



EDUCATION ACTIVITY PACK



FORWARD

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I am passionate about giving all children around the world the best start in life and have dedicated my career to helping children and families. This is why I have joined with **IAPB** and their World Sight Day Global Partners to put together this activity pack for World Sight Day.

There are **1.1 billion people** globally living with vision loss. That includes **91 million children** – our future – who live with vision loss.

Detecting and addressing vision loss among children brings huge benefits – transforming lives, boosting educational attainment and enabling children to reach their full potential. School-based screenings can identify other vision issues, helping to get them addressed promptly. Without action, vision loss among children is projected to grow rapidly in the years ahead.

We need to educate our children about the importance of eye health and why it is important to regularly get their eyes tested. I hope that this pack offers opportunities to learn more about how our eyes work and why it is important to **#LoveYourEyes**.

This is about our children's lives and futures.

INTRODUCTION

WHY VISION IS SO IMPORTANT?

LOVE YOUR EYES

Vision and eye-related problems during the developmental years can significantly impact the wellbeing of a child.

Any undetected vision problems during the early school years can substantially impact their overall behaviour at school as well as academic achievement.

It's time to **LoveYourEyes**.

VISION FACTS

AT A GLANCE

165 million children

have short sight (myopia) rising to 275 million by 2050 if we fail to act.

44%

Glasses can reduce the odds of failing at class by 44%.

90% of people

of people who experience vision loss are from the low and middle-income countries.

INTRODUCTION

HOW DO I LOVE MY EYES?

TO MAINTAIN HEALTHY VISION, FOLLOW THE **4P** GOOD EYE HEALTH GUIDE

PREVENT

- Eat healthy
- Adopt healthy habits
- Go and play outdoors
- Reduce screen time

PROTECT

- Wear quality sunglasses if going out in sunny conditions
- Use specific sports-related eyewear while playing sport

PRESERVE

- Routine eye check-ups
- Follow the recommendations provided during school vision screenings
- Follow treatment advice for wearing glasses, and for any eye medications prescribed by the eyecare practitioner

PRIORITISE

- Prioritise your eye care and vision care. A periodic eye test is as important as a vaccination schedule or any other routine health check-up
- Make sure that every child gets an eye examination before they start school, to enable early detection and treatment of eye problems that can impact reading and learning
- Do not ignore any warning signs that indicate any underlying vision problems

SMART TIPS

- Playing at least 1-2 hours outdoor every day in natural sunlight has proven to reduce the risk of children becoming short-sighted
- Take frequent breaks and look outside or as far into the distance as you can
- When on screens use 20/20/20 rule: Every 20 mins, look 20 ft/metres away, for about 20 seconds
- If you find it hard to read, or your eyes or head sometimes feel funny or sore when you try to look at objects, ask your parents to take you for an eye exam

INTRODUCTION

EYE TESTS

WHERE CAN I GET AN EYE TEST?

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

A child might need an eye examination if they...

- ▶ are born pre-term
- ▶ have developmental concerns and reading difficulties
- ▶ have parents or siblings that need to wear glasses
- ▶ 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 or seeing double
- ▶ present symptoms where the eyes appear to drift outwards or inwards

WHAT HAPPENS IN AN EYE TEST?

In general, a comprehensive eye test involves:

- **History taking** – the eye care practitioner will enquire about your eye and vision related complaints, medical history, and family history of specific eye diseases
- **Visual acuity** – your vision will then be tested using a standard vision chart to see the smallest size of letters that you are able to identify at a range closer in and further away. If you already use glasses, the test will be done with your glasses on
- **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** – may include testing for alignment of the eyes, 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 will be followed by measurement of eye pressure.
- **Dilation of eyes** – your eyes may then 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) through an ophthalmoscope. Some practitioners will also advise capturing a photo of the retina and optic nerve
- **Spectacle measurement and dispensing** – If you need glasses for the first time or require a change of eyeglasses, measurements will be taken to ensure that the spectacle 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

LESSON

LESSON PLAN

SCHEME OF LEARNING

This lesson is structured around key learning domains, designed to expose students to important knowledge, thinking and central themes about vision.

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 and visual graphics to provide a better understanding of vision issues.

EVALUATE

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

EXPLORE

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

PRACTICE

Encouraging students to support the campaign.

