### Good vision for life®

# Children's glasses

#### **Prismatic lenses**

Some eye coordination problems may be treated temporarily with a special type of lens called a prismatic lens. Prismatic lenses alter the wearer's perception of where an object is and may not make the object clearer. The edges of prismatic lenses are of different thicknesses.

The thin side of a prismatic lens is known as the apex and the thick side is known as the base. Depending on where the base of the prismatic lens is positioned in the spectacle frame, objects may appear to be smaller but closer (base-out prescription) or larger and further away (base-in prescription).

These optical effects are normal and in a short time the brain adapts to the distortions. Often the best way for a child to adapt to prismatic glasses is to wear them in a familiar environment around home before using them outside.

#### **Reading glasses**

Many people associate reading glasses, bifocals and multifocals with the failing sight of the elderly. Some people also think that prescription glasses are used only to make things look clearer for people who are short-sighted or long-sighted, but prescription reading glasses, bifocals and multifocals are worn for other reasons.

Many children and young adults benefit from wearing glasses to help them maintain normal eye coordination without effort for long periods of close focusing. A good example of this kind of work is reading in class, using hand-held devices and computers, or studying after school. Glasses for this purpose are generally called reading glasses.

In some cases, prescription reading glasses may appear to make very little difference to the clarity of the print. Their main purpose for children and young adults is often to allow both eyes to aim and focus on near tasks in a relaxed and comfortable manner.

Children in particular may have trouble understanding how these glasses help them or why they have to wear them, when there is no sudden or dramatic change in the clarity of their vision when they first put them on. The benefits of reading glasses are many and subtle.

They reduce fatigue and eyestrain from over-focusing, and can allow children to focus on the task at hand rather than on trying to see the task clearly.

Reading glasses are for use when working on tasks close at hand. Children may need to be reminded to use them. It is important to explain patiently to children that the glasses help them to see more easily rather than more clearly. Wearers must also get used to taking off the glasses to see clearly in the distance.

#### **Bifocals**

Bifocals are special types of lenses that contain two prescriptions: one for distance and one for reading. This overcomes the problem of having to take off reading glasses to see more clearly in the distance. The reading prescription is in a segment in the lower part of the lens because we naturally glance downward while reading.

Middle-aged adults wear bifocals to assist their close-focusing, which weakens as a natural consequence of ageing. It is much less common for children to wear bifocals; the usual reason is to help to relax an over-active close-focusing system.

Bifocals can be useful in treating some forms of myopia (short-sightedness). Some children who have trouble relaxing their close focusing (accommodation) may become short-sighted. Research in this area is ongoing.

The bifocal lens allows them to relax their focusing for close objects but retain clear distance vision. Research suggests this treatment may slow the development of myopia during the years of intense study.

Bifocals are also used occasionally with children and young adults in the case of convergence excess, which is a tendency to over-converge or go cross-eyed. The reading segment of the bifocal lens allows the child to relax the focusing and convergence mechanisms when looking at close objects.

Wearing properly prescribed glasses of any description cannot weaken a child's vision. For most short-sighted children and teenagers for whom bifocals are prescribed, it is necessary for the bifocals to be worn for only a few years. Children generally adapt to bifocals more quickly than adults do.

For more information and help to select the treatments that meet all your eye care and lifestyle needs, ask your Optometrist or visit goodvisionforlife.com.au

## Your optometrist

