



GIRL SCOUT

VISION AWARENESS

PATCH PROGRAM



Pennsylvania Paraoptometric Association

Girl Scouting offers a wide variety of opportunities and activities. With this in mind, the Pennsylvania Paraoptometric Association (PPA) would like to offer Girl Scouts the opportunity to earn a Vision Awareness Patch.

PPA is an association committed to enhancing the quality of eye care. We believe the activities required for the girls to earn the patch will make them more aware of the importance of eyesight and good vision care. The girls' efforts may even spark an interest in Optometry or related fields.

Each Vision Awareness Patch is \$1.00.

If your troop is interested in earning the Vision Awareness Patch, please contact Dawn Deppe at 814-272-0262 (phone) 814-272-1501 (fax) or ddeppe@restoreeyecare.com.

Additionally there may be a PPA member in your area that would be willing to assist your troop in earning the Vision Awareness Patch.





Chartered by the
Pennsylvania Optometric Association

PENNSYLVANIA PARAOPTOMETRIC ASSOCIATION

REQUEST FOR VISION AWARENESS PATCH

Please send _____ patches to troop# _____

Council _____

Leaders Name _____

Address _____

City, State & Zip Code _____

Enclosed \$ _____ for _____ patches

Mail to:

Dawn Deppe

Restore Eye Care

650 Gray's Woods Blvd., Suite 120

Port Matilda, PA 16870

Make checks payable to: Pennsylvania Paraoptometric Association

**This is a resource guide to help
you achieve your goals
towards the Girl Scout Vision
Awareness Patch**



Chartered by the
Pennsylvania Optometric Association

I give my permission for _____ to have her picture taken and shared via POA/AOA/PPA/Facebook pages for the Girl Scout Patch Vision Awareness Program.

We would like to share their experience with our associations.

Parents Signature _____

Troop Leader Signature _____

Date _____

VISION AWARENESS PATCH PROGRAM

Complete 2 activities including one of the two starred activities

- *1. Visit an optometrist in your area or have one come to a meeting. Have a list prepared with questions such as: How are eyes tested? What is nearsightedness, farsightedness and astigmatism? Who needs glasses? How do glasses work? What is Convergence Insufficiency? What is Vision Therapy? Think of your own question...
- *2. Visit a local optical lab or have a lab representative visit a meeting. Have questions prepared, such as: How are glasses made? What do lenses look like for nearsighted, farsighted and bifocal corrections before they are put into frames? How do you make sure lenses are safe? How should people take care of their glasses? Think of your own question...
3. Appreciate your sight. Spend at least 10 minutes blindfolded. Divide the Scouts into pairs, having one girl put a blindfold on. The other girl should lead that person and explain what they see. The blindfolded girl should try some basic activities such as: buttoning or zipping a coat, tying her shoe, writing her name, eating a snack, etc. The non-blindfolded girl will guide her to keep her safe. Then trade roles. Discuss: How did it feel to not be able to see? How did you find where you were going? How did you accomplish simple activities? What would you do if you saw or met a blind person?
4. Children often experience vision problems that are not easily detected. Find out about vision problems in young children from an Optometrist or other vision professional. How can Optometrist help a child with these problems?
5. People with impaired vision must learn to adjust to their disability. Invite a representative from your local Blind Association or the Pennsylvania Office of Blindness and Visual Services to speak to a meeting. Find out what support services are available in your community for a person with impaired vision.
6. Make a poster for your school that promotes good vision practices.
7. What can you do to improve and protect your vision? Learn about how your vision is affected by TV, computer screens, tablets, smart phones, sports injuries and concussions. Make a plan to improve your vision environment.
8. Learn about how you can become an Optometrist or Paraoptometric. What type of training or college is required? What type of license or certification is required? What are the average salaries? What are typical hours and work demands/ You may learn through an internet search, speaking to, or emailing Optometrists and Paraoptometrics.
9. Service project: Do an eyeglass donation drive and donate your eyeglasses to the Lions Club. You can donate in person to your local Lions Club, or mail them in; <http://www.lionsclubs.org/EN/how-we-serve/health/sight/eyeglass-recycling.php>.

Vision Awareness Patch Program

Optometrist

An optometrist is a state licensed independent health care provider who examines, diagnoses, treats, and manages diseases and disorders of the visual system, the eye and associated structures, as well as diagnoses related systemic conditions. Optometrists provide comprehensive eye health and vision exams; detect general health problems; and prescribe glasses, contact lenses, ocular medications and vision therapy. In some states, optometrists perform simple ocular surgery and laser procedures. An optometrist, in most cases, has completed a four-year undergraduate degree, four more years of optometry school, and an optional one-year post graduate residency program.

Ophthalmologist

An ophthalmologist is a physician (doctor of medicine, MD, or doctor of osteopathy, DO) who specializes in the medical and surgical care of the eye and visual system and in the treatment of eye diseases and injury. An ophthalmologist has in most cases completed four years of undergraduate study, four or more years of medical school, one year of internship and three or more years of specialized training in eye care, surgery and disease. They are state licensed as physicians and surgeons.

