**Imaging in the Eye and Eye Problems**

**Pathway of light into our eye:**

-Enters the eye through the **\_\_\_\_\_\_\_\_\_\_\_\_**

-Goes through the opening of the **\_\_\_\_\_\_\_\_\_** into the **\_\_\_\_\_\_\_\_\_\_**

-Light is **\_\_\_\_\_\_\_\_\_\_\_\_\_** by the **\_\_\_\_\_\_\_\_\_**

-The light is **\_\_\_\_\_\_\_\_\_\_\_\_\_** onto the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



The **\_\_\_\_\_\_\_\_\_\_\_\_\_** around the lens will change its **\_\_\_\_\_\_\_\_\_\_\_\_** so it can focus light coming from different **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** away



**Forming Images**



The image on our retina is **\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_**. The **\_\_\_\_\_\_\_** automatically swaps the orientation of the images it sees to give us an accurate representation of what is happening.

**Blind spot**

Where the **\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_** meets the eyeball, there are no **\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_**. This portion of your eye is where there is a **\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_**.



Page 205 in the textbook has a good activity to find your blind spot.

**Focusing problems**

**Near-sighted**

People who are near-sighted can see things **\_\_\_\_\_\_\_\_\_** to them, but things **\_\_\_\_\_\_\_\_\_\_\_** away are unfocused.

Can be corrected with **\_\_\_\_\_\_\_\_\_\_\_** lenses



**Far-Sighted**

People who are far-sighted can see things **\_\_\_\_\_\_\_\_\_** from them, but things **\_\_\_\_\_\_\_\_\_\_\_\_** are unfocused.

Can be corrected with **\_\_\_\_\_\_\_\_\_\_\_\_** lenses



**Astigmatism**

When somebody has astigmatism their **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is distorted in **\_\_\_\_\_\_\_\_\_\_\_**. The light will focus on more than **\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_** in the eye.

Can be corrected with **\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_** to reshape the cornea.

**Blindness**

Blindness can be any vision **impairment** that keeps people from doing the living their normal life relying on sight. In rare cases, blind people cannot **detect** any light, but most can perceive a **limited** **amount** of light.

Common causes are **disease** or **malnutrition**.

**Snow** **Blindness**

Snow blindness is caused by **\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_** to **\_\_\_\_\_\_\_\_\_\_** and glare. This can cause inflammation in and around the eye. Resting in a **\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_** helps recovery from snow blindness.

**Night** **Blindness**

A portion of the **\_\_\_\_\_\_\_\_\_\_** lose their ability to respond to light. This will reduce the overall effectiveness of the eye’s ability to process light. Low light situations become much harder for the eyes to process.

**Colour** **Blindness**

Colour blindness happens when the **\_\_\_\_\_\_\_\_\_** not responding properly, only **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is colour blind. Colour **\_\_\_\_\_\_\_\_\_\_\_\_\_** is more common, where green-red are hard to distinguish.

Homework p.215 #3,5