Optometrist: Hello, [patient's name]. How can I help you today?

Patient: Hello, Dr. [optometrist's name]. I'm here for my annual eye exam, but I'm also concerned about my vision. It's been getting blurry lately, and I'm worried that I might have diabetic retinopathy.

Optometrist: I see. Well, let's start with a few tests. First, I'm going to dilate

your pupils so that I can get a better look at your retinas.

Patient: Okay.

Optometrist: (The optometrist dilates the patient's pupils.) Now, I'm going to look at your retinas with a special microscope. (The optometrist examines the patient's retinas.)

Optometrist: I do see some signs of diabetic retinopathy. It's still in the

early stages, but it's important to start treatment right away to prevent

further vision loss.

Patient: What kind of treatment is available?

Optometrist: There are a few different options, depending on the severity

of your condition. In some cases, we can simply monitor your condition and

treat any complications that arise. In other cases, we may need to use laser

surgery to seal off leaking blood vessels or to remove scar tissue.

Patient: What are the risks of these treatments?

Optometrist: The risks are generally low, but there is always a small chance

of side effects, such as bleeding, infection, or vision loss.

Patient: Okay. I'm willing to try anything to prevent my vision from getting

worse.

Optometrist: Good. I'll start you off with a medication that can help to

reduce swelling and inflammation in the retina. I'll also schedule you for a

follow-up appointment in a few months to monitor your progress.

Patient: Thank you, Dr. [optometrist's name].

Optometrist: You're welcome.

AL-NAJAF TECHNICAL INSTITUTE / DEPATMENT OF OPTOMETRY / ENGLISH COURSE FOR 2ND YEAR

Lesson Title: Common Eye Diseases and Conditions and Treatment Options

Education Level: Intermediate

Reading Passage

Our eyes are complex and delicate organs that allow us to see the world around us. However, they are also susceptible to a variety of diseases and conditions. Some of the most common eye diseases and conditions include:

* **Refractive errors**: Refractive errors are the most common type of eye problem. They occur when the light entering the eye does not focus correctly on the retina, the light-sensitive tissue at the back of the eye. This can cause blurry vision at near or far distances, as well as distorted vision. Refractive errors can be corrected with eyeglasses, contact lenses, or surgery.

* **Cataracts:** A cataract is a clouding of the eye's lens. Cataracts are caused by changes in the proteins that make up the lens, and they can develop due to aging, injury, or certain diseases. Cataracts can cause blurry vision, difficulty seeing at night, and sensitivity to light. Cataracts are typically treated with surgery to replace the cloudy lens with a clear artificial lens.

* **Age-related macular degeneration (AMD):** AMD is a leading cause of blindness in adults over the age of 50. AMD affects the macula, the central part of the retina that is responsible for sharp, central vision. AMD can cause blurry vision, difficulty reading, and blind spots in the central field of vision. There is no cure for AMD, but there are treatments that can help slow the progression of the disease and preserve vision.

* **Glaucoma:** Glaucoma is a group of eye diseases that damage the optic nerve. The optic nerve carries signals from the eye to the brain, and damage to the optic nerve can lead to vision loss. Glaucoma is often

caused by increased pressure inside the eye. Glaucoma can be treated with eye drops, medications, or surgery to reduce the pressure in the eye.

* **Diabetic retinopathy:** Diabetic retinopathy is a complication of diabetes that can damage the blood vessels in the retina. Diabetic retinopathy can cause blurry vision, blind spots, and even vision loss. Diabetic retinopathy can be treated with laser therapy, injections, or surgery.

Comprehension Questions

1. What are refractive errors?

2. What is a cataract?

3. What is age-related macular degeneration (AMD)?

4. What is glaucoma?

5. What is diabetic retinopathy?

6. What are some of the treatments for common eye diseases and conditions?

Conversation between an optometrist and an eye patient.

Optometrist: Hello, [patient's name]. How can I help you today?

Patient: Hello, Dr. [optometrist's name]. I'm here for my annual eye exam, but I'm also concerned about my vision. It's been getting blurry lately, and I'm worried that I might have diabetic retinopathy.

Optometrist: I see. Well, let's start with a few tests. First, I'm going to dilate your pupils so that I can get a better look at your retinas.

Patient: Okay.