Paraoptometric

A person, who works under the direct supervision of a licensed doctor of optometry, collects patient data, administers routine and technical tests of the patient's visual capabilities, and assists in office management. The paraoptometric may assist the optometrist in providing primary patient care examination and treatment service, including contact lenses, low vision, vision therapy and ophthalmic dispensing and office management. State laws may limit, restrict or otherwise affect the duties that may be performed by a paraoptometric.

Optician

An optician prepares or dispenses eyeglasses, spectacles, lenses or related optical devices upon prescription to the intended wearer or users, or prescription from licensed physicians or licensed optometrists; or who duplicates, measures, adapts, fits and adjusts eyeglasses or lenses to the face. An optician makes, verifies and delivers frames and other specifically fabricated optical devices upon prescription from an optometrist or ophthalmologist. Opticians grind lenses and shape them to fit an eyeglass frame and adjust the finished product to fit the patient. Opticians may be apprenticeship trained or attend a community college program. Some states require opticians to be licensed.

Glossary of Common Eye & Vision Conditions

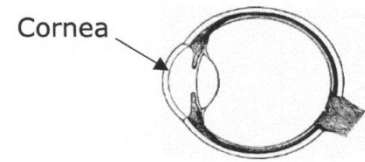
Accommodative Dysfunction	An eye focusing problem that is unrelated to changes in the lens of the eye due to aging.
Amblyopia	Also known as lazy eye, the loss or lack of development of clear vision in just one eye not due to eye health problems. Eyeglasses or contact lenses can't fully correct the reduced vision caused by lazy eye.
Astigmatism	A vision condition that causes blurred vision due either to the irregular shape of the cornea (the clear front cover of the eye) or sometimes the curvature of the lens inside the eye.
Blepharitis	An inflammation of the eyelids and eyelashes causing red, irritated, itchy eyelids and dandruff-like scales on eyelashes.
Cataract	A cloudy or opaque area in the normally clear lens of the eye located behind the iris.
Chalazion	A slowly developing lump that forms due to blockage and swelling of an oil gland in the eyelid.
Color Vision Deficiency	The inability to distinguish certain shades of color. The term "color blindness" is also used to describe this visual condition, but very few people are completely color blind.
Computer Vision Syndrome	A group of eye and vision-related problems that result from prolonged computer use.
Conjunctivitis	A swelling or inflammation of the conjunctiva, the thin, transparent layer of tissue that lines the inner surface of the eyelid and covers the white part of the eye. Causes may or may not be infectious.
Convergence Insufficiency	An eye coordination problem in which the eyes drift outward when reading or doing close work.
Corneal Abrasion	A cut or scratch on the cornea, the clear front cover of the eye.
Crossed Eyes	See <i>strabismus</i>
Diabetic Retinopathy	A condition occurring in people with diabetes. It causes progressive damage to the retina, the light-sensitive lining at the back of the eye.
Dry Eye	A condition in which there are insufficient tears to lubricate and nourish the eye.
Farsightedness	See <i>hyperopia</i>

Floater & Spots	The shadowy images that appear in the field of vision caused by particles floating in the fluid that fills the inside of the eye.
Glaucoma	A group of disorders leading to progressive damage to the optic nerve. It is characterized by loss of nerve tissue that results in vision loss.
Hordeolum	An infection of an oil gland in the eyelid.
Hyperopia	A vision condition in which distant objects are seen clearly, but close objects are blurred.
Keratitis	An inflammation or swelling of the cornea, the clear front cover of the eye.
Keratoconus	An eye disorder causing progressive thinning and bulging of the cornea, the clear front cover of the eye.
Lazy Eye	See <i>amblyopia</i>
Learning-related Vision Problems	Vision disorders that interfere with reading and learning.
Macular Degeneration	An eye disease affecting the macula (the center of the light-sensitive retina at the back of the eye), causing loss of central vision.
Migraine with Aura	A type of severe headache accompanied by various visual symptoms.
Myokymia	Myokymia of the lid is a unilateral and uncontrollable lid twitch or tic that is not caused by disease or pathology. It is thought to be brought on by stress and other similar issues and resolves on its own with time.
Myopia	See <i>nearsightedness</i>
Nearsightedness	A vision condition in which close objects are seen clearly, but objects farther away are blurred.
Nystagmus	A vision condition in which the eyes make repetitive, uncontrolled movements, often resulting in reduced vision.
Ocular Allergies	The abnormal response of sensitive eyes to contact with allergens and other irritating substances.
Ocular Hypertension	An increase in the pressure inside the eye above the range considered normal without any detectable changes in vision or damage to the structures of the eye.

