



absee™



a **BCAO** children's vision program

## An essential eye-care guide



A program of the British Columbia  
Association of Optometrists supported by



Ministry of  
Children and Family  
Development



## a-b-See

The job of a teacher is an enormously important one. Children look up to you. But how they *really* see you may be different than you think.

### **One in five children has a vision disorder.**

Not knowing any differently, many of these children accept poor vision and other eye ailments as normal. If these vision problems are left unchecked, serious long-term effects can result.

As a teacher, you can play a big part in saving the kids you care for from eye conditions that hinder learning, play and how they look at the world.

Much like you, we care for kids, too. This informal guide provides easy-to-understand information about children's vision problems, eye care and related activities to make sure they see the world as clearly as possible.

**When it comes to children's vision, what could be more important?**

## Look and learn

Many children are wide-eyed with wonder as they discover new things – and for good reason.

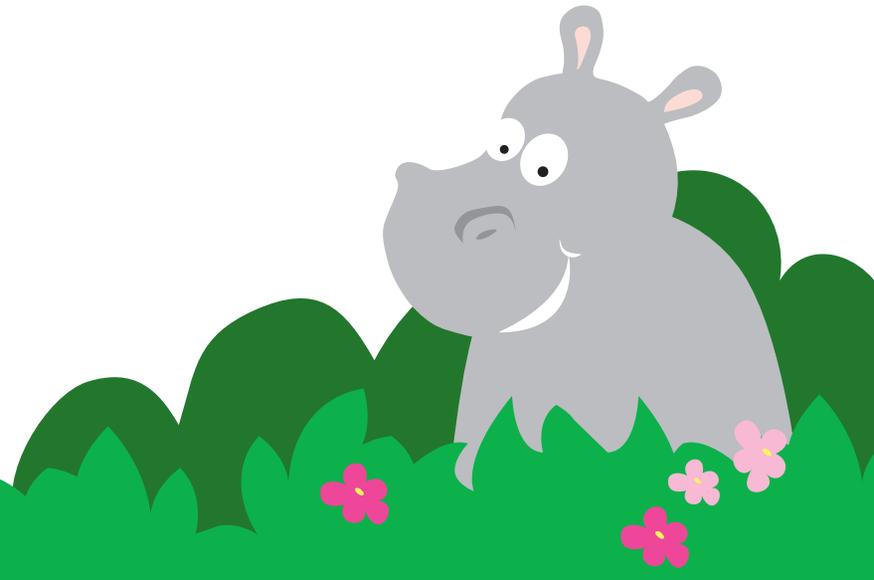
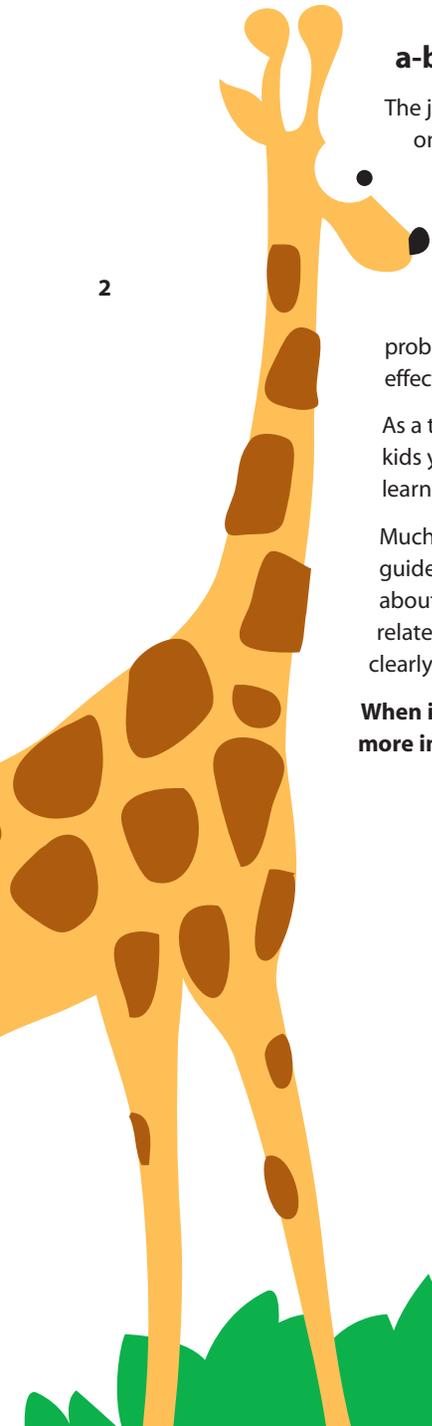
**Over 80 per cent of a child's learning is based on vision.** When it comes to drawing, colouring, reading or following instructions, the eyes have it.

