

# Guide to In-Home Vision Testing



Banner Eye Care

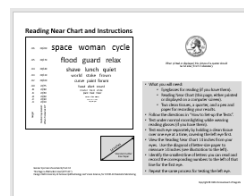
## How to set up the tests

- This PDF document contains the following vision tests and instructions:
  - Letter Distance Chart: This is a common eye chart. This chart can be used with children who know all their letters and with adults who read. It assumes that people are literate, and can say the letters one at a time.
  - HOTV Distance Chart: This is a letter chart that is used with young children who are unsure of their letters, or for those who do not read. Instead of saying the letters on the chart, a helper points to letters on the HOTV Distance Chart one letter at a time, and the person being tested points to the matching letter on the HOTV Pointing Card.
  - Reading and HOTV Near Charts: This is used for testing vision close-up. Charts to test the ability to read words or match letters are provided.
  - Macular Function Chart: This chart contains the Amsler Grid that is used to detect vision problems resulting from damage to the retina (the inner surface of the back of the eye).
- If you have a printer, print the individual pages for the charts you would like to use (shown below).
- If you do not have a printer, the tests can be displayed on a computer screen either with Acrobat Reader, or as pictures.
- Once you have a test printed or displayed on a computer screen, please check the image of the quarter, and compare it to an actual quarter. They should be the same size (1 inch, or 25 mm, across). If the image is too big or too small, you will need to adjust the size of the image. If you printed the test, make sure your printer menu is set to print the page “full size” or at “100% size” and try printing again. If that does not work, try adjusting the print size up or down using your printer menu. If you are using a computer screen, use the magnification adjustment tool provided by your software.

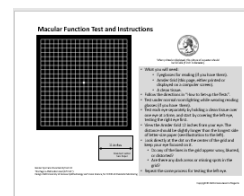
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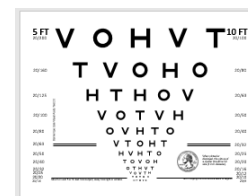
Letter Distance



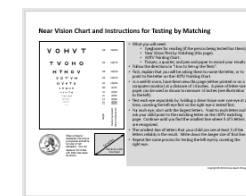
Reading Near



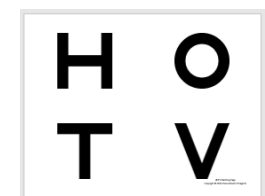
Macular Function



HOTV Distance



HOTV Near



HOTV Pointing

# Letter Distance Chart Instructions

- What you will need:
  - Eyeglasses for seeing far away (if you have them).
  - Letter Distance Chart (either printed or displayed on a computer screen).
  - A clean tissue to cover each eye one at time, a quarter, and a pen and paper to record your results.
- Follow the procedures in “How to Set-up the Tests”.
- If you have eyeglasses for seeing far away, wear them for viewing the Letter Distance Chart.
- In a well-lit room, sit 10 feet from the Letter Distance Eye Chart (either the printed chart taped to a wall or the chart displayed on the computer screen). If you do not have 10 feet of room, sit 5 feet from the chart. Check to see if there is glare on the Chart. If there is, try another location or adjust the screen angle to eliminate the glare. You can estimate a foot as an inch more than the biggest side of a piece of letter sized paper.
- Test each eye separately by holding a clean tissue over one eye at a time. Cover the left eye, and test the right eye first.
- For each eye, view each line of letters, starting at the top of the chart. As you view the letters, identify the smallest line of letters that you can see at least 3 of the 5 letters reliably. Write down the result.
  - If you are sitting 10 feet from the chart, find the smallest line of letters that you can read, and write down the acuity for the smallest line where 3 of 5 letters were read using the scale to the **right** of the letters.
  - If you are sitting 5 feet from the chart, find the smallest line of letters that you can read 3 of 5 letters and write down the acuity for that line using the scale to the **left** of the letters.
- Cover the right eye and repeat the same process for testing the left eye.

5 FT  
20/200

H

Z

V

D

S

10 FT  
20/100

20/160

N

C

V

K

D

20/80

20/125

C

Z

S

H

N

20/63

20/100

O

N

V

S

R

20/50

20/80

K

D

N

R

O

20/40

20/63



Z

K

C

S

V



20/32

20/50

D

V

O

H

C

20/25

20/40

O

H

V

C

20/20

20/32

H

Z

C

K

20/16

20/25

N

C

K

H

20/12

20/20

Z

H

C

S

20/10

20/16

S

Z

R

D

20/8

Banner Eye Care Visual Acuity Test 2.0

Mount on wall 5 or 10 feet from subject, away from light or window.



When printed or displayed, this picture of a quarter should be full size (1 inch diameter).

