

1. Dial at 10 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye switches illuminated



This test is a screening for color perception. It will identify deficiencies, but it does not classify them. Eight Pseudo-Ishochromatic Ishihara Plates are accurately and authentically reproduced for this test. This test is a set for a minimal visual acuity of 20/70. If a subject has 20/70 acuity or lower, the subject could fail the test because of low vision, not poor color perception.

QUESTION: Which way is the “E” pointing in each block? Top, Bottom, Right or Left, starting with block #1.

SCORING: (3A) A subject with normal color perception can identify the E’s in each of the eight blocks.

(3B) Acceptable color perception is correctly identifying five of the eight E’s. Blocks 2 and 3 are the most difficult to identify, so it is recommended to test block 1 then 4,5,6,7,8 and then come back to 2 and 3.

(3C) Any subject who fails one or more tests in blocks 1, 2, or 3 should be retested at a later date. When retested, many subjects will pass the second time. There are many normal reasons for this, such as medications, tiredness or anxiety. Retesting also makes referrals more valid.

| | | | | | |
|------|---|-----|-----|-----|-----|
| LINE | A | 1=R | 2=L | 3=B | 4=T |
| LINE | B | 5=B | 6=L | 7=T | 8=R |

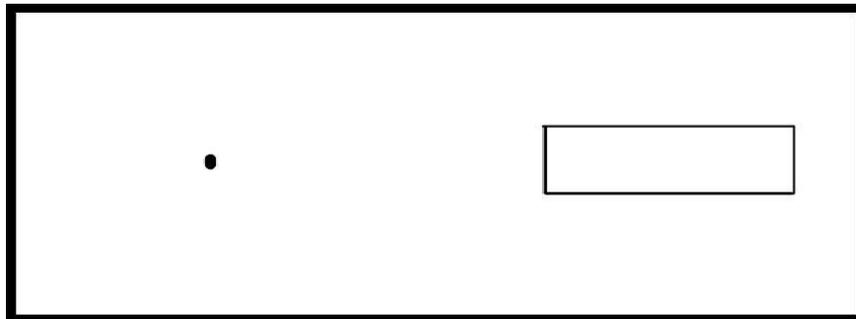
Left, Right, Top, Bottom

Slide 2000-020 “FAR” MUSCLE BALANCE

1. Dial at 11 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right eye switch illuminated 



QUESTION: Do you see a box? If yes, tell the subject that a red ball will be thrown at the box, simultaneously, turn the Left eye switch ON. Ask where the ball lands, IN or OUT of the box?

SCORING: Anywhere IN the box is a PASS, OUT of the box is a FAIL.

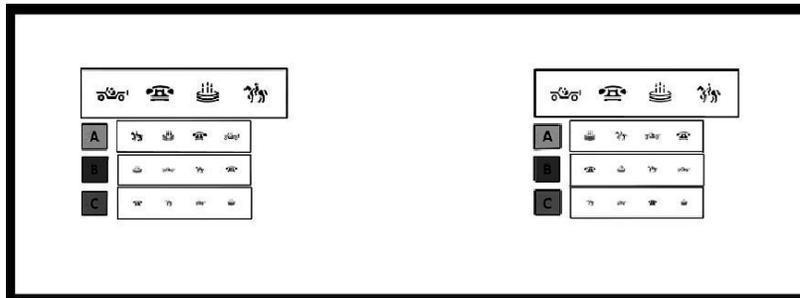
Record the initial response.

Slide 2000-046 “FAR” ACUITY - ALLEN PRESCHOOL

1. Dial at 12 (Yellow) indicator.

2. Far Point switch illuminated 

3. Right and Left eye switches illuminated



Show the test subject the demonstration cards when administering the test.

QUESTION: Can you point to the picture of what you see?

SCORING: Test subject must answer all four correctly per line to pass that acuity.

Both Eyes: 20/100 Top Line - Car, Phone, Cake, Horse

ACUITY LEFT EYE “FAR”

Left Eye switch illuminated



Read from left to right

- A Blue: 20/50 Horse, Cake, Phone, Car
- B Red: 20/40 Cake, Car, Horse, Phone
- C Yellow: 20/30 Phone, Horse, Car, Cake

ACUITY RIGHT EYE “FAR”

Right Eye switch illuminated



Read from left to right

- A Blue: 20/50 Cake, Horse, Car, Phone
- B Red: 20/40 Phone, Cake, Horse, Car
- C Yellow: 20/30 Horse, Car, Phone, Cake



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