WHAT YOU MAY NEED FOR THE ACTIVITIES

- Sheets of A4 paper or card
- Home printer (if available)
- Scissors
- Glue or sticky tape
- Arts and crafts items which will help you to complete the activities: drawing pencils, crayons, coloured pencils, black marker pen; assorted decorative items – glitter, rhinestones, sequins, jewels etc.
- A blindfold or suitable and safe piece of material to cover the eyes

SUITABLE AGES

6-14 years

ENGAGE

EXPERIMENT 1

Blind spots: everyone has a natural 'blind spot' in each eye. Can you find yours?

INSTRUCTIONS

If you have a printer at home, please print off the following page featuring the cross and dot. If you don't, using a thick black pen draw a cross and a dot 12cm apart on a piece of white paper. Hold the picture of the cross and the dot 60cm from your face and make sure that your nose is pointing in between the cross and the black dot. Cover your left eye and stare at the cross with your right eye. Now SLOWLY move towards the picture while still staring at the cross with your RIGHT eye. If you move slowly enough you'll eventually notice that the black dot will disappear! This is your BLIND SPOT. If you move closer to the cross and dot or further away, the dot will re-appear. At just 'the right distance', the dot will disappear.



This way up

ENGAGE

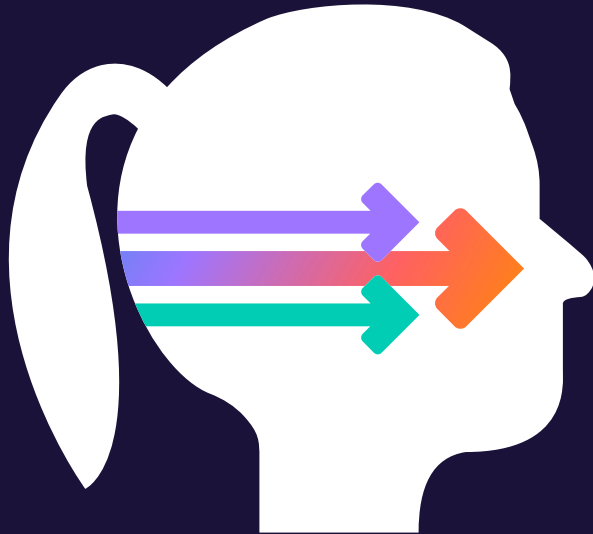
EXPERIMENT 2

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. Then 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? Artists that 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 sense of touch can be a useful alternative to help us understand objects that are in front of us.

EXPLORE EYE HEALTH ISSUES 1



VISION LOSS IS DRIVEN BY INEQUALITY: WOMEN ARE 12% MORE LIKELY TO HAVE VISION LOSS THAN MEN

Women and girls more likely to have vision loss and experience additional barriers to eye care services. We are committed to break down barriers and ensuring that all children, especially girls, have access to education from early childhood.

Discover more from the IAPB Vision Atlas at www.atlas.iapb.org

ELABORATE DISCUSSION 1

Why do we need our eyes?

They help us to understand the world around us

They keep us safe by letting us see danger

They allow us to see beautiful things

Two eyes allow us to sense depth

VISION FACTS

FUN LEARNING

15x

The average person blinks 15 times per minute.
Our eyes are closed for roughly 10% of our
waking hours overall.



Tears help keep the eye clean, but scientists do not
really understand why we cry. Also, humans are
the only animals that produce emotional tears.

 1 in 12
 1 in 200

Around 1 in 12 men are colour blind, but fewer than
1 in 200 women. Men are much more likely to be
colour blind because the genes responsible for the
most common, inherited colour blindness are on
the X chromosome.

Ommatophobia

A **BIG WORD**... which means a fear of the eyes.

256

The coloured part of your eye, iris, has 256
unique characteristics

50%

About half of our brain is involved in the seeing
process. Humans are very much visual animals

ELABORATE DISCUSSION 2

Why vision is so important?

UNDERSTANDING THE ISSUE OF POOR VISION

Uncorrected poor vision is the largest unaddressed disability in the world today. The leading causes of vision impairment and blindness are uncorrected refractive errors and cataracts. 671 million people, have poor vision because they do not have a simple 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 particularly in low and middle income countries.

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.