Play, too, is serious business when it comes to vision. Reaching, running, catching, grabbing and balancing are all about eye-hand coordination, depth perception, focusing and tracking abilities. Simply put, keeping your eye on the ball is hopeless if you can't see properly.

If vision problems remain untreated, kids who are packed with potential are left lagging behind in learning and may become withdrawn or disruptive.

Not everyone makes the connection. Some children with poor eyesight are mistakenly labelled learning-disabled. **In fact, one out of six children diagnosed with a learning disability actually has a correctable vision problem.**

If detected, these conditions can be corrected by an eye doctor (optometrist or ophthalmologist). Eye doctors often prescribe corrective lenses or vision therapy, enabling young children to rapidly catch up to their pals.



## No reading required

One of the most important first tests a young child can take doesn't require answering any questions.

A comprehensive eye exam by an eye doctor (optometrist or ophthalmologist) is the most important investment in a child's health. An eye doctor can complete this test even if their young patients don't know their ABCs.

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For young patients, an eye doctor can use shapes, animals and other child-friendly ways to evaluate vision and eye health.

Some schools offer vision screenings. These general evaluations are good for detecting some basic sight conditions, however, they are limited in evaluating a child's overall eye health.

Many parents, for example, believe an eye test conducted by their family doctor is enough. But a perfect score of 20/20 vision only means a child may see detail at 20 feet away. The child may still experience some other visual deficiency.

Many serious eye conditions may not be accompanied by recognizable symptoms. A comprehensive eye exam by an eye doctor is the only way to know for sure.

## Learning with others

When entering your care, a bright-eyed child will be introduced to a new level of learning, play and social interaction.

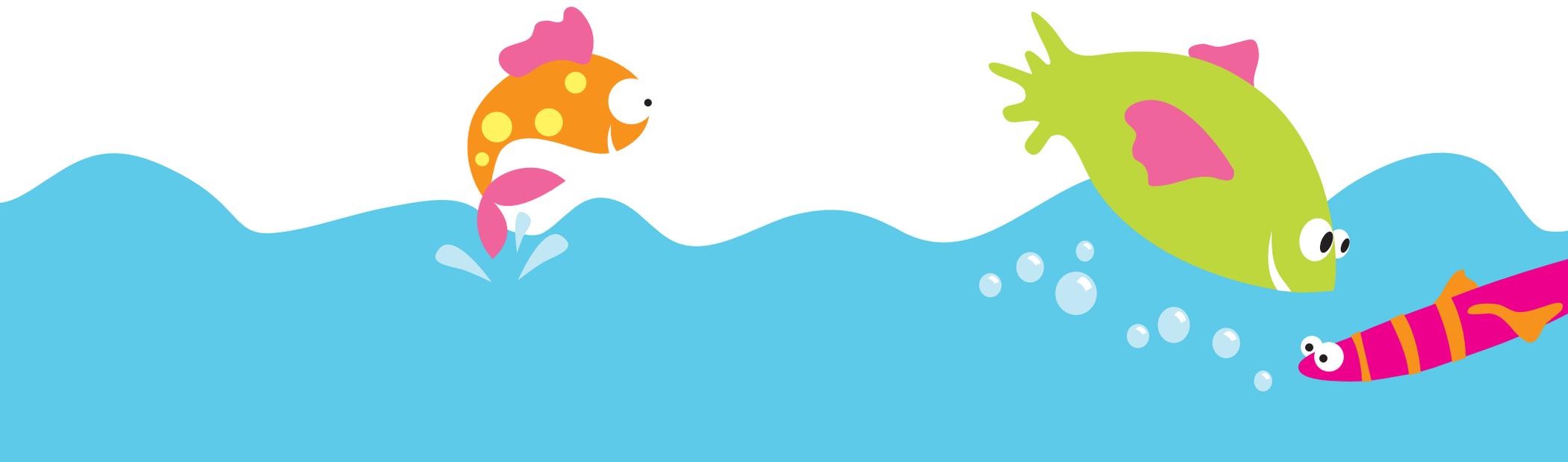
A child's days are jam-packed with mastering new skills, storytime, toys, games, drawing, crafts and playground fun. As a result, a young child's eyes need to be active, too.

