A NOTE TO THE READERS:

This document has two sections. The school pack is designed primarily for teachers to have facts and activities that they can use in the classroom for children to learn about eyes in a fun and engaging way. The pack may also be useful for parents and guardians.

SECTION 1

This section is aimed at teachers, parents, and guardians of young children. It introduces the concept of eye health and presents some useful facts, tips and activities in a fun and engaging way.

SECTION 2

This section is aimed at teachers, parents, and guardians of older children to initiate discussions on eyes and vision and educate and create awareness about eye health. The information is presented keeping the learning journey in mind and includes eye care tips, a check list for prioritizing eye tests, individual and class activities, discussions etc.

Disclaimer:

This guide contains general information relating to eye health and is intended for informational purposes only. This information is not intended to be used as medical advice and does not guarantee any outcomes. Please do not use this information for diagnosing or self-treating any health or medical-related condition as this information is not a substitute for professional medical advice, diagnosis or treatment. If you think you may have a medical condition or emergency, please immediately consult a medical or health professional for assistance.
SECTION 1

This section is aimed at teachers, parents, and guardians of young children. It introduces the concept of eye health and presents some useful facts, tips and activities in a fun and engaging way.

Note: In your classroom you may have children that already have eye conditions, diseases and poor vision. Consider adapting activities and messages to ensure these children are included and know that with access to eye care services, vision rehabilitation and a supportive environment, children with poor vision that is not correctable are able to achieve their full potential.
INTERESTING FACTS ABOUT EYES:
DID YOU KNOW?

**15x**
The average person blinks 15 times per minute. This means our eyes are closed for 10% of our waking hours!

**50%**
Half of the human brain is used for the process of seeing! We are very much visual animals.

Humans are the only animals that produce emotional tears! Scientists don’t fully understand why we cry, but tears do help keep our eyes clean.

It is impossible to sneeze without blinking!
**ACTIVITY 1:**
**HOW MUCH DO YOU KNOW ABOUT YOUR EYES?**
**UNSCRAMBLE AND FIND THE ANSWERS.**

**Instructions:** Go ahead and try to unscramble these jumbled words using the clue given along with each jumbled word.

<table>
<thead>
<tr>
<th>Unscramble</th>
<th>Clue</th>
<th>Your Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>yEes</td>
<td>1. One of the five sense organs</td>
<td>Eyes</td>
</tr>
<tr>
<td>tuOodrso</td>
<td>2. Playing here helps keep your eyes seeing clearly</td>
<td>Outdoors</td>
</tr>
<tr>
<td>Gasless</td>
<td>3. Many people wear these to help them see clearly</td>
<td>Glasses</td>
</tr>
<tr>
<td>lEedsiy</td>
<td>4. These sometimes shut automatically to protect your eyes</td>
<td>Eyelids</td>
</tr>
<tr>
<td>kBnil</td>
<td>5. Don't forget to do this when using digital devices!</td>
<td>Blink</td>
</tr>
</tbody>
</table>

Our eyes create an image that is upside down and reversed! The brain then turns the image around the right way.

Chameleons can move their eyes in two different directions at the same time!

The coloured part inside the eye is called the iris. Just like the fingerprints, the iris has unique patterns in it!

Dolphins can sleep with their eyes open!
A CHECKLIST FOR YOUR EYES

It is a good idea to sometimes think about how your eyes feel and look and about how well you can see. Here is a checklist for you to use. If you answer “yes” to one or more of these questions, let your teachers, parents and/or caretakers know.

Q1: Do you feel like rubbing your eyes all the time?
Q2: Do you have trouble reading the board in your classroom?
Q3: Do you find it difficult to focus or follow moving objects?
Q4: Do your eyes tear up often? Or when you try to read?
Q5: Do you find it difficult or painful to look at light?
Q6: Do you have a headache or feel that your eyes are often tired?
Q7: Have any of your friends/ family told you that one of your eyes turns in or out or doesn't always look straight?
Q8: Is the TV blurred when you sit further from the screen?
ACTIVITY 2:
DESIGN YOUR OWN GLASSES FRAME

For some people, glasses can help their eyes see clearly. Here is a fun activity for you. Draw a super cool frame that everyone would love to wear or you want to wear in the box below.
Imagine if your glasses could have superpowers. What superpowers would your glasses have? Write or draw the superpowers in the box below.
Are you having fun learning about your eyes so far? Next, would you like to know what happens in an eye test?

To keep our eyes healthy and make sure we can see well, it is important to regularly have our eyes checked.

What Happens In An Eye Test?