World leaders have signed up to a series of 17 Sustainable Development Goals including those on poverty, health, education, gender, work, and inequality. It's impossible to see how we can deliver these goals by 2030 without urgent action on vision. It's time to act now.

VISION FACTS

A GLOBAL PROBLEM IN NUMBERS

1.1 billion people

experience vision loss, 90% could be prevented or treated

700 years ago

glasses were invented, yet 671 million people do not have the glasses that they need

\$410 billion

Poor vision costs the global economy US \$410 billion in lost productivity every year

22% per day

Addressing vision loss can increase productivity by the equivalent of over 22% a day per week, the largest known increase from improvements to healthcare

ELABORATE DISCUSSION 3

THINGS TO DISCUSS AS A CLASS

- What would it be hard for you to do with poor vision?
- What jobs would be hard to do with poor vision?
- Some people who are blind or wear glasses that inspire you.
- Can you think of someone who wore glasses that changed the world in a big way?
- Who is your favourite glasses wearer?

ELABORATE DISCUSSION 4

VISION FACTS

AVOIDABLE BLINDNESS

At least 771 million people (90%) have vision loss that can be prevented or treated.

161 million people

have uncorrected refractive errors that can be treated with spectacles or contact lenses

100 million people

have cataract that can be treated with surgery

510 million people

have near vision impairment due to uncorrected presbyopia that can be treated with spectacles

There are 77 million people (10%) with vision loss from conditions that require ongoing management, treatment, low vision services or rehabilitation.

TOP 2 CAUSES FOR VISION LOSS

UNCORRECTED REFRACTIVE ERROR

Refractive error refers to a group of eye conditions when the eyes cannot focus at the objects resulting in blurring of vision. The major types of refractive errors include myopia, hyperopia, astigmatism, and presbyopia

CATARACT

Cataract is caused due to the clouding of the lens inside the eye. As we age, the proteins inside the lens break, causing fogginess and reduction in vision. The cloudiness of the lens tends to progress resulting in opacification of the lens, progressive reduction in vision, and could lead to blindness if left untreated

EXPLORE EYE HEALTH ISSUES 2



GOOD VISION EQUALS BETTER EDUCATION: CHILDREN WITH VISION LOSS ARE 2.5X LESS LIKELY TO BE IN FORMAL EDUCATION

Educational performance is linked to good vision. Children with vision impairment in low and middle-income countries tend to have poorer educational outcomes and are more likely to be excluded from schools. Investing in eye health services improves educational attainment and increases participation in education.

Discover more from the IAPB Vision Atlas at www.atlas.iapb.org

EVALUATE

REFLECTION

EXPRESS YOURSELF

Write a sentence, or draw something that reflects how grateful you are to be able to see.

Write a sentence, or draw something that shows what you would miss if you could not see.

EVALUATE

REFLECTION

EXPERIENCE POOR VISION

Get together with a partner and using blindfold or any type of safe material take turns to try moving around a room unable to see. Speak to each other about how you feel, how difficult it is and the help that is needed to get around safely.

EXPLORE EYE HEALTH ISSUES 3



GOOD VISION HELPS EDUCATION OPPORTUNITIES: GLASSES CAN REDUCE THE ODDS OF FAILING A CLASS A CLASS BY 44%

Vision screening and provision of glasses helps improve educational outcomes for children with vision impairment, and the provision of other types of assistive devices and reading aids are also likely to be effective.

Discover more from the IAPB Vision Atlas at www.atlas.iapb.org

PRACTICE

PRACTICE

PHOTO FUN

Design Your Own Glasses

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



PRACTICE

SHOW YOUR SUPPORT

Petition World Leaders

“We urge World leaders to commit to providing sight tests, affordable glasses and other treatments for all school children”

[All class members sign their names in the white space]

A large white rounded rectangular area intended for students to sign their names. The area is completely blank and occupies the central portion of the page.

Take a picture of your class with your signed petition and send it to: communications@iapb.org



YOUR EYES

LOVES

CHILDREN WITH

CLEAR SIGHT

 **YOUR EYES
LOVES
EQUITY AND
INCLUSION**



YOUR EYES

LOVES

ACCESS TO ALL

WHERE NO-ONE

IS LEFT BEHIND



#LoveYourEyes

www.iapb.org/wsd2021