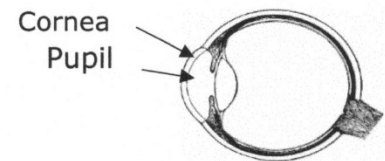
Ocular Migraine	Visual disturbance similar to what can occur with a migraine but without the headache. This visual disturbance can be alarming.
Pinguecula	An abnormal growth of tissue on the conjunctiva, the clear membrane that covers the white of the eye.
Presbyopia	An age-related vision condition in which the eye gradually loses the ability to focus on near objects.
Pterygium	An abnormal growth of tissue on the conjunctiva (the clear membrane that covers the white of the eye) and the adjacent cornea (the clear front surface of the eye).
Ptosis	A drooping of the upper eyelid.
Retinal Detachment	A tearing or separation of the retina (the light-sensitive lining at the back of the eye) from the underlying tissue.
Retinitis Pigmentosa	A group of inherited disorders of the retina (the light-sensitive lining at the back of the eye), which cause poor night vision and a progressive loss of side vision.
Retinoblastoma	A rare type of eye cancer occurring in young children that develops in the retina, the light-sensitive lining at the back of the eye.
Strabismus	A condition in which both eyes do not look at the same place at the same time.
Sty	See <i>hordeolum</i>
Subconjunctival Hemorrhage	An accumulation of blood underneath the conjunctiva, the clear membrane covering the white part of the eye.
Uveitis	An inflammation of one or more of the structures that make up the uvea, the middle layer of the eye.

How the Eye Works

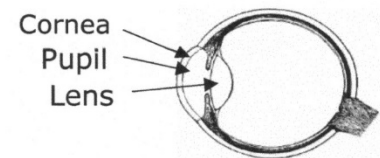
1. Light enters the eye through the CORNEA



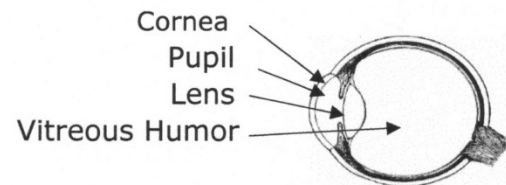
2. From the CORNEA it passes through the PUPIL. The amount of light passing through is regulated by the IRIS, the colored part of the eye.



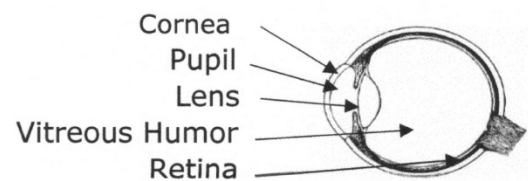
3. And, it hits the Clear LENS.



4. Next, it passes through a jelly-like fluid. This fluid is what keeps the eye round. It is called the VITREOUS HUMOR.



5. Finally, it reaches The Retina where it appears like an inverted picture.



Your Eyes

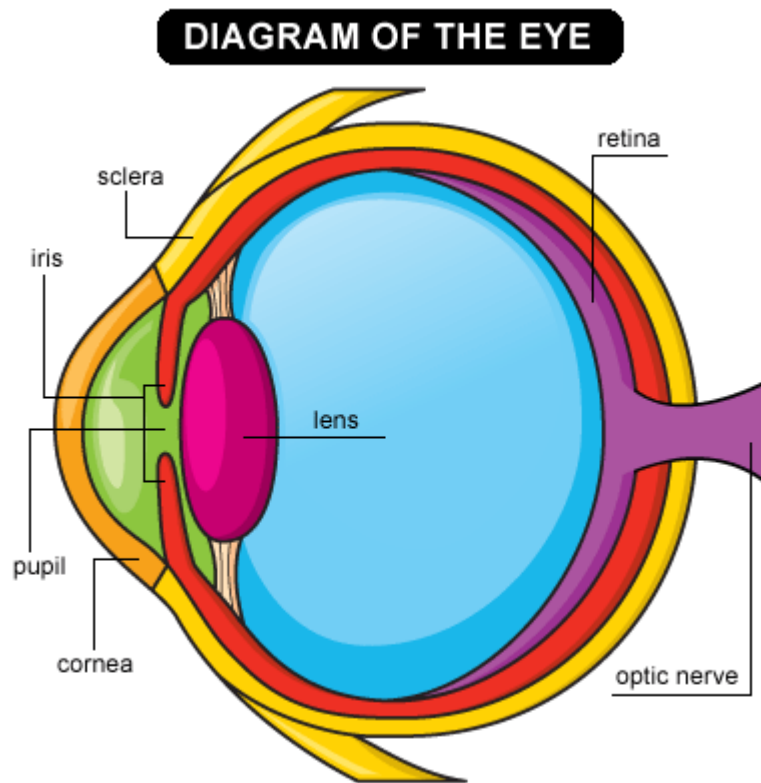
Which part of your body lets you read the back of a cereal box, check out a rainbow, and see a softball heading your way? Which part lets you cry when you're sad and makes tears to protect itself? Which part has muscles that adjust to let you focus on things that are close up or far away? If you guessed the eye, you're right!

Your eyes are at work from the moment you wake up to the moment you close them to go to sleep. They take in tons of information about the world around you — shapes, colors, movements, and more. Then they send the information to your brain for processing so the brain knows what's going on outside of your body.

You can see that the eye's pretty amazing. So, come on — let's take a tour of its many parts.