**HISTORY TAKING**
The eye care practitioner will ask you about how your eyes look and feel and if you have any trouble seeing. They will also ask about your general health and if anyone in your family has any eye diseases.

**SIGHT TEST**
You will be asked to look at a chart of letters or pictures that may be on a wall or screen. They will ask you which letters or pictures you can see. They will also ask you to look at a chart that you can hold and tell them which letters or pictures you can see. If you already use glasses, this test may be done with your glasses on and with your glasses off.

**GLASSES PRESCRIPTION**
Your glasses prescription will be assessed using special devices. Your new prescription will be compared to any glasses you already have.

**ADDITIONAL TESTING**
You may also be asked to do a few other activities that help the practitioner understand how your eyes work for example how well your two eyes work together and how you see colours.

**EYE HEALTH**
The health of the front of your eye will then be tested using a microscope-based instrument. Your practitioner might also ask to put some eyedrops in your eye, which will increase the size of the pupils (the black part of your eye) so that the practitioner can look at the back of your eye.

**GLASSES MEASUREMENT AND DISPENSING**
If you need glasses for the first time or require a change of glasses, measurements will be taken to ensure that the frame fits well on your face, is comfortable and you can see well with the glasses.

**DISCUSSION**
At the end of the eye test, the practitioner will explain to you and your parents or carer about the health of your eyes and your vision. They will explain things you will need to do to look after your eyes and vision. If you are found to have an eye disease, they will let you know what you need to do to treat the disease. They will also let you know when you need to have your eyes tested again.
WHERE CAN I GET AN EYE TEST?

Eye tests are generally done in eye clinics or eye hospitals. However, this could be different depending on the community or country that you live in.

In your community you might have an eye test by:

- going to see an eye care professional at their eye clinic.
- checking your vision as part of health checks in your school and then, if you need to, visiting an eye care professional in a clinic or hospital.
- having your vision checked at a health care clinic and then, if you need to, being referred to see an eye care professional in a clinic or hospital.
ACTIVITY 3:

Here is a book of colourful stories about eyes and vision called **Through the Looking Glasses**. Have a look at the story, Full Colour, by Caroline Dusabe on page 92.

Now that you have read the story, can you try to answer these questions?

- **Q1. What problems does he have when he doesn’t have his glasses?**
- **Q2. How do the glasses help the little boy?**
LOVE YOUR EYES.
THERE ARE SIMPLE AND EASY THINGS WE CAN ALL DO TO KEEP OUR EYES HEALTHY.

1. **Follow the 20/20/20 rule to give your eyes screen breaks.** When using a screen, look at something 20 feet away for 20 seconds every 20 minutes, to avoid eye strain and headaches.

2. **Spend time outside for your eyes to develop in a healthy way.** Children should spend at least two hours a day outside. This also helps avoid developing nearsightedness.

3. **Wear sunglasses outside.** Make sure your sunglasses offer UVA and UVB protection to prevent radiation from the sun damaging your eyes.

4. **Wear prescription glasses if you need them.** You should wear your prescription glasses to see clearly and prevent your eyes from having to work harder which can lead to eye strain and headaches.

5. **Check your cosmetics to avoid eye infections.** Check the expiry date on eye makeup and replace your brushes regularly to prevent the build up of bacteria that could cause eye infections.

6. **Exercise regularly to look after your eyes.** Taking regular exercise can reduce the risk of developing conditions like diabetes or high blood pressure which can affect your sight.

7. **Eat a healthy diet for healthy eyes.** Eating a balanced diet ensures you have the vitamins and minerals that are essential for maintaining healthy eyes.

8. **Stop smoking to help avoid sight loss.** Smoking increases your risk of developing serious eye conditions and permanent sight loss.

9. **Book an eye test to detect problems before they arise.** An eye test can detect an eye condition even before it’s affected your eyesight, so even if you don’t think there’s anything wrong with your eyes, you should book a test.

10. **Prioritise your eyes - you need them to last all your life.** Put reminders in your calendar to have regular eye checks. You should have your eyes checked every 1-2 years.
SECTION 2

This section is aimed at teachers, parents, and guardians of older children to initiate discussions on eyes and vision to create awareness about eye health. The information is presented keeping the learning journey in mind and includes eye care tips, a check list for prioritizing eye tests, individual and class activities, discussions etc.

Note: In your classroom you may have children that already have eye conditions, diseases and poor vision. Consider adapting activities and messages to ensure these children are included and know that with access to eye care services, vision rehabilitation and a supportive environment that they can achieve their full potential.
WHY IS VISION SO IMPORTANT?

