

Fitting for Success:  
Understanding the Rx and  
Guiding the Patient to the  
Proper Frame

By Tim Elinski

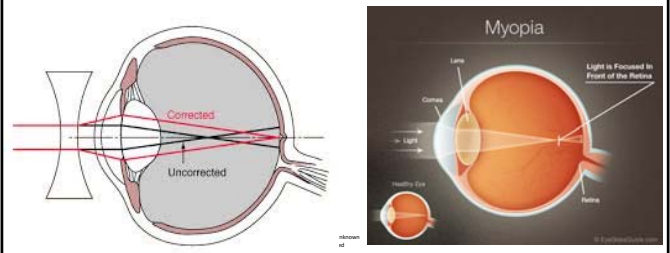
## About me...

- 46 yrs experience in optical
- Graduated 1975 Health Optics Degree
- Certified in 1978 Fellow of NAO
- Optical Trainer 2004 - 2014
- Owner of Cedar Springs Vision

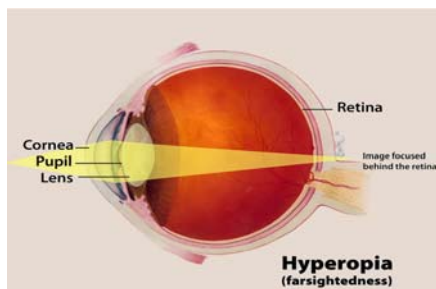
### Introduction to Eye Conditions

- Myopia
- Hyperopia
- Astigmatic
- Presbyopia
- Cataract

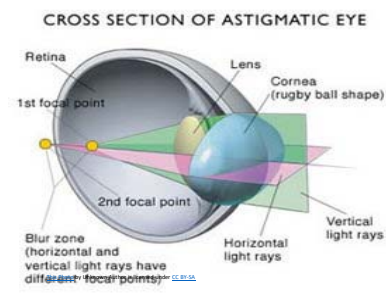
**Myopia** – Condition where the Cornea is steeper than normal , causing light rays to fall short of the Retina

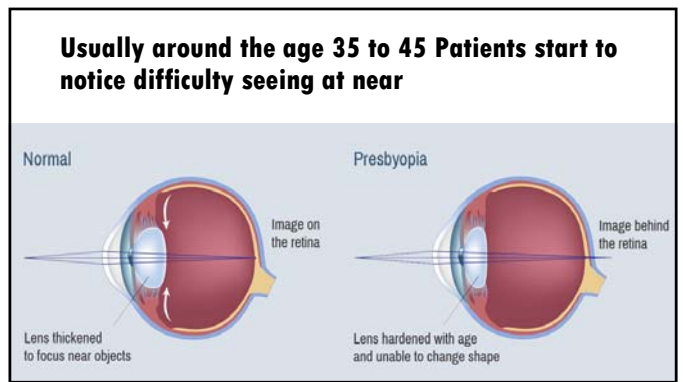
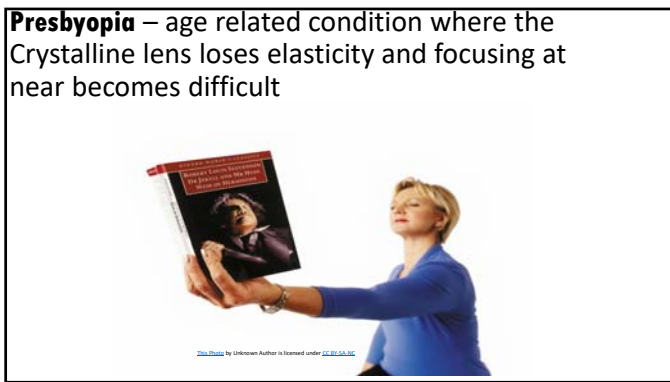
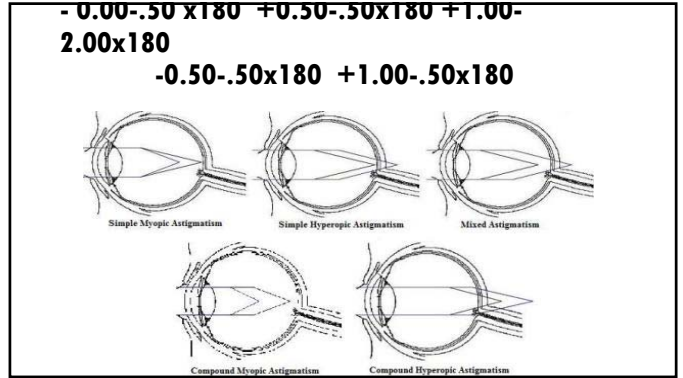
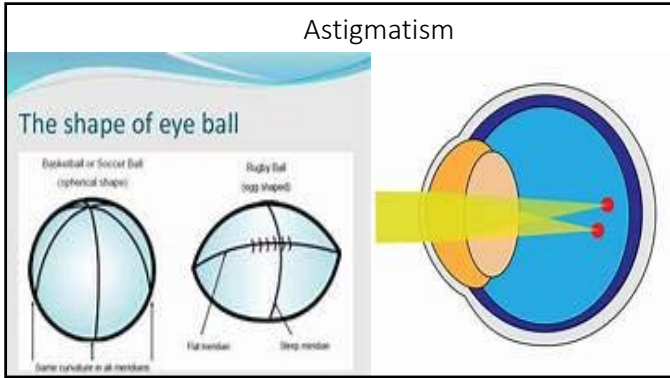