Letter Eye Chart Copyright © 2020 Arizona Board of Regents

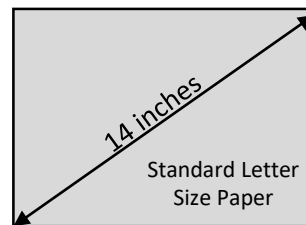
# Reading Near Chart and Instructions

J16	20/200	space woman cycle
J15	20/170	flood guard relax
J14	20/140	shave lunch quiet
J13	20/110	world stake frown
J12	20/100	curve paint forum
J10	20/75	feast elect round
J8	20/60	model trust smile
J6	20/50	plant treat miner
J4	20/40	mouth prize water
J2	20/30	bread carve cabin
J1	20/20	study chair plane
Jaeger	Snellen Equivalent When Tested at 14"	

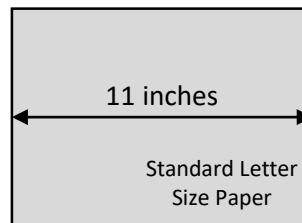
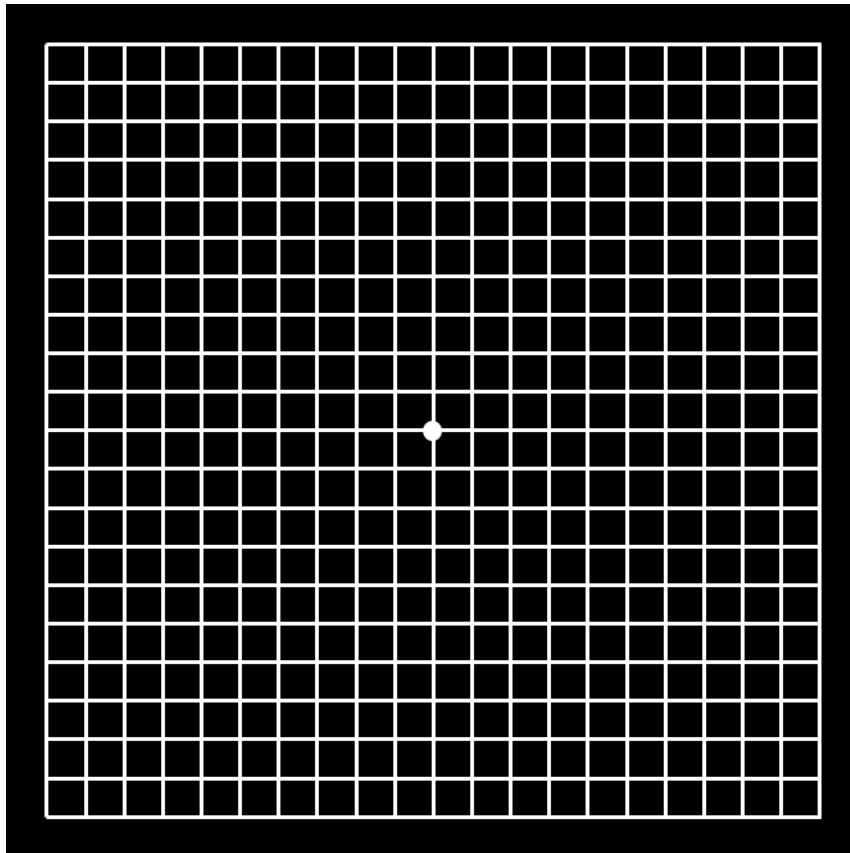


When printed or displayed, this picture of a quarter should be full size (1 inch in diameter).

- What you will need:
  - Eyeglasses for reading (if you have them).
  - Reading Near Chart (this page, either printed or displayed on a computer screen).
  - Two clean tissues, a quarter, and a pen and paper for recording your results.
- Follow the directions in "How to Set-up the Tests".
- Test under normal room lighting while wearing reading glasses (if you have them).
- Test each eye separately by holding a clean tissue over one eye at a time. Cover the left eye, and test the right eye first.
- View the Reading Near Chart 14 inches from your eyes. Use the diagonal of letter-size paper to measure 14 inches (see illustration to the left).
- Identify the smallest line of letters you can read and record the corresponding numbers to the left of that line for the first eye.
- Cover the right eye and repeat the same process for testing the left eye.



# Macular Function Test and Instructions

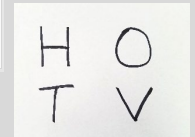


When printed or displayed, this picture of a quarter should be full size (1 inch in diameter).