- We use our sense of vision for many important tasks every day, it is one of the main ways we gain information about the world around us.

- Many of our daily tasks rely on being able to see well, from reading to recognising faces to playing sport.

- Vision plays an important role in a child’s overall health and well-being, self-esteem and the ability to function in day-to-day life.

- Poor vision can impact many areas of life. Children with vision loss often experience more symptoms of anxiety and depression and often achieve poorer outcomes at school. Vision loss can have ongoing consequences on other life opportunities.
  - However, it is important to note, if a child with poor vision has access to rehabilitation services, products and a supportive environment they should be able to reach their full potential.
SOME VISION FACTS AT A GLANCE

• Vision is a two-part process; the eyes focus on and create an image then the brain interprets the image to understand what we are seeing.

• Our eyes and vision continue to develop until we are about 8 years of age.

• Most vision loss can be avoided in children if their eye condition is detected early.

• Providing glasses to children who need them can reduce the odds of failing at class by 44%.

• Glasses were invented 700 years ago and is the simplest solution available to treat refractive error, yet 671 million people do not have the glasses that they need.

• Myopia, often called short or near sightedness, is increasing rapidly among children and almost half the world’s population might have myopia by 2050.

• 1.1 billion people experience vision loss, 90% could be prevented or treated.

• 90% of people who experience vision loss live in low and middle-income countries.

• People with vision loss often have fewer employment prospects and are more likely to have low paid work rather than professional jobs.
Prioritize your eyes. Make sure that every child has an eye test before entering school, so that eye problems that can impact reading, learning, social interactions and sport can be detected and treated early.

**WHERE DO I GET AN EYE TEST DONE?**

Eye tests are generally done in eye clinics or eye hospitals. However, this could differ based on the health systems and practice followed in your country. Depending on your setting, you may access eye tests by:

- Direct access to your eyecare practitioner.
- A vision screening in a health care clinic followed by a comprehensive eye examination as needed.
- A vision screening in school and referral to a comprehensive eye examination.
WHAT HAPPENS IN AN EYE TEST?

In general, a comprehensive eye test involves:

**HISTORY TAKING**
The eye care practitioner will enquire about your eyes and vision, your general health and your family history of specific eye diseases.

**VISION TEST**
Your vision will then be tested using a standard vision chart to see the smallest size of letters or pictures that you are able to identify. This test will be done twice, once on a chart that is at a distance from you and one that is within arms length. If you already use glasses, the test may be done with your glasses on and without glasses.

**GLASSES PRESCRIPTION**
Your glasses prescription will be assessed using special devices. Your new prescription will be compared to any glasses you already have.

**ADDITIONAL FUNCTION TESTING**
May include testing for how your eyes work together, colour vision, and any other procedures relevant to your eye condition.

**EYE HEALTH**
The health of the front of your eye will then be tested using a microscope-based instrument. This may be followed by measurement of eye pressure.

The back of your eye will be looked at through an ophthalmoscope or similar device. To best see into the back of the eye, your eyes may be dilated using eye drops. This will increase the size of the pupils so that the eye care practitioner can better examine the inside of your eyes (retina and optic nerve). Some practitioners will also advise capturing a photo of the retina and optic nerve.

**GLASSES MEASUREMENT AND DISPENSING**
If you need glasses for the first time or require a change of glasses, measurements will be taken to ensure that the frame fits well and provides you with good vision and comfort.

If you are diagnosed with any eye disease, further testing will be advised to plan treatment.

**VISION REHABILITATION**
For children with poor vision that cannot be corrected, vision rehabilitation services and optical aids and devices can enable and enhance functional ability.
TEACHERS OR PARENT & GUARDIAN CHECKLIST ON WHEN TO SEEK ADVICE FROM AN EYECARE PRACTITIONER

Most countries have guidelines on when children should have their eyes checked, however it is helpful for teachers, parents and guardians to be aware to seek advice for any item on this checklist.

- is born pre-term
- shows developmental concerns (delayed milestones)
- have parents or siblings who wear glasses or has a history of other inherited eye conditions
- have visual complaints such as squinting, soreness, and constant eye rubbing
- need to move closer to the television or move objects closer to them to see
- have red, watery or itchy eyes
- tilt or adjust their head position when viewing objects
- complain of headaches, eyestrain, seeing double or blurred vision
- present symptoms where the eyes appear to drift outwards or inwards
- if the pupil (the round hole in the middle of the coloured part of the eye) appears white in colour rather than appearing black
- has diabetes or any other diseases that can result in vision loss
LESSON
Talking about eye health is important to make children aware of the various issues related to vision. This lesson is structured around key learning domains, designed to expose students to important knowledge, thinking and central themes about vision. This lesson plan will help teachers, parents, and guardians to initiate discussions on eye and vision with children.