**Hyperopia** – Condition where the cornea is flatter than normal

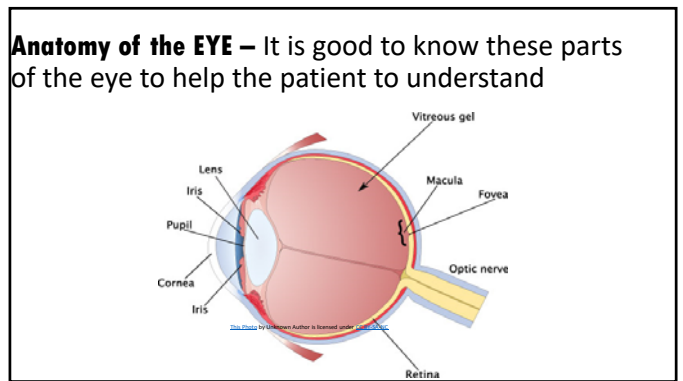


**Astigmatism**- Condition where the cornea is shaped like a football , light rays fall in 2 different areas

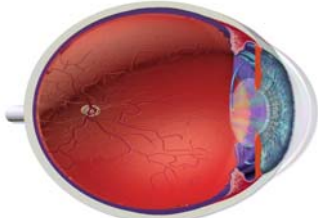




- Presbyopia**
- ADD Powers Chart
  - Anyone over 30 may experience vision loss
  - 40 – 44 +1.00 to +1.25
  - 45 – 49 +1.25 to +1.50
  - 50 – 54 +1.50 to +2.00
  - 55 – 60 + 2.00 to +2.50
  - 60 – up + 2.50 to +3.00



**Cataract** – Condition where the Crystalline lens starts to become cloudy and vision becomes impaired



Ocular Implant

## Successful Dispensing

- Analyze the Prescription and direct the patient toward suitable frames.
- The 3 causes of lens Thickness
  - 1 The Rx
  - 2 The Size of the Frames
  - 3 Decentration (How far OC from GC)

Thickness considerations  
Rx over + or - 3.00

### Lens options

Polycarbonate  
Mid- Index  
Hi-Index  
Aspheric

## Lens Styles

- Single Vision - (stock or grind)
- Bifocal
- Tri-Focal
- Progressive
- Occupational - computer, large segment, HD & Others

## Frame Selection

- The Bridge is the most important part in Fitting
- The Frame front should be as wide as the head
- B measurement not hitting cheeks
- Long enough Temple

## The Patients old glasses

- Why are they getting new glasses
- Neutralize old lenses
- Base Curve
- Check old measurements PD & SEG
- Check frame fitting

## New Measurements

- Pre-adjust frames and mark temple
- Dot the frames for center of pupil
- Sometimes the patients nose will be
- Unsymmetrical ,Pupilometer ,and
- Dot lens for PD

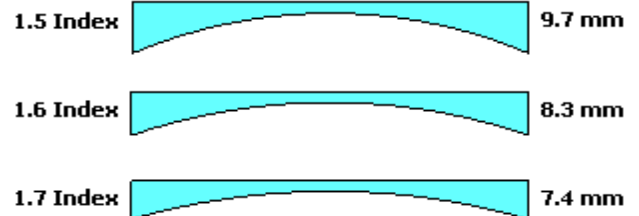
## Communication Skills

- In Myopia, The early stages of presbyopia the patient will tend to take the glasses off to read.
- In Hyperopia, The early stages the patient uses the glasses for reading more than for distance