- What you will need:
  - Eyeglasses for reading (if you have them).
  - Amsler Grid (this page, either printed or displayed on a computer screen).
  - A clean tissue.
- Follow the directions in “How to Set-up the Tests”.
- Test under normal room lighting while wearing reading glasses (if you have them).
- Test each eye separately by holding a clean tissue over one eye at a time. Cover the left eye, and test the right eye first.
- View the Amsler Grid 12 inches from your eye. The distance should be slightly longer than the longest side of letter-size paper (see illustration to the left).
- Look directly at the dot on the center of the grid and keep your eye focused on it.
  - Do any of the lines in the grid appear wavy, blurred, or distorted?
  - Are there any dark areas or missing spots in the grid?
- Cover the right eye and repeat the same process for testing the left eye.

# HOTV Distance Chart and Instructions for Testing by Matching

- What you will need:
  - Eyeglasses for seeing far away if person being tested has them.
  - HOTV Distance Chart (either printed or displayed on a computer screen).
  - HOTV Pointing Card (either printed, or made as shown).
  - Tissues, a quarter, and pen and paper.
- Follow the directions in “How to Set-up the Tests”.
- First, explain that you will be asking the person being tested to name the letter, or to point to the letter on the HOTV Pointing Card. Practice a few times while standing close to the HOTV Distance Chart.
- In a well-lit room, have the person being tested sit 10 feet from the HOTV Distance Chart (either the printed chart taped to a wall or the chart displayed on the computer screen).
  - If you do not have enough space to sit 10 feet from the chart, the person can sit 5 feet from the chart.
  - Check to see if there is glare on the HOTV Distance Chart. If there is, try another location or adjust the screen angle to eliminate the glare.
- If the person being tested has eyeglasses for seeing far away, they should wear them for testing.
- Test each eye separately by holding a clean tissue over one eye at a time. Cover the left eye, and test the right eye first.
- For each eye, start with the largest letters. Point to each letter and ask the person being tested to point to the matching letter on the HOTV Pointing Card. Continue until you reach the smallest line of letters where the person can reliably identify at least 3 of the 5 letters on that line.
- The smallest line of letters where at least 3 of the 5 letters are matched reliably is the acuity result.
  - If the person being tested is 10 feet from the chart, record the acuity for that line from the scale on the **right**.
  - If the person being tested is 5 feet from the chart, record the acuity for that line from the scale on the **left**.
- Cover the right eye and repeat the same process for testing the left eye.



5 FT  
20/200

V O H V T

10 FT  
20/100

20/160

T V O H O

20/80

20/125

H T H O V

20/63

20/100

V O T V H

20/50

20/80

O V H T O

20/40

20/63



V T O H T



20/32

20/50

H V H T O

20/25

20/40

T O V O H

20/20

20/32

O T H V T

20/16

20/25

V O V T H

20/12

20/20

T H T O V

20/10

20/16

H T H V O

Mount on wall 5 or 10 feet from subject, away from light or window.



When printed or displayed, this picture of a quarter should be full size (1 inch diameter).

HOTV Copyright © 2020 Arizona Board of Regents

20/8

Banner Eye Care Visual Acuity Test 2.0

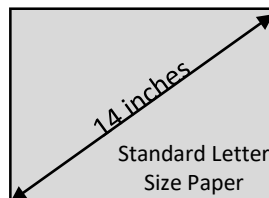
# HOTV Near Chart and Instructions for Testing by Matching

V O H V T	J16	20/200
T V O H O	J15	20/170
H T H O V	J14	20/140
V O T V H	J13	20/110
O V H T O	J12	20/100
V T O H T	J10	20/75
H V H T O	J8	20/60
T O V O H	J6	20/50
O T H V T	J4	20/40
V O V T H	J2	20/30
T H T O V	J1	20/20

Jaeger  
Snellen Equivalent  
When Tested at 14"



When printed or displayed, this picture of a quarter should be full size (1 inch diameter). You can measure 14 inches with letter size paper as shown.



What you will need:

- Eyeglasses for reading if the person being tested has them.
- HOTV Near Chart (this page).
- HOTV Pointing Chart (the page with giant HOTV).
- Tissues, a quarter, and pen and paper to record your results.
- Follow the directions in "How to Set-up the Tests".
- First, explain that you will be asking them to name the letter, or to point to the letter on the HOTV Pointing Card.
- In a well-lit room, have them view this page (either printed or on a computer monitor) at a distance of 14 inches. A piece of letter-size paper can be used as shown to measure 14 inches (see illustration to the left).
- Test each eye separately by holding a clean tissue over one eye at a time. Cover the left eye, and test the right eye first.
- For each eye, start with the largest letters. Point to each letter and ask the person being tested to point to the matching letter on the HOTV Pointing Card. Continue until you find the smallest line where 3 of 5 letters are recognized.
- The smallest line of letters where at least 3 of the letters are reliably seen is the result. Write down the Jaeger size of that line.
- Cover the right eye and repeat the same process for testing the left eye.



**H**

**O**

**T**

**V**