For young children, several different vision skills must work together for them to see and understand clearly. If any of these eye abilities are out of sync, their learning development can be greatly affected.

Nearsightedness, farsightedness and astigmatism are the most common vision conditions among children. The treatment of lazy eye and crossed eyes in a child's early years is critical, as the conditions become more difficult – and sometimes impossible – to correct as the child ages.

Poor visual performance is also common among younger children and largely escapes detection in general vision screenings. A thorough eye exam is required to determine visual-performance problems, including: poor coordination of the eyes, turned eye, eye-movement defects, below-average eye-hand coordination and difficulties controlling focus.

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## Exercises and O's

Crayons may be key to a child's development.

Colouring O's in a newspaper can be an important part of a child's vision therapy program – a non-surgical treatment for many children's vision problems that cannot be remedied by glasses alone.

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Vision therapy can be used to treat a variety of eye conditions that develop in a child's early years, including crossed eyes (strabismus) or lazy eye (amblyopia). A personalized treatment program can also improve poor eye movements, eye teaming and focusing abilities.

With vision therapy, a child with lazy eye might have his stronger eye patched for a time to reverse the condition. Exercises to improve focusing may involve colouring O's or spearing raisins with a toothpick. Many activities stress balance and timing.

Vision therapy can involve the use of lenses, prisms, filters and other innovative procedures, combined with a sequence of activities performed either at the optometrist's office or at home.

Depending on the visual condition, a vision therapy program can last from a few weeks to several months.

## Top eye ailments

Without doubt, some of the children in your class may have:

### Astigmatism

An irregular curvature of the front surface of the eye that can result in blurred vision at all distances. It is a common refractive error, just like nearsightedness and farsightedness. It is usually a condition that is present from birth and progresses over time.

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### Binocular deficiencies

The inability of the eyes to work together effectively as a team. This includes poor eye alignment, focusing, movement and fixation (i.e. depth perception). Each of your eyes sees a slightly different image and your brain blends these two images into one three-dimensional picture. Poor eye coordination fails to keep the eyes in proper alignment.

### Crossed eyes (strabismus)

A vision condition in which a child cannot align both eyes simultaneously. One or both eyes may turn in, out, up or down. Poor eye muscle control usually causes crossed-eyes. Children with strabismus may initially have double vision. In an attempt to avoid double vision, the brain will eventually disregard the image of one eye.

### Farsightedness (hyperopia)

Individuals see better in the distance than up close.

### Lazy eye (amblyopia)

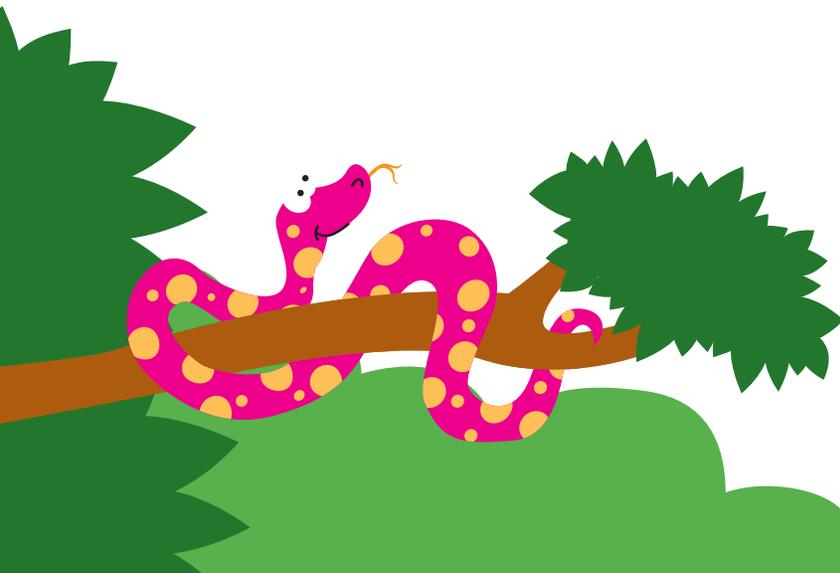
Weak vision, or vision loss, in one eye that cannot be fully corrected with lenses. The condition usually develops in children before the age of eight and is extremely difficult to treat if not attended to early. Symptoms may include noticeably favouring one eye or a tendency to bump into objects on one side.