## Lenze Thickness- Rx.Frame Size & Decentration

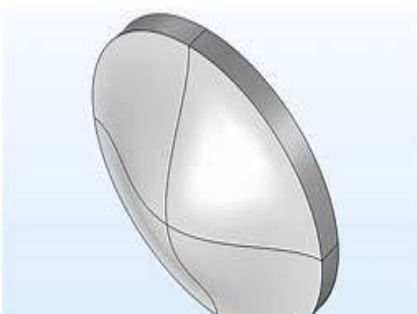
1.50	1.56	1.57	1.60	1.67
SPH: +f-2.00 or below. CYL: +f-1.50 or below.	SPH: +200f-4.00 or below. CYL: +f-4.50 or below.	SPH: +f-4.00 or below. CYL: +f-4.00 or below.	SPH: +f-4.25 to +f-6.00. CYL: +f-2.00 to +f-3.00.	SPH: +f-6.25 to +f-9.75. CYL: +f-3.00 to +f-4.00.
	-10.00 sphere			
	-6.00 sphere			
	-4.00 sphere			
	-2.00 sphere			

Note: Pictures for reference only. For higher index lens, please contact service@firmoo.com



Index Versus Edge Thickness for Minus Lenses

## Aspheric Lens Design

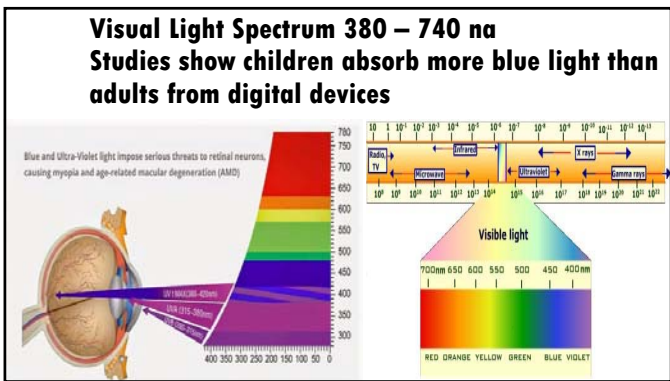
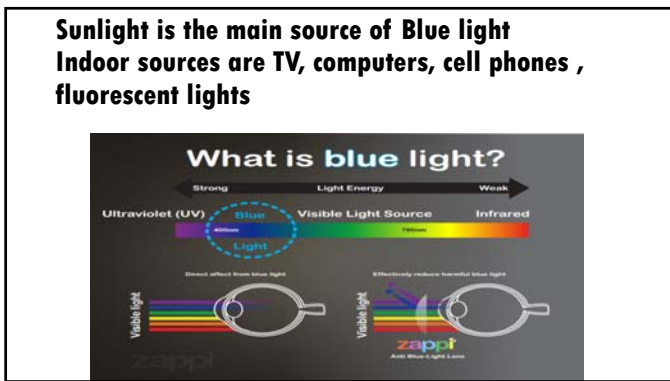
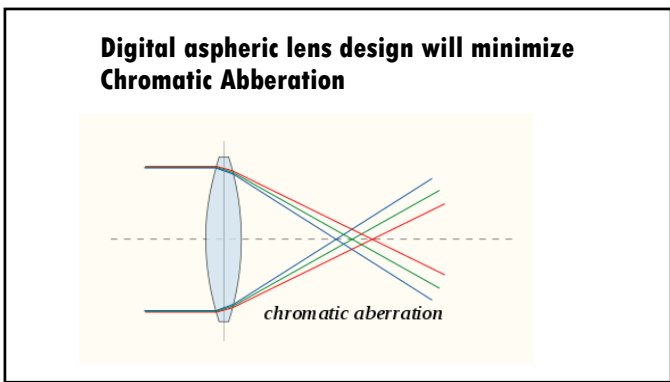
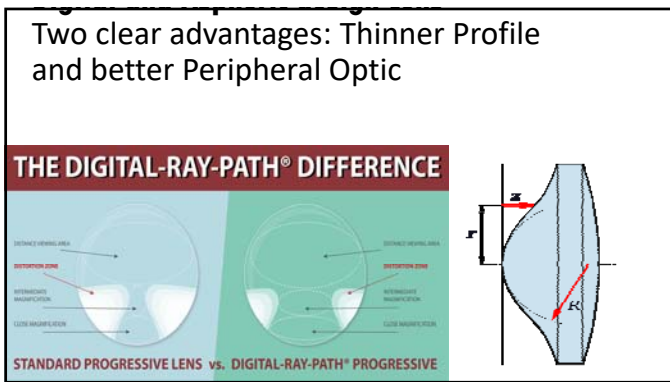
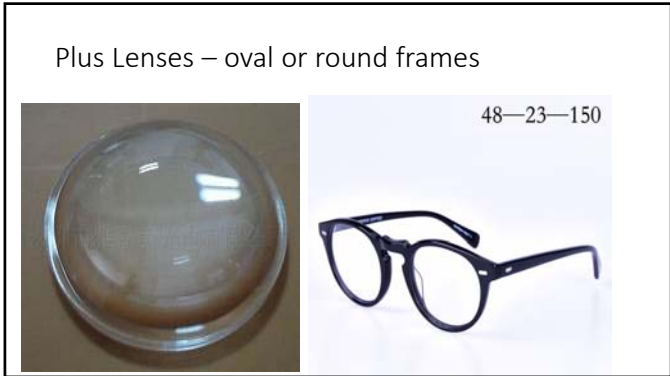


