Why Wear Glasses?

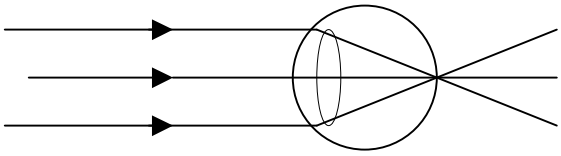
Why wear glasses?

Glasses may be prescribed for several reasons:

- To correct a refractive error, that makes the eyes unable to focus clearly.
- To alter a squint.
- To relieve symptoms such as eyestrain or headaches caused by muscle imbalance.

Normal vision

Light, from everyday objects, enters the eye and is bent by the lens at the front of the eye. Light is then focused on the retina at the back of the eye giving a clear image.

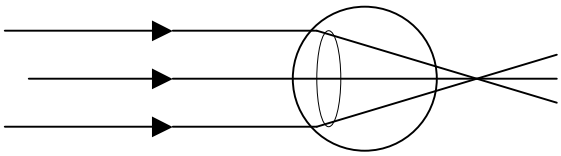


What are refractive errors?

Refractive errors mean the shape of the eye does not bend the light into focus on the back of the eye. The image that is seen is, therefore, blurred.

Hypermetropia – long sight

This occurs when the rays of light entering the eye are focused behind the retina. This is usually because the eyeball is too short.

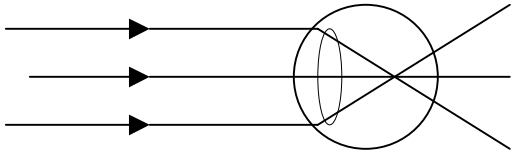


Objects at all distances appear blurred unless the eyes make an extra effort to focus. In some children this extra focusing effort may result in a squint. A convex lens is needed to focus the light clearly onto the retina.

Most children have some long sight whilst their eyes are growing and developing.

Myopia – short sight

This occurs when the rays of light entering the eye are focused in front of the retina.



Distance objects are blurred. A concave lens is needed to focus the light clearly onto the retina.

Astigmatism

This occurs when the cornea (the front surface of the eye) curves more in one direction than the other. The cornea can be described as being more like a rugby ball than a football. The vision is blurred for both near and distance objects. It is often combined with long or short sight. A cylindrical lens is needed to focus the light clearly onto the retina.

Anisometropia

This occurs when there is a difference in the refractive error of each eye. This results in blurred vision, especially in the eye with the greatest refractive error. In children, the wearing of glasses alone does not always correct the vision. A patch may be required, covering the good eye, to encourage the eye with the weaker vision to develop.

How often should glasses be worn?

In children, 7 years and younger, glasses should be worn full time. This is because there is a critical period for visual development. If refractive errors are not corrected, or compliance with the treatment is poor, then a permanent reduction in vision may occur.

To alter squints with glasses

If a young child is moderately long sighted the effort to focus and see clearly at close range i.e. reading, may make one eye turn in and squint. This happens because the muscles needed to focus the lens in the eye are linked to the muscles that turn the eye in towards the nose.

Wearing the correct glasses allow the eye muscles to relax and the eye “straighten”. When both eyes are seeing clearly the child’s vision can develop normally.

To relieve symptoms such as eye strain and headaches

Children often say that they can see as well without their glasses as with them. This may well be true. Young children can over-exert the muscles in the eye and see clearly, but this puts a lot of stress on these muscles and can lead to eyestrain or headaches. Wearing glasses allows the muscles to relax and enables both eyes to see clearly so that the child’s vision can develop properly.

Will my child always need glasses?

This depends on the reason for wearing them.

- A small amount of long sight will need correcting while the eyes are developing but after, around the age of 10, it may be possible to manage without glasses.
- Myopia (short sight) tends to increase with age. This means a child will usually continue to wear glasses.
- Astigmatism can only be corrected by wearing glasses.

- Glasses may also continue to be needed where children have squints that are improved by wearing glasses or where surgery is not an option.

Your orthoptist can advise you on your child's individual case.