The Parts of the Eye

You can check out different parts of the eye by looking at your own eye in the mirror or by looking at (but not touching) a friend's eye. Some of the eye's parts are easy to see, so most friends will say OK. Most friends won't say OK if you ask to see their liver!



Big as a Ping Pong Ball

The eye is about as big as a ping-pong ball and sits in a little hollow area (the eye socket) in the skull. The eyelid protects the front part of the eye. The lid helps keep the eye clean and moist by opening and shutting several times a minute. This is called **blinking**, and it's both a voluntary and involuntary action, meaning you can blink whenever you want to, but it also happens without you even thinking about it.

The eyelid also has great reflexes, which are automatic body responses, that protect the eye. When you step into bright light, for example, the eyelids squeeze together tightly to protect your eyes until they can adjust to the light. And if you flutter your fingers close (but not too close!) to your friend's eyes, you'll be sure to see your friend's eyes blink. Your friend's eyelids shut automatically to protect the eye from possible danger. And speaking of fluttering, don't forget eyelashes. They work with the eyelids to keep dirt and other unwanted stuff out of your eyes.

The white part of the eyeball is called the **sclera** (say: SKLAIR-uh). The sclera is made of a tough material and has the important job of covering most of the eyeball. Think of the sclera as your eyeball's outer coat. Look very closely at the white of the eye, and you'll see lines that look like tiny pink threads. These are blood vessels, the tiny tubes that deliver blood, to the sclera.

The **cornea** (say: KOR-nee-uh), a transparent dome, sits in front of the colored part of the eye. The cornea helps the eye focus as light makes its way through. It is a very important part of the eye, but you can hardly see it because it's made of clear tissue. Like clear glass, the cornea gives your eye a clear window to view the world through.

Iris Is The Colorful Part

Behind the cornea are the iris, the pupil, and the anterior chamber. The **iris** (say: EYE-riss) is the colorful part of the eye. When we say a person has blue eyes, we really mean the person has blue irises! The iris has muscles attached to it that change its shape. This allows the iris to control how much light goes through the **pupil** (say: PYOO-pul).

The pupil is the black circle in the center of the iris, which is really an opening in the iris, and it lets light enter the eye. To see how this works, use a small flashlight to see how your eyes or a friend's eyes respond to changes in brightness. The pupils will get smaller when the light shines near them and they'll open wider when the light is gone.

The **anterior** (say: AN-teer-ee-ur) **chamber** is the space between the cornea and the iris. This space is filled with a special transparent fluid that nourishes the eye and keeps it healthy.

Light, Lens, Action

FUN FACT!! When light passes through the eye's lens and the image hits the retina, the image is actually upside down. So the message that the optic nerve brings the brain is upside down, too. But luckily, your brain knows how to flip the image over so it's right-side up.

These next parts are really cool, but you can't see them with just your own eyes! Doctors use special microscopes to look at these inner parts of the eye, such as the lens. After light enters the pupil, it hits the lens. The lens sits behind the iris and is clear and colorless. The lens' job is to focus light rays on the back of the eyeball — a part called the **retina** (say: RET-i-nuh).

The lens works much like the lens of a movie projector at the movies. Next time you sit in the dark theater, look behind you at the stream of light coming from the projection booth. This light goes through a powerful lens, which is focusing the images onto the screen, so you can see the movie clearly. In the eye's case, however, the film screen is your retina.

Your retina is in the very back of the eye. It holds millions of cells that are sensitive to light. The retina takes the light the eye receives and changes it into nerve signals so the brain can understand what the eye is seeing.

A Muscle Makes It Work

The lens is suspended in the eye by a bunch of fibers. These fibers are attached to a muscle called the **ciliary** (say: SIL-ee-air-ee) **muscle**. The ciliary muscle has the amazing job of changing the shape of the lens. That's right — the lens actually changes shape right inside your eye! Try looking away from your computer and focusing on something way across the room. Even though you didn't feel a thing, the shape of your lenses changed. When you look at things up close, the lens becomes thicker to focus the correct image onto the retina. When you look at things far away, the lens becomes thinner.

The biggest part of the eye sits behind the lens and is called the **vitreous** (say: VIH-tree-us) **body**. The vitreous body forms two thirds of the eye's volume and gives the eye its shape. It's filled with a clear, jelly-like material called the vitreous humor. Ever touch toy eyeballs in a store? Sometimes they're kind of squishy — that's because they're made to feel like they're filled with vitreous humor. In a real eye, after light passes through the lens, it shines straight through the vitreous humor to the back of the eye.

Rods and Cones Process Light

The retina uses special cells called **rods** and **cones** to process light. Just how many rods and cones does your retina have? How about 120 million rods and 7 million cones — in each eye!

Rods see in black, white, and shades of gray and tell us the form or shape that something has. Rods can't tell the difference between colors, but they are super-sensitive, allowing us to see when it's very dark.

Cones sense color and they need more light than rods to work well. Cones are most helpful in normal or bright light. The retina has three types of cones. Each cone type is sensitive to one of three different colors — red, green, or blue — to help you see different ranges of color. Together, these cones can sense combinations of light waves that enable our eyes to see millions of colors.