Optometrist: (The optometrist dilates the patient's pupils.) Now, I'm going to look at your retinas with a special microscope. (The optometrist examines the patient's retinas.)

Optometrist: I do see some signs of diabetic retinopathy. It's still in the early stages, but it's important to start treatment right away to prevent further vision loss.

Patient: What kind of treatment is available?

Optometrist: There are a few different options, depending on the severity of your condition. In some cases, we can simply monitor your condition and treat any complications that arise. In other cases, we may need to use laser surgery to seal off leaking blood vessels or to remove scar tissue.

Patient: What are the risks of these treatments?

Optometrist: The risks are generally low, but there is always a small chance of side effects, such as bleeding, infection, or vision loss.

Patient: Okay. I'm willing to try anything to prevent my vision from getting worse.

Optometrist: Good. I'll start you off with a medication that can help to reduce swelling and inflammation in the retina. I'll also schedule you for a follow-up appointment in a few months to monitor your progress.

Patient: Thank you, Dr. [optometrist's name].

Optometrist: You're welcome.

2-minute neuroscience: the optic nerve.

The optic nerve is a sensory nerve responsible for transmitting information about vision to the brain. The nerve begins in the retina as the axons of cells called retinal ganglion cells come together to leave the eye at a region called the optic disc and form the optic nerve.

The optic nerve leaves the eye and extends to a structure called the optic chiasm where it meets the optic nerve from the other eye. At the optic chiasm, the optic nerve fibers carrying information from the sides of the retina closest to the temple cross over to the other side of the brain, while those carrying information from the sides of the retina closest to the temples remain on the side of the brain where they are. After leaving the optic chiasm, the nerve fibers are referred to as the optic tract. Most of the nerve fibers in the optic tract end in the lateral geniculate nucleus of the thalamus, and from there the information will be passed on to the visual cortex.

Damage to the optic nerve can occur due to a variety of causes like trauma, tumors, stroke, or glaucoma. The deficit that occurs after damage depends on where the nerve is damaged, and involves some degree of visual defect or anopsia. If the damage occurs before the optic chiasm, then the patient will experience blindness in the eye supplied by that optic nerve. Damage to the middle of the optic chiasm will cause loss of the lateral visual field of both eyes, due to the way fibers from the nasal side of the retina cross over at this point. If the optic tract is damaged, one half of the visual field will be lost in both eyes.

I Have No Eyebrows and No Eyelashes

Jane is a truly unique girl. She's not like everyone else and would even say, "I'm not like normal people". The thing that's different about Jane is that she has no eyebrows and no eyelashes. Having no eyebrows and no eyelashes is a condition that can happen for several reasons. Eyebrows and eyelashes are obviously hair and hair falling out can be very traumatic for a young person.

Jane does not have cancer, alopecia or any other disease that caused her eyebrows to fall out or her eyelashes to fall out. She has a mental disorder called Trichotillomania. Trichotillomania is a mental problem that people can get from stress, or through birth. The condition causes chemical reactions in the brain that tells the

body to pull out hair from a certain part of the body. In Jane's case, she pulls out her eyebrows and her eyelashes. It's less a form of hair loss, and more of a mental condition she acts on when she's stressed out.

Lots of people stare at her and sometimes they even whisper about her behind her back. It makes her feel sad and really angry. It also makes her crazy and mad when friends ask her why she does not have eyebrows or eyelashes. This is because after she explains her mental condition, Trichotillomania, they act like they understand but she can tell that they are still weirded out.

Jane is NOT weird. Her mental problem is just something she deals with and it makes her unique, totally unique, somthing that makes her stand out from the crowd. She says "I am me, and that's who I am." She feels she will never be able to put on makeup and and stuff and be a beauty queen or a diva all because of her appearance. To some people, she may look a little strange.

It stinks because her parents have tried virtually everything to help her from doctors to treatment to therapy through therapists, to medicine to hypnotism through hypnosis. But nothing has worked and she can't stop pulling out her eyebrows and pulling out her eyelashes.

The good news is that Jane got microblading and now has eyebrows. Microblading is the tattooing of eyebrows where you have none. Microblading is very effective but it did hurt a little. She uses fake eyelashes sometimes but because she has no eyelashes of her own for them to hold on to on her eyelids, the fake eyelashes often fall off. While this could cause anxiety, Jane is used to it and realizes that for now, this is just the consequences of her mental problem that she's trying to cure.