R – 4.00 – 3.00 x 180

L – 3.50 – 4.50 x 180

•R – 2.75 – 3.25 x 90

•L – 3.50 – 3.50 x 90



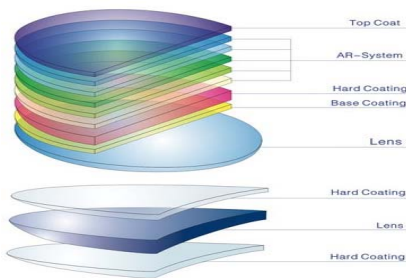
### Blue light – Good or Bad

- Pros- Boosts Alertness , helps Memory ,Elevates Mood , used in Therapy for Depression , and help Sleep cycles
- A deficiency in blue light can increase Myopia
- Cons – Eye strain ,Difficulty in focusing , can lead to Macular Degeneration , Cataracts , Retinal damage

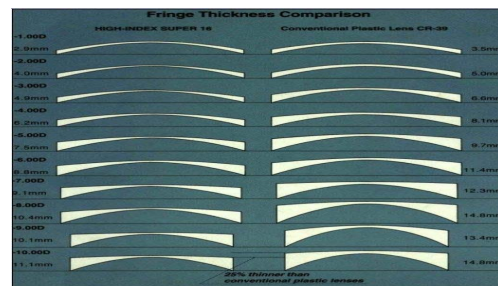
### A/R Coatings ?

- Pros – More light passings through 99% , better Acuity ,less eyestrain , look better.
- Cons – Cost , Many Types ,Fingerprints ,Greese buildup , Require Special cleaning , Scratch , can Peel and wear off