### Nearsightedness (myopia)

Individuals see better up close than in the distance.

### Pink eye (conjunctivitis)

Caused by bacteria, viruses or allergic reactions. The contagious condition affects one or both eyes, causing discomfort and visible inflammation. Children with pink eye tend to rub their eyes often.





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## Keep an eye out

As a teacher, you know each child's likes, dislikes and when they're acting differently from the other kids. You may not realize it, but you're probably aware if they have a vision disorder, too.

Although many serious eye conditions don't have obvious symptoms – a thorough eye exam by an eye doctor (optometrist or ophthalmologist) is the *only* way to know for sure – child care, preschool and kindergarten teachers can be the first to detect early symptoms of some eye problems among children. Warning signs include:

- sitting very close to the television
- holding objects too close
- avoiding puzzles, picture books, colouring or other near-distance work
- covering one eye when looking at something up close
- body rigidity while looking at distant objects
- lack of concentration
- visible frustration or grimacing
- excessive blinking or rubbing of the eyes
- tilting of the head or unusual posture
- lack of participation
- performing below potential
- complaining of headaches, blurred or double vision, or burning and itchy eyes
- marked inability to catch, build, balance or do other related eye-hand coordination activities
- having difficulty remembering, identifying and reproducing basic shapes
- hyperactive or short attention span

## Rubbing a problem the wrong way

When foreign materials or chemicals find their way into a child's eye, their first response is to try to rub out the problem. This action only aggravates the condition and may cause more serious damage.

Here are some helpful hints to consider if a child experiences an eye injury. Be sure the child in your care sees an eye doctor as soon as possible after any eye mishap.

### Foreign objects

Don't rub. Rinse. If you can't flush out, try to lift the upper eyelid outward and gently pull it down over the lower lashes. Tears will flow, often washing the object out. If the object does not wash out or discomfort persists, contact an eye doctor.

### Chemicals in eyes

Immediately flush the eyes with cool water for at least 15 minutes. Hold their head under a slowly running faucet or pour water gently from a glass. Seek professional attention immediately after flushing.

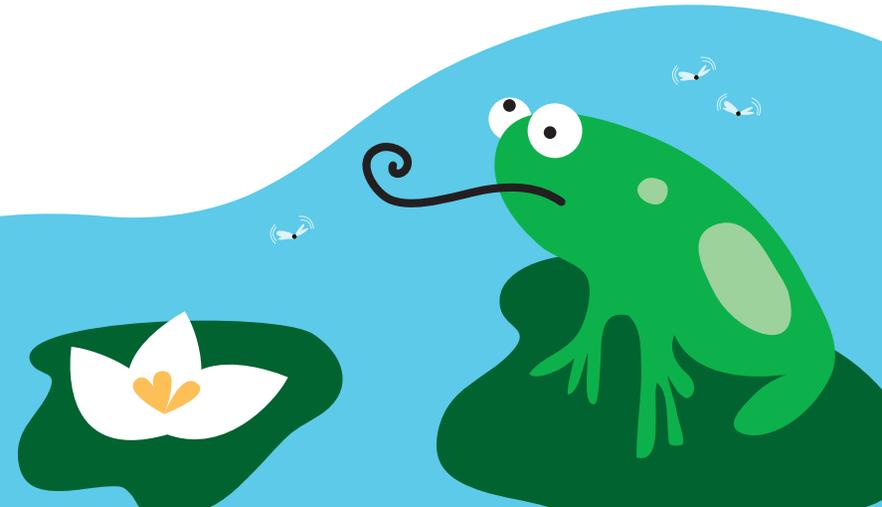
### Bruised eye

Treat with a cold compress for about 15 minutes every hour. Have the eye checked by an eye doctor for any internal damage.

