

# KEY COMPONENTS FOR COMPREHENSIVE EYE & VISION EXAMINATION IN SCHOOL-AGE CHILDREN

**Virtual learning and more frequent use of electronic devices have increased demands on children's visual systems.**

*The American Optometric Association's Evidence-Based Clinical Practice Guideline for Comprehensive Pediatric Eye and Vision Examination outlines the key components for a comprehensive eye examination for school-aged children. As children's visual systems are being required to do more to adapt to changes in school and play, assessing children for Binocular Vision, Ocular Motility, and Accommodation through cover testing, near point of convergence and accommodative amplitude is especially critical.*

## Patient History

- Nature and history of the presenting problem, including chief complaint
- Visual and ocular history
- General health history, including prenatal, perinatal, and postnatal history and review of systems, surgical and/or head or ocular trauma history, and any vision or ocular treatment
- Medication reconciliation, including prescription and nonprescription drugs (e.g., over the counter medications, supplements, herbal remedies) and documentation of medication allergies
- Family eye and medical histories
- Developmental history of the child
- School performance history
- Time spent outdoors, on sports activities, and on near work and screen viewing
- Names of, and contact information for, the patient's other health care providers



## Visual Acuity

- Snellen visual acuity
- ETDRS visual acuity



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## Refraction

- Static (distance) retinoscopy
- Cycloplegic retinoscopy
- Subjective refraction
- Autorefractometry



## Binocular Vision, Ocular Motility, and Accommodation

- Ocular alignment assessment - distance and near (e.g., cover test, Hirschberg test, Krimsky test, Von Graefe phoria, Modified Thorington, Maddox Rod)
- Ocular motility assessment (e.g., fixation, saccades, pursuits)
- Near point of convergence
- Stereopsis (e.g., Random dot stereopsis test)
- Positive and negative fusional vergence ranges
- Accommodative testing (e.g., amplitude, facility, and response)



## Color Vision Testing

## Ocular and Systemic Health Assessment

- Assessment of pupillary responses
- Visual field evaluation (e.g., confrontation)
- Evaluation of the ocular anterior segment and adnexa
- Evaluation of the ocular posterior segment
- Measurement of intraocular pressure

