**Test 1 – Part 1 - Blind Spot**

*Each eye has a “blind spot” due to the absence of photoreceptors on a particular spot on the retina where the optic nerve is located. Because there are no photoreceptors there, there will be no information sent to the brain about any images/light that hits that area of the eye, and therefore an image that falls on that area will NOT be seen.*

**Procedure**

1. Close your right eye.
2. Hold the image about arm’s length in front of you with the + sign directly in front of your left eye.
3. Staring at the + sign, slowly bring the image closer to your face. At a certain distance the dot will disappear from sight.
4. Repeat the process with your other eye.

**Test 1 – Part 2 – Visual Compensation**

*If each eye has a “blind spot,” why do you not have a blank spot in your vision all the time?*
**Procedure**

1. Using the new image (the plus sign and the dot with a line through it), repeat Steps 1-3 of Part 1.

***\*Questions***

1. Were you able to locate your blind spot? Yes No
2. Did both eyes have a blind spot? Yes No
3. In Part 2, what happens to the vertical line when the dot disappears?
4. Explain why you do not have a blank spot in your vision all the time.

**Test 2 – Visual Acuity**

*If you have contacts, you may leave them in for this test. If you have glasses, take them off and do the test without them. ☺*

**Procedure**

1. Have one partner stand at the chart and one partner stand at the tape line on the floor.
2. The partner at the tape line should cover his/her right eye with one hand.
3. Starting at the top line, the partner at the tape line reads each letter aloud while the partner at the chart checks for accuracy.
4. Continue to the bottom row or until the person can no longer read the letters.
5. Write down the number of the smallest line where you identified the majority of the letters correctly.
	1. For example, if the person read Line 6 as “E O E C Z P” (they got 4 out of 6 correct) but read Line 7 as “ E F L Q B Z D” (they got 3 out 7 correct), the smallest line with the majority would be Line 6, indicating they have 20/30 vision.
	2. A person with 20/30 vision is seeing objects clearly 20 feet, that a person with normal vision would see at 30 feet. A person with 20/40 vision is seeing objects clearly at 20 feet that a person with normal vision would see at 40 feet, etc.
6. Cover the other eye and repeat the procedure.

***\*Questions***

1. Do you have corrective lenses (contacts or glasses?) Yes No
2. Did you perform the test with your corrective lenses? Yes No
3. What is the visual acuity of your right eye? 20/\_\_\_\_\_
4. What is the visual acuity of your left eye? 20/\_\_\_\_\_

**Test 3 – Depth Perception**

**Procedure**

1. Hold the end of a pencil in your right hand horizontally and the end of another pencil in your left hand horizontally.
2. Hold the pencils out so they are arm’s length away from your body
3. Close one eye and try to touch the free ends of the pencils together.
4. Now open your eye and repeat the process with both eyes open.

***\*Questions***

1. Were you able to successfully touch the ends of the pencils together with one eye closed?

Yes No

1. Were you able to successfully touch the ends of the pencils together with both eyes open?

Yes No

1. Which was easier – one eye closed or both eyes open?

One closed Both open

**Test 4 – Near Point Accommodation**

Accommodation is a change in the shape of the lens of the eye to obtain maximal sharpness or focus of an image. The closest point at which an eye can focus is termed the near point of vision.

**Procedure**

1. Have the test subject hold a pin with the pointy end facing upward (not inward!) at eye level and at arm’s length.
2. Have the test subject cover his/her left eye and focus on the tip of the pin with their right eye.
3. Slowly bring the pin closer to the right eye until the point becomes out of focus.
4. Have the test subject hold the pin at that spot while his/her partner uses a ruler to measure the distance from the pin to the eye.
5. Repeat for the other eye.

***\*Questions***

1. Near point for the right eye: \_\_\_\_\_\_\_\_\_\_\_ cm
2. Near point for the left eye: \_\_\_\_\_\_\_\_\_\_\_\_\_ cm
3. Did you hold the pin the wrong way and poke yourself in the eye?
4. Yes and I need to see the doctor
5. Yes, but I’m more embarrassed at my own stupidity than anything else
6. No, I read the instructions and still have my eyesight as a result!

**Test 5 – Afterimage**

**Procedure**

1. Place an orange card on a sheet of white paper.
2. Have the test subject stare at the card for 30 seconds without moving his or her eyes, then remove the card.
3. The test subject should see a rectangular image where the card was. Record the color of the rectangle in the question section below.
4. Repeat this procedure with the green card.

***\*Questions***

1. Rectangle color after the orange card: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Rectangle color after the green card: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Explain what you think is happening (why do you see a different color once the card is removed?).

**Test 6 – Optical Illusions***The eye can play tricks on the brain! You may already be familiar with most of theses, but they’re still fun to try again.*

1. Which of the lines shown below is longer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



2. Do you see a face or a vase (or both?) in the picture below? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Is the center circle on the left the same size as the center circle on the right? \_\_\_\_\_