She also hopes that her appearance will not effect other kids and people getting to know who she really is inside. But for now she just accepts that she the girl with no eyebrows and no eyelashes. And she's okay with that.

How Animals and People See the World Differently

What most people think of when they look at the world, they think other animals probably see the world pretty much the same way. And only with time do we realize that of course, other animals don't see the same things we see that takes us to a sort of a philosophical question is what is the animal actually seeing? It's impossible to know because it goes into a brain that's very alien to ours. It goes through a processes that we don't use when we process visual stimuli. The animal does things with that information that we don't do. So it's really hard to know the most simple eye, just tell

an animal when it's light and when it's dark and then you've got eyes like ours that have color vision and very, very good spatial vision and can see very complex detail.

The development of eyes can be categorized into four stages from simple to complex stage. One is the simplest form, light falling on just a few photo receptors allows an animal to sense light and dark at stage. Two organisms can now tell which direction light is coming from. In stage 3 distinct eyes appear the first is a cupped eye with more photo receptors. The second is a compound eye that adds more cups. Both types in stage three can produce crude images of objects. In stage four, the most advanced eyes perform complex visual tasks, lenses, corneas and irises focus light on photo receptors, creating sharp clear vision.

This entire evolution from simple to complex could theoretically happen in less than half a million years. People have asked me, um, if I could be any animal at all, what animal would I like to be? In terms of their vision? It would only be right to say this since I work on them so much of my time, I would really like to know how many of shrimps see the world. Their perception of the world is so different both in terms of their sense of color, their sense of parts of the spectrum that we don't see at all. And also the way that their, their eyes are multiple so that each eye sees the same thing multiple times from different points of view. I think I'd probably, if I got myself into the mind of a man of shrimp, I'd have no idea what was going on and I would never be able to tell myself, oh, this is how they see. That's, that's the thing that I'm afraid of, but I still like to spend at least a few minutes seeing how a man of shrimp sees the world.

Why did you move your eyes today?

Maybe you wanted to check out something specific that caught your eye Or maybe you just wanted to look off into space for no reason in particular Well, it turns out that brain activity changes in these two situations When an animal looks at something with a goal in mind versus not. The scientists who recently discovered this connection between mental state and movement Hope that it will one day help us to diagnose brain diseases some of which affect how we move our eyes.

English Language Teaching Course for Optometry and Ophthalmology Students

Reading Passage and Questions

1.Passage:Title: The Science of Vision

Vision is the process by which light enters the eye and is converted into electrical signals that are sent to the brain. The eye is a complex organ that consists of several different parts, each of which plays a role in vision.

The cornea is the clear front part of the eye that helps to focus light. The iris is the colored part of the eye that controls the amount of light that enters the pupil. The pupil is the black opening in the center of the iris. The lens is a transparent structure that helps to focus light onto the retina. The retina is a light-sensitive layer of tissue at the back of the eye that contains photoreceptor cells. Photoreceptor cells convert light into electrical signals that are sent to the brain.

The brain interprets these electrical signals and creates the images that we see.

Vocabulary:

cornea: the clear front part of the eye

iris: the colored part of the eye

pupil: the black opening in the center of the iris

lens: a transparent structure that helps to focus light

retina: a light-sensitive layer of tissue at the back of the eye

photoreceptor cells: cells that convert light into electrical signals

Questions:

1.What are the three main parts of the eye?

2.What is the role of the cornea?

3.What is the role of the iris?

4.What is the role of the pupil?

5.What is the role of the lens?

6.What is the role of the retina?

7.How does the brain interpret the electrical signals from the retina?

Q/ Match the following words and definitions:

Cornea		a. the colored part of the eye
Iris		b. the clear front part of the eye
Pupil		c. the black opening in the center of the iris
Lens		d. a transparent structure that helps to focus light
Retina		e. a light-sensitive layer of tissue at the back of the eye

Q/ Fill in the blanks with the correct words:

1.The eye is a complex organ that consists of several different parts, each of which plays a role in _____.
2.The cornea helps to _____ light.
3.The iris controls the amount of _____ that enters the pupil.