### Cut, laceration or penetrating eye injury

Do not attempt to treat the injury yourself. Gently cover the eye with a bandage or gauze pad and go directly to a nearby hospital.

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# class activities

## Eye know

Eyes are a child's most prized possession for playing, watching TV or any other Top 10 kids' activity. Yet for all they use their eyes, children know little about their sight and how important it is. Inspire your children to become prized pupils of eye care.

The British Columbia Association of Optometrists has included a number of fun activity sheets and singled out several popular preschool- and kindergarten-aged story books that promote visual awareness.

## BCAO activities

**Magic Glasses** – Glasses make people see better. Magic glasses can change the way people see you. Paint black spots on the supplied glasses and become a super-sighted guide dog or glue on whiskers and become the cat's meow.

**Colouring Safari** – This rainbow adventure will have the children in your class searching the skies, waters and lands for exotic birds, fish and animals. When it comes to colouring, this book shows it's a real jungle out there.

**Googley Eyes** – Everyone has different coloured eyes. Some eyes are even shaped differently than other people's. Have a child look into the mirror. Let them try to colour the eyes to look like their own. Or their friends. Or have the child make the first pair of purple and green-spotted goofy, googley eyes.

*Other activity ideas:*

**Private Eye** – A mystery of missing mementoes where sleuths solve a case of subtraction. Line up a number of objects. Have the children close their eyes while you remove one or more items. Can anyone identify and describe in detail what went missing? A perfect activity to promote visual memory and comparison.

**Treasure Hunt** – Ahoy, mateys! Have your young pirates look near and far for buried – or at least partially hidden – treasure. Draw selected items on the blackboard and have your children look for the objects within the classroom. This treasure hunt promotes visual performance.

**Eye Spy** – I spy with my little eye something that is red? Square?

A game where everyone is on-lookout for your prized pick. Choose an object and make others guess what you see. A simple, but great, activity to promote visual comparison and visual performance.

## Storytime

*A selection of story books focused on eye issues:*

**All the Better to See You With**, *Margaret Wild* – Kate doesn't know what other people can see until one day on a crowded beach...

**Arthur's Eyes**, *Marc Brown* – His friends tease Arthur when he gets glasses, but he soon learns to wear them with pride.

**Glasses – Who needs 'em?**, *Lane Smith* – A doctor provides a wacky list of well-adjusted eyeglass wearers.

**I Need Glasses**, *Charlie Thomas* – A little girl learns why she needs to wear glasses...

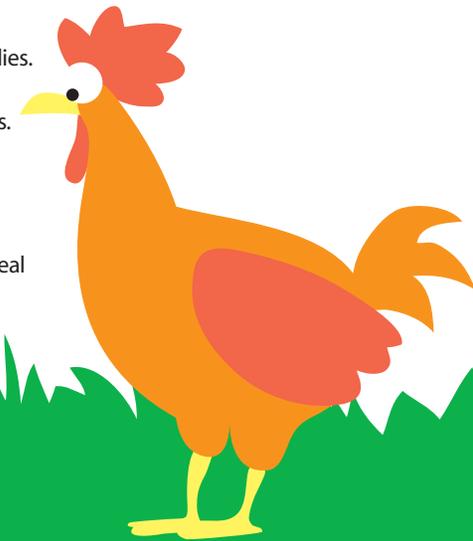
**Look! Look! Look!**, *Tana Hoban* (also, **Look Again!**) – Unusual photographs teach readers different ways to look at familiar objects.

**Luna and the Big Blur**, *Shirley Day* – After a series of mishaps, Luna learns to accept her nearsightedness.

**Magenta Gets Glasses**, *Deborah Reber* – Popular Blue's Clues character Magenta needs glasses but is nervous about seeing the eye doctor and having an eye exam.

**The Eye Book**, *Theo LeSieg* – "Our eyes see flies. Our eyes see ants. Sometimes they see pink underpants." Dr. Seuss's hilarious ode to eyes.

**The Patch**, *Justina Chen Headly* – Embarrassed to wear her patch and glasses, Becca wears several costumes to school to boost her confidence before revealing the real reason for her patch.





To find an optometrist near you, visit  
**[www.absee.ca](http://www.absee.ca)**  
or call 1.888.393.2226.



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