

Understanding Your Child's Vision Results

Photoscreening: The Lions Club uses a photoscreening digital device called a SPOT. Welch Allyn Spot Vision Screener, to objectively check for vision problems. The photoscreener is like a large camera. It takes a picture of your child's eyes. With that and the infrared measurements, SPOT can detect a number of potential eye conditions.

How to read the SPOT referral form: If your child's SPOT results form states, "**Complete Eye Exam Recommended**" at the top right of the page, it is a referral and we recommend that your child visit an eye care professional.

On the SPOT referral, you will see a section on the right side of the page called "Potential Condition." This includes information about the potential eye condition(s) detected by the SPOT device.

It will state the medical terminology followed by a short description in brackets in non-technical language. An example would be "Myopia [nearsighted]." At the bottom of the sheet, you will see a chart that shows the conditions that the SPOT can detect. For each condition, it shows whether your child's results were within the normal range or out-of-range. Shown in the graph is a relative indication of how severe the condition may be (whether it is slightly out of range or way out of range, for instance).

Please contact your local school health nurse or guidance counselor if you need financial help. Another source of help is the local Social Worker for the Blind in your local county. In New Hanover County the contact number is 910 251-5743.

Definition of Condition Identified by the SPOT and Listed on the SPOT Results Form

Anisocoria: a condition characterized by an unequal size of the eye's pupils.

Anisometropia: a condition in which the two eyes have unequal refractive power; one example of this condition would be if one eye had near-perfect vision and the other eye was near or farsighted.

Astigmatism: an optical defect in which vision is blurred due to the inability of the optics of the eye to focus a point object into a sharp focused image on the retina. This may be due to an irregular or toric curvature of the cornea or lens.

Gaze Asymmetry and Gaze Deviation: measurements the SPOT uses to detect **strabismus**, a misalignment of the eyes. Strabismus is one of the major causes of **Amblyopia** (commonly referred to as "lazy eye").

Hyperopia: commonly known as being "farsighted"; a vision issue caused by an imperfection in the eye (often when the eyeball is too short or the lens cannot become round enough), causing difficulty focusing on near objects, and in extreme cases causing a sufferer to be unable to focus on objects at any distance.

Myopia: commonly known as being "nearsighted"; a condition of the eye where the light that comes in does not directly focus on the retina but in front of it, causing the image that one sees when looking at a distant object to be out of focus, but in focus when looking at a close object.

Information resourced from <https://www.springfield.k12.or.us/Page/889>

How to Read Your Eyeglass Prescription

When you look at your prescription for eyeglasses, you will see numbers listed under the headings of **OS** and **OD**. They are Latin abbreviations: **OS** (oculus sinister) means the left eye and **OD** (oculus dextrus) means the right eye. Occasionally, you will see a notation for **OU**, which means something involving both eyes. In general, the further away from zero the number on your prescription, the worse your eyesight; the more vision correction you need. A plus sign in front of the number means you are farsighted and a minus sign means you are nearsighted. These numbers represent diopters, the unit used to measure the correction, or focusing power, of the lens your eye requires. Diopter is often abbreviated "D."

For example, if your prescription says -1.00, you have one diopter of nearsightedness. This is a fairly mild amount of nearsightedness. If you are -4.25, that means you have 4 and 1/4 diopters of nearsightedness. This is more nearsighted than -1.00, and requires stronger (thicker) lenses. Similarly, +1.00 would be a small amount of farsightedness and +5 would be more.

For people who have astigmatism, there will be three numbers in your prescription. The general form for writing these numbers is **S x C x Axis**

The **S** refers to the "spherical" portion of the prescription, which is the degree of nearsightedness or farsightedness discussed above.

The **C** refers to the "cylinder" or astigmatism, and can be a negative or a positive number. It measures in diopters the degree of astigmatism that you have. The bigger this number, the more astigmatism you have.

The **Axis** is a number anywhere between 0 and 180 degrees. It reveals the orientation of the astigmatism. It is not enough to specify how much astigmatism there is; you have to know where the difference in curvature is taking place.

Here are two examples of what prescriptions for eyes with astigmatism could look like:

-2.00 +1.50 x 180
+3.50 +3.00 x 45

The first prescription means that the person has 2 diopters of nearsightedness with 1.5 diopters of astigmatism and an axis of 180 degrees. The second prescription means that the person has 3.5 diopters of farsightedness, 3 diopters of astigmatism and an axis of 45 degrees.

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