So That's What That's For!

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- You have seen them
- Have you ever wondered what they are used for?
- Have you ever wondered what they are looking at?

TODAY
WE ARE GOING TO FIND OUT!
Retinoscope
*Objective

Auto-refractor
*Subjective

Keratometer
- Measures the curvature of the cornea
- Response from the patient not needed to perform = objective test

Manual Keratometry

Starting Point

End Point
Readings

- Example:

  44.25 x 90 / 45.00
Schiotz Tonometer

- Measures the thickness of the cornea
- Useful in monitoring the progression of certain disorders that cause the cornea to become thickened (or filled with water), resulting in a loss of vision.
- Determines whether the cornea is strong enough for procedures such as LASIK.

Pachymeter

Visual Fields
Visual Fields

- How does stroke affect vision?
  The vision can be affected by stroke and parts of the visual field (the whole picture of the vision we see) may be missing or there may only be a small fragment missing, which does not cause the patient too many problems. However half of the picture can be missing.

- How does glaucoma affect vision?

- How can some brain tumors be detected?
Amsler Grid View with Abnormal Macular Involvement

Biomicroscope a.k.a Slit Lamp

Slit Lamps can be used for:
- Tears
- Foreign bodies
- Corneal abrasions
- Contact lens evaluation
- Corneal Health
  - Neovascularization
Going deeper.....

- Angle of the anterior chamber
- Crystalline lens
  - cataracts
- Retina
  - Optic nerve
  - Blood veins and arteries

Monocular Indirect Ophthalmoscope

- The monocular indirect ophthalmoscope (MIO) gives a magnification of 5 x and a field of view of approximately 30 degrees
- Give a more magnified view
- Gives a more narrow view

Binocular Indirect Ophthalmoscope

- Used with Pupil dilation
- Gives a less magnified
- Gives a wider view
What is Diabetes?
Diabetes is a disease which stops or impedes the body from utilizing sugar, or from storing it. Hence energy requirements are compromised. There are two forms of diabetes; type one or insulin dependent diabetes where the patient will need to have insulin injections, and type two or non-insulin dependent diabetes where the patient may need tablets or a special diet.
GLAUCOMA

What is glaucoma?
Glaucoma is an increase in ocular pressure of the fluid within the eyeball. The eyeball needs to have this fluid to keep the eyeball inflated and working normally. If the pressure is too high, then damage to the retina may occur (this is the part of the eye which receives the image to enable us to see) and vision is impaired or lost.

Ask your doctor

Gives you a new “in sight”