**ENGAGE**
Introductory activities to provide an “entry point” to issues about vision for students.

**ELABORATE**
Focusing more broadly on poor vision as a global problem, using in-depth facts to provide a better understanding of eye health and vision issues.

**EXPLORE**
Stimulating student’s knowledge base on eye health and provoking discussions which can be expanded on through the ‘EVALUATE’ section.

**EVALUATE**
Encouraging students to think deeper and express their opinions on the topics covered in the lesson.

**PRACTICE**
Encouraging students to support Love Your Eyes campaign.
**ENGAGE**

**EXPERIMENT**

**Blind drawing:** There are many blind artists who overcome their sight loss. Can you?

**INSTRUCTIONS:**

With a partner, take it in turns. Cover the eyes of your partner or ask them to close their eyes tightly. Ask them to draw something (think of an animal or an object) whilst their eyes are covered.

After a minute, stop drawing, uncover your partner’s eyes, then examine and discuss the results.

Is the animal or object recognisable? Are there any features that are out of place?

**DISCUSSION POINTS:**

- Artists who live with sight loss use their other senses to help understand the object that they are drawing. For instance, when drawing faces, they will often use their hands to feel the features of the face. Our senses of touch and hearing can be a useful alternative to help us understand our world if we have sight loss.
- How do you think you would continue to do the things you like if you had sight loss in both eyes?
- How could you access information about the environment or digital content using touch or hearing?
- What kind of support might you need?
YOUR OBSERVATIONS (OPTIONAL)

Consider what you observed and/or felt while doing this activity. Write down the top two things that you observed or felt while doing the activity?
ELABORATE
DISCUSSION

Understanding the issue of poor vision

Uncorrected poor vision is the largest unaddressed disability in the world today.

The leading causes of vision loss are uncorrected refractive errors and cataracts. 671 million people, have poor vision because they do not have a pair of glasses! – a solution that has been around for 700 years.

While several factors can be attributed to why so many do not have access to glasses, it is true that life can be difficult for many people without them.

Without clear vision:

• A child may not be able to see the blackboard and make the best of themselves at school.

• A child may not be able to read, play sport, participate in social media and online games, or socialise easily with family and friends.

• A worker cannot be their productive best and will therefore earn less in the workplace.

• People can be cut off from society, unable to enjoy a proper quality of life.
THINGS TO DISCUSS AS A CLASS OR GROUP

• What would be hard for you to do if you could not see clearly? It may be useful to ask everyone to close their eyes and think about this question.

• What jobs would be hard for someone who cannot see clearly?

• Can you think of someone who wore or wears glasses that changed the world in a big way?

• Who is your favourite glasses wearer?
EXPLORE

There are several issues that the world is seeking answers and solutions for when it comes to making sure that no one suffers vision loss because of lack of access, resources or awareness.

**Things to discuss as a class / group**

**Below are some issues that we would want you to know:**

**Eye health issues**

- Children with vision loss - 2.5X less likely to be in formal education
- Women 12% more likely to have vision loss than men
- 1.1 billion people experience vision loss; 90% could be treated or prevented
- Uncorrected poor vision is the largest unaddressed disability in the world today

1) What other issues do you think should be in this list?

Express Yourself

Write a sentence, or draw or describe something that reflects your experience of vision. This may be good or poor vision.

Write a sentence, or draw or describe something that shows what you do or would need help with if you have poor vision.
Poor Vision activity

In pairs, and using a blindfold from any type of safe material, take turns to try moving around a room while wearing the blindfold. Have the person not wearing the blindfold guide the person wearing the blindfold and ensuring they move around the room safely.

Speak to each other about how you feel, how easy or difficult it is and the help you may have needed to get around safely.
PRACTICE
Design your own glasses

Create your own glasses designs using the card and decorate them, then take photos in class.
SHOW YOUR SUPPORT

Take Your Heart Glasses Selfie & Call On Everyone To #LoveYourEyes

Everyone can get involved in this year’s #LoveYourEyes campaign – a campaign that highlights the importance of looking after our eye health.

You can download your very own heart glasses from the social media resources page at iapb.org.

Print them off, take your selfies and get sharing to help everyone understand why it’s important to #LoveYourEyes.