Helping You See It All

Rods and cones process the light to give you the total picture. You're able to see that your friend has brown skin and is wearing a blue hat while he tosses an orange basketball.

Sometimes someone's eyeball shape makes it difficult for the cornea, lens, and retina to work perfectly as a team. When this happens, some of what the person sees will be out of focus.

To correct this fuzzy vision, many people, including many kids, wear glasses. Glasses help the eyes focus images correctly on the retina and allow someone to see clearly. As adults get older, their eyes lose the ability to focus well and they often need glasses to see things up close or far away. Most older people you know — like your grandparents — probably wear glasses.

To the Brain!

Think of the optic nerve as the great messenger in the back of your eye. The rods and cones of the retina change the colors and shapes you see into millions of nerve messages. Then, the optic nerve carries those messages from the eye to the brain!

The optic nerve serves as a high-speed telephone line connecting the eye to the brain. When you see an image, your eye "telephones" your brain with a report on what you are seeing so the brain can translate that report into "cat," "apple," or "bicycle," or whatever the case may be.

Have No Fear, You Have Tears

For crying out loud, the eye has its own special bathing system — tears! Above the outer corner of each eye are the **lacrimal** (say: LAK-ruh-mul) **glands**, which make tears. Every time you blink your eye, a tiny bit of tear fluid comes out of your upper eyelid. It helps wash away germs, dust, or other particles that don't belong in your eye.

Tears also keep your eye from drying out. Then the fluid drains out of your eye by going into the lacrimal duct (this is also called the tear duct). You can see the opening of your tear duct if you very gently pull down the inside corner of your eye. When you see a tiny little hole, you've found the tear duct.

Your eyes sometimes make more tear fluid than normal to protect themselves. This may have happened to you if you've been poked in the eye, if you've been in a dusty or smoking area, or if you've been near someone who's cutting onions.

And how about the last time you felt sad, scared, or upset? Your eyes got a message from your brain to make you cry, and the lacrimal glands made many, many tears.

Your eyes do some great things for you, so take these steps to protect them:

- Wear protective goggles in classes where debris or chemicals could go flying, such as wood shop, metal shop, science lab, or art.
- Wear eye protection when playing racquetball, hockey, skiing, or other sports that could injure your eyes.
- Wear sunglasses. Too much light can damage your eyes and cause vision problems later in life. For instance, a lens could get cloudy, causing a cataract. A cataract prevents light from reaching the retina and makes it difficult to see.

The eyes you have will be yours forever — treat them right and they'll never be out of sight!

Eyes in Action

We all use our eyes differently. The way we use them depends on our jobs, habits and leisure activities. **To get an idea of the many ways your eyes help you every day, fill in the blanks below.**

1. Today I used my eyes at home to do the following:

_____.



2. Today I used my eyes during leisure time to do the following:

_____.



3. Today I used by eyes at work/school to do the following:

_____.



Look over the items you listed above. Now complete the following:

1. At home, I take care of my eyes by

_____.

2. At school/work, I take care of my eyes by

_____.

3. During leisure activities, I take care of my eyes by

_____.

Now examine what you have written about how you take care of your eyes, then complete the following.

1. I am MOST CONCERNED about taking care of my eyes at HOME, WORK, SCHOOL, LEISURE (circle one) because

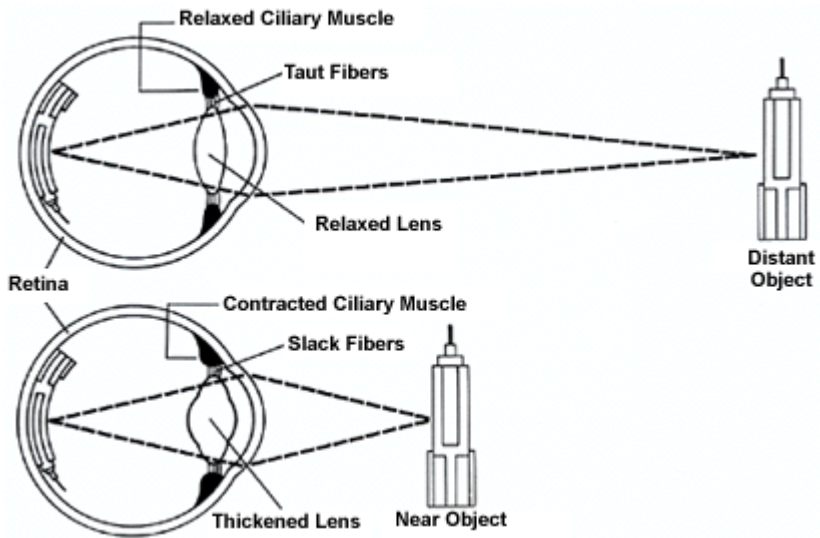
_____.

2. To reduce my concern, I am going to do the following:

_____.

Focus on Seeing

To see objects that are close up the eye's lens must change shape according to the distance involved. The drawings show how lenses that are functioning correctly change shape to give a clear image. Look over the illustrations carefully and then fill in the statements to make them correct.



1. The shape of the lens is changed by _____.
2. For the image to be in focus, it must fall on the _____.
3. After passing through the lens, the position of the image is _____.
4. For nearsighted people, the eyeball may be too long and the image will fall in _____ of the _____.
5. For farsighted people, the eyeball may be too short and the image will fall in _____ of the _____.
6. You might be _____ if objects in the distance appear blurred.
7. Since focusing of an image in the eye is caused by the bending of light rays, your doctor of optometry can correct nearsightedness and farsightedness with glass or plastic _____.

ANSWERS:

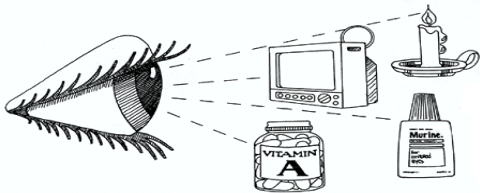
ciliary muscles
 retina
 inverted or upside down
 front, retina
 back, retina
 nearsighted or myopic
 lenses

Your Eye-Q Test

How well do you understand your eyes? Find out by taking this test.

Check the True or False box next to each statement. When you are finished, find the correct answers at the bottom of the page.

Grade yourself as follows: 19-20, I understand my eyes very well; 17-18, my view of my eyes is pretty clear; 15-16, my concept of my eyes is a little fuzzy; 13-14, the way I see my eyes could use a little correcting; and 12 or under, I need a much better understanding of my eyes.



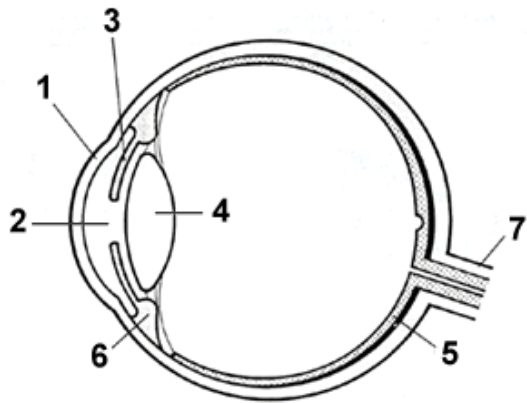
True False Questions

1. At a distance of 10 inches, my eyes can detect an object as small as four thousandths of an inch.
2. My eyes can distinguish only four colors.
3. My eyes can see a candle 14 miles away.
4. Ten percent of what I know comes through my eyes.
5. Reading in dim light can strain my eyes.
6. When watching TV, I should sit a distance equal to twice the width of the screen.
7. Too little vitamin A in my diet can cause reduced night vision.
8. Dilation of the pupils allows my doctor to better view the inside of my eyes.
9. The best color for sunglasses is blue.
10. Tears contain substances that slow bacterial growth.
11. My eyelids work much like a car's windshield wipers.
12. Sunglasses will allow me to look directly at the sun.
13. Many eyeglass prescriptions are identical.
14. Smoking can affect my vision.
15. If I have 20/20 vision, I don't have any eye problems.
16. Air pollution affects only my lungs and breathing.
17. If I am nearsighted, I see near objects more clearly than distant ones.
18. If I am farsighted, I see distant objects more clearly than near ones.
19. Glaucoma is a serious eye disease that can cause blindness.
20. Regular eye examinations can help protect my eyes and general health.

ANSWERS: 1.T. 2.F. 3.T. 4.F. 5.F. 6.F. 7.T. 8.T. 9.F. 10.T. 11.T. 12.F. 13.F. 14.T. 15.F. 16.F. 17.T. 18.T. 19.T. 20.T.

How the Eyes Work

Below is a drawing of the eye with some important parts numbered. Write the names of the parts of the eye and their functions in the proper boxes. The clue list is there to help you.



Number	Part Name	Function
1		
2		
3		
4		
5		
6		
7		

Part Names	Functions
Lens	Contains cells that detect light
Retina	Opening to the inner eye
Ciliary Muscle	Controls the size of the pupil
Optic Nerve	Focuses image of object
Pupil	Controls shape of lens
Cornea	Transmits information to brain
Iris	Outermost transparent layer of eye, begins focusing process

ANSWERS:

1. Cornea. Outermost transparent layer of eye. Begins focusing process.
2. Pupil. Opening to the inner eye.
3. Iris. Controls size of pupil.
4. Lens. Focuses image of object (on retina).
5. Retina. Contains cells that detect light.
6. Ciliary muscle. Controls shape of the eye.
7. Optic Nerve. Transmits information to the brain.

What It's Like to Be Color Blind

If your clothes don't match, someone might have teased you about being color blind. But some people really **are** color blind.

It doesn't mean they can't see any color at all, like a black and white movie. It means that they have trouble seeing the difference between certain colors.

Being color blind can make it tricky to match your shirt and pants, but it's not a serious problem. People who are color blind can do normal stuff, even drive. Most color-blind people can't tell the difference between red or green, but they can learn to respond to the way the traffic signal lights up — the red light is generally on top and green is on the bottom.

