

## Children's Vision

If a child's vision is not assessed early in life (as early as 6 months) it can have the following impact:

- ▶ Impair child development
- ▶ Interfere with learning
- ▶ Lead to permanent vision loss
- ▶ Cause behavioral and attention issues

An eye exam will include a variety of tests looking at overall eye health, as well as for vision problems including eye tracking, eye focusing and eye coordination.

Early detection and tracking of changes is key!

### Common ocular conditions that can be diagnosed and treated by an optometrist

- ▶ Refractive error- myopia, hyperopia, astigmatism
- ▶ PREVENTION of future high myopia (nearsightedness)
- ▶ Strabismus (an eye turn), amblyopia ("lazy eye", other binocular issues)
- ▶ Inefficient or under-developed visual skills
- ▶ Eye infections- viral conjunctivitis, blepharitis

### Optical Eye Problems that Require Glasses

**Hyperopia:** farsightedness

- ▶ Hyperopia is a common vision condition in adults.
- ▶ People with hyperopia must squint to see nearby objects. Reading, writing, computer work, or drawing for long periods of time may cause eye strain and headache.
- ▶ Young people with hyperopia can often accommodate and have perfect vision.

**Astigmatism:** having different prescriptions in different parts of one eye

- ▶ You can overcome astigmatism by squinting

**Myopia:** nearsightedness

- ▶ A condition in which close objects appear clearly, but far ones don't
- ▶ A growing concern in the overall population.

### Learning related vision problem

**NOT** related to eye problems that require glasses.

A learning related vision problem is due to *deficient visual skills*

Visual Skills include

- ▶ Eye Focusing
- ▶ Eye Teaming
- ▶ Eye Tracking
- ▶ Visual Perceptual Motor

If these skills are deficient, they make it difficult to read, write, copy, and perform written math.

Specific symptoms if visual skills are deficient

- ▶ Eye Focusing: blurry vision not caused by the need for glasses
- ▶ Eye Teaming: double vision / words in a book moving
  - Both can cause visual discomfort / eye headaches
- ▶ Eye Tracking: Difficulty keeping place while reading or copying
- ▶ Visual Perceptual Motor: messy writing, copying is slow with errors, sight word recognition errors, applied spelling errors, reversal errors, and sequence errors

Vision Therapy

“While *visual acuity* (the “20/20” part of vision) requires glasses to improve, *visual skills* such as tracking together along a line of text must be learned during *development*, these skills can also be improved later in life at any age.”

- **College of Optometrists in Visual Development (COVD)**

What is VT?	What does VT use?	What is the goal of VT?
<ul style="list-style-type: none"><li>• A progressive program of vision procedures</li><li>• Performed under doctor supervision</li><li>• Individualized to fit the visual needs of each patient</li><li>• Generally conducted in-office, in once- or twice-weekly sessions of 30 minutes to an hour, sometimes with homework</li></ul>	<ul style="list-style-type: none"><li>• Therapeutic lenses</li><li>• Prisms</li><li>• Filters</li><li>• Occluders or patches</li><li>• Electronic targets with timing mechanisms</li><li>• Balance boards</li><li>• A variety of special tools designed for specific and unique vision therapy activities</li></ul>	<ul style="list-style-type: none"><li>• Help patients develop or improve fundamental visual skills and abilities</li><li>• Improve visual comfort, ease, and efficiency</li><li>• Change how a patient processes or interprets visual information</li></ul>

\*\*images of vision therapy\*\*

## Screen Time

Screen time guidelines for young children:

Ages	Screen Time
Birth – 15 months	Screen time is not recommended
15 months – 2 years old	Limit screen time to short high quality programs on television or video chatting. Avoid solo screen time.
2 – 5 years	Limit sedentary screen time to no more than 1 hour per day. Less is better
6 and older	<p>For children ages 6 and older, place consistent limits on the time spent using media, and the type of media, and make sure media does not take place of adequate sleep, physical activity and other behaviors essential to health.</p> <p>Designate media-free times together, such as dinner or driving, as well as media-free locations at home, such as bedrooms.</p> <p>No screens 1 hour before bedtime, and remove devices from bedrooms before bed.</p>

Screen time means time spent viewing a device such as a computer, tablet, phone, game console, or television. The guidelines above are a blend of recommendations from the World Health Organization and American Academy of Pediatrics

Increased screen time affect a child's refractive error (spectacle prescription), is a cause of dry eyes and we are still discovering the affects of Blue Light

Children with uncorrected vision concerns or eye health issues face many barriers to being able to perform at their potential academically, socially, and in sports. The longer an eye condition goes untreated the more a child finds ways to compensate it but with negative effects. This is why it is critical that all children have a comprehensive examination to detect these concerns early and to get the appropriate treatment.