

# General Science Assignment

## Short sightedness

Short sightedness is also known as "Myopia". It is a very common visual disorder. You are able to see the objects near you but have difficulty in viewing things that are far.

## Myopia on the rise

According to American Optometric association almost 40 percent of the americans suffer from myopia.

## Symptoms

If a person is near sighted he may notice the following things;

- i, Eye strain
- ii, Far away objects look unclear
- iii, Close items appear clear
- iv, Headaches
- v, Squinting

vi, Holding object close to face

## Cause

If you have myopia than likely one or both of parents did, too.

It can be a mixture of both hereditary and environmental factors.

If you use your eyes for alot of close up work, such as reading or working on a computer you may develop myopia.

## Treatment

The most popular ways to correct myopia are given below:

(i)

### Eye glasses

Depending on the degree of vision correction needed, you will wear glasses either daily or only for when

distant vision is needed.

## Contact lenses (ii)

Some people find that their vision is sharper and wider so they use contact lenses

(iii)

## Lasik

It is a laser assisted procedure to correct short sightedness. In this treatment laser is used to cut a flap through the top of cornea, reshape the inner corneal tissues and then drop the flap back

(iv)

## Lasek

It is also a laser procedure, laser is used to cut the flap, reshape the outer layers and then close the flap.

## Far sightedness

Far sightedness is a common eye condition that may cause you to have a clear blurry vision. People are able to see objects that are far away clearly but may have a blurry vision when things are close.

### Symptoms

Following are the symptoms of far sightedness;

- i, Blurry close up vision
- ii, Difficulty in reading
- iii, Dull pain in your eyes.
- iv, Eye strain
- v, Headaches

### Causes

Your cornea is the clear, outer layer of your eye. The "window" bends light as it enters your eye and helps it land on your retina

a thin layer of tissue at the back of your eye. Your cornea is slightly curved, this curvature bends light entering your eye at the right angle where it reaches your retina but if your cornea is flat or the distance between the front and back of your eye is too short this balance is ~~worn~~ <sup>thrown</sup> off.

As a result, light enters your eye but doesn't hit the retina. This causes the objects to look blurry.

### Treatment

Following are the things that can be used to treat far sightedness.

- i, Eye glasses
- ii, Surgery
- iii, Contact lenses

## Color blindness

Color blindness is when you don't see colors in the traditional way because some of your cones (nerve cells) are missing. You may have difficulty in seeing different colours or shades.

### Symptoms

If you have the following symptoms shows that you are color blind

- i) Telling difference between colours.
- ii) Unable to notice the brightness of the colours.

### Causes

Following are the factors that cause color blindness;

(i)  
Exposure to chemicals that harm your nervous system.

(ii)  
Long term exposure to welding lights

(iii)  
Certain medicines.

Treatment

Currently there is no medical treatment or cure for the color blind. Your health care provider would treat the underlying condition or adjust your medication

Night blindness

Night blindness (Nyctalopia) is a symptom of underlying problem of retina.

Symptoms

The blindness prevents you from seeing well at night or in poor lighting.

Causes

It's causes are given below;

- i) Diabetes
- ii) Myopia
- iii) Cataracts
- iv) Vitamin A deficiency.

## Treatment

Treatment may be as simple as getting yourself a new glasses prescription or switching "glaucoma" medications