Cones and Color

To understand what causes color blindness, you need to know about the **cones** in your eyes. Cones in your eyes? Yes, but they're very small. These cones are cells on your retina, an area the size of a postage stamp that's at the back of your eye.

You have "red," "blue," and "green" cones, which are sensitive to those colors and combinations of them. You need all three types to see colors properly.

When your cones don't work properly, or you don't have the right combination, your brain doesn't get the right message about which colors you're seeing. To someone who's color blind, a green leaf might look tan or gray.

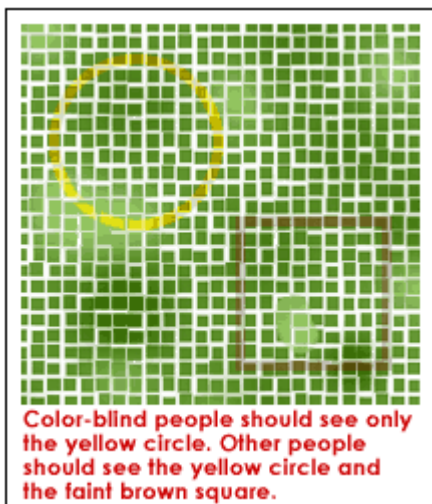
Color Blindness Is Passed Down

Color blindness is almost always an **inherited** (say: in-HER-ut-ed) trait, which means you get it from your parents. You get inherited traits through **genes** (say: jeenz), which determine everything about your body, including how tall you'll be and whether your hair will be straight or curly.

Eye doctors (and some school nurses) test for color blindness by showing a picture made up of different colored dots, like the one above. Someone who can't see the picture or number within the dots may be color blind.

Boys are far more likely to be color blind. In fact, if you know 12 boys, one of them is probably at least a little color blind.

So, girls, the next time a boy asks you if something matches, you'd better lend him a hand!



HOW THE BODY WORKS

Eye: Word Find

Directions: Print out the word find. See how many words you can find from the list below.

C C W Z G A G L N T S E Z E S
S O I X N J A H Q D E T Q J L
S Z R I A S E N O C S W G O Z
U G T N H S O R G F S F D D T
K E M E E T E N E Y A I S E E
R D S E J A I P K K L S R Q U
T V D E E Y W D X E G C A G E
T L B J I V I S I O N L E V J
A Y I M F N P G V B H E T O F
F W A P N R V N A G E R L W H
Q U Y X U D A X C M L A R V C
N C Q P M P D Y M R L P D S F
B M U W P R E C A H X E O R Y
F C J G K K C M N U V R N F A
G G C F I I R I S J Z X D S C