### A/R Coatings 8 to 10 layers



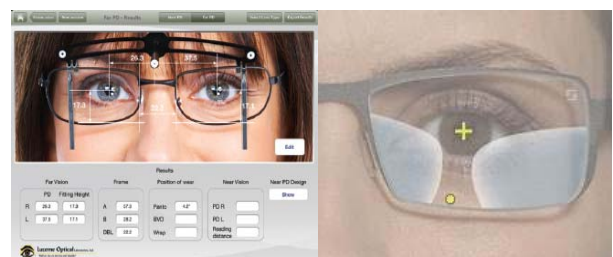
### Use care in selecting High Index



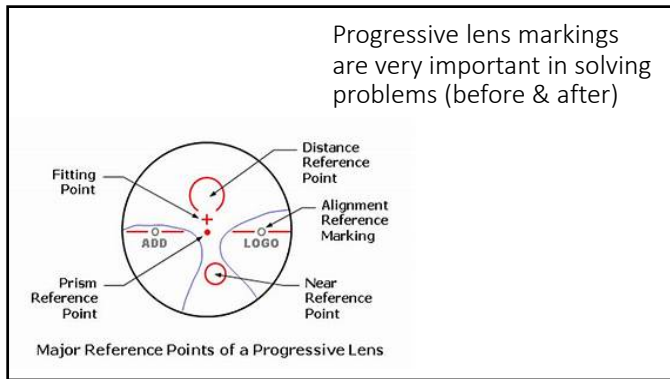
### Digital Technology



### Properly adjust frames and measure Height

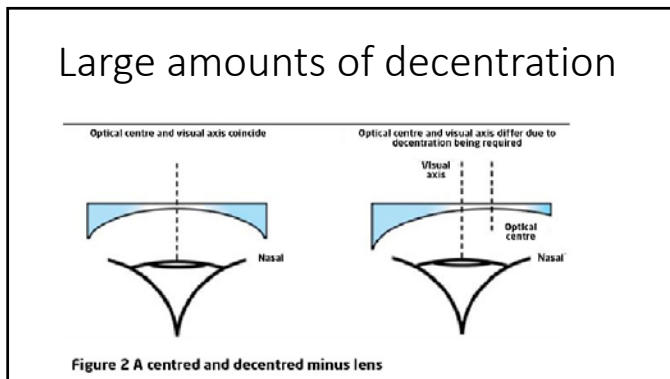
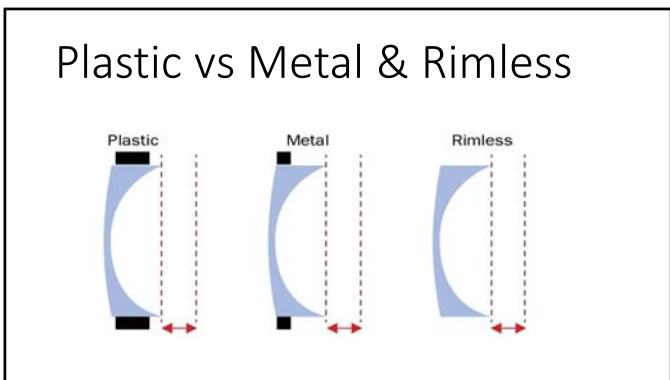
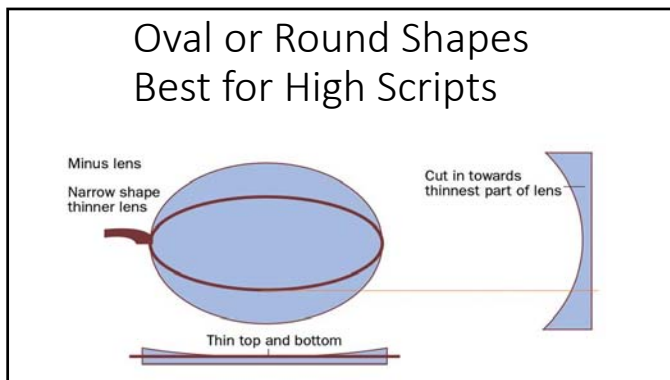






**Digital or HD lens design**

- Pros – Accuracy up to .001 diopter , wider field of view , less distortion , Thinner profile
- Cons – Cost , not only lenses but measuring devices. What Rx is best suited to make a difference ?



### Important Considerations

- On Stronger Rx's I check the base curve , old PD & Seg ht , and in some cases stay closer to what they were used to .
- Same with frames : with stronger Rx's stay close to (old glasses ) their style and fix .
- This also applies to High Astigmatic corrections especially at the oblique axis 45% 135% X

### Lens Selection

- Glass – Only about 6% of are made of Glass , they are the heaviest weight of lenses , but have superior optics .
- CR-39 – One of the best choices regular prescriptions ( + or – 1.50 ) also tint well for sunglasses and fashion tints .  
Polycarbonate - I use it about 25% of the time , what I don't like is scratches too easy , tints poorly , A/R coats decay easily , warp .  
Mid and Hi-Index – I use it in the range ( + or – 3.00 or above )  
Specialty Lens – HD , Trivex , Aspheric – All 3 are great choices but at a higher cost . \$\$\$

### Communication Finale

- There is really no finale to communication with your Patient but I have found that through my experiences that most the problems that I have had with unsatisfied patients could have been avoided if I had communicated with a better understanding .
- My first question is why are we getting new glasses today ? This will usually get many responses , and can get a lot of information from them , i.e. frame doesn't fit , don't like them , can't read , computer distance , seeing at night , Etc.
- Now at this point I can start steering the Patient proper lenses and certain frames . I also give them options of multiple pairs for different situations and explain .

### Frame Selection

- Keep in mind what the Rx thickness will be the frames .
- The Bridge is one of the most important parts of Fitting .
- Pre-Adjust frame for two reasons . 1. For Proper measurements and 2. So you won't have to do at Delivery

#### PD & SEG HT

- I always dot the frame for center of Pupil seg ht and sometimes to check PD along with pupilometer .
- I'm always Double checking - patient sitting and standing

Questions?