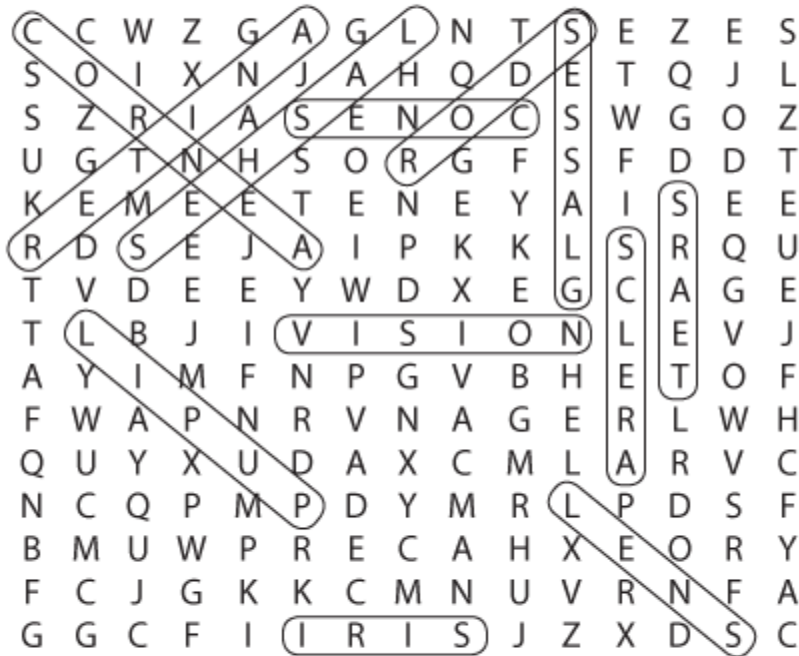
CONES
CORNEA
GLASSES
IRIS

LASHES
LENS
PUPIL
RETINA

RODS
SCLERA
TEARS
VISION

HOW THE BODY WORKS

Eye: Solution

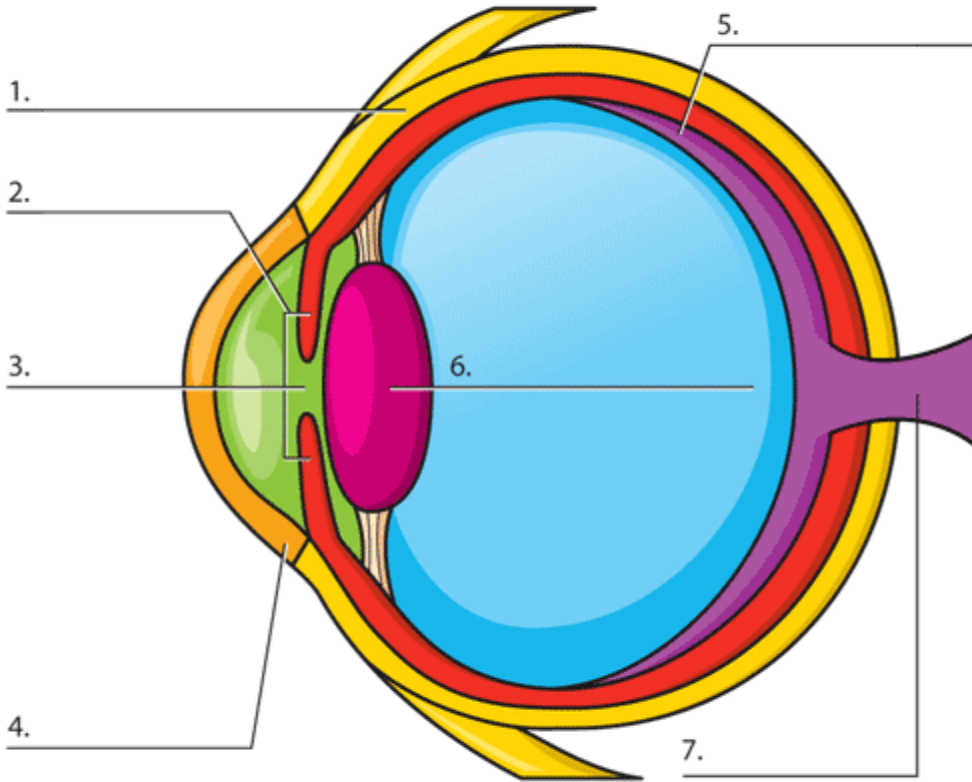


CONES	LASHES	RODS
CORNEA	LENS	SCLERA
GLASSES	PUPIL	TEARS
IRIS	RETINA	VISION

HOW THE BODY WORKS

The Eye

Directions: Print out and label the parts of the eye.



WORD BANK

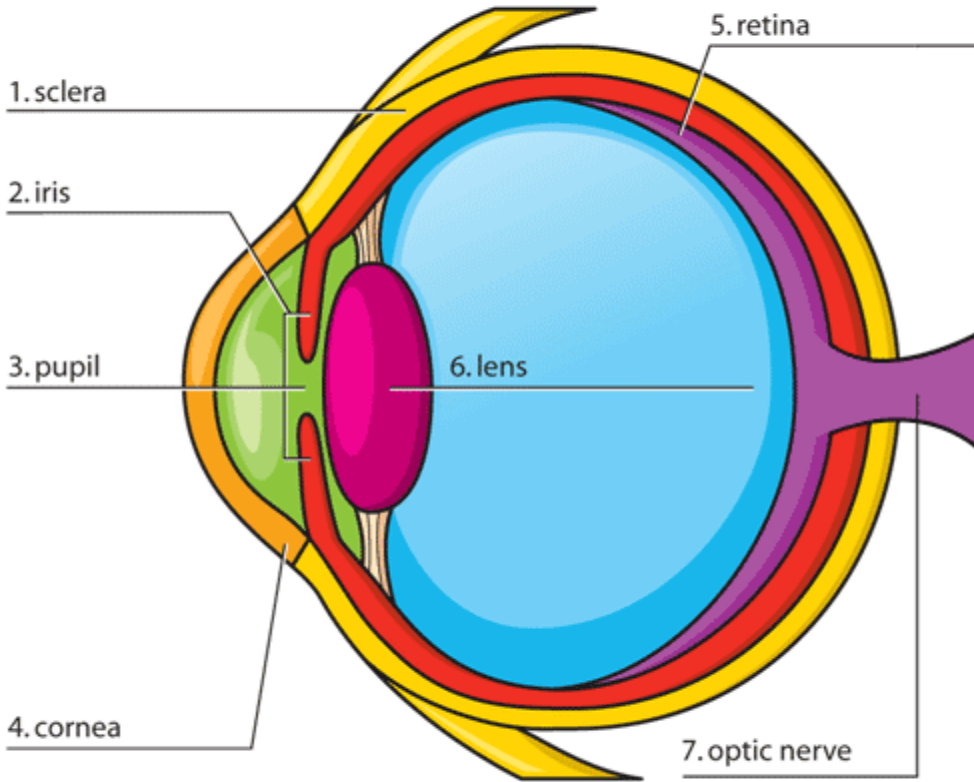
sclera
pupil

lens
iris
optic nerve

cornea
retina

HOW THE BODY WORKS

The Eye Solution



WORD BANK

sclera
pupil

lens
iris
optic nerve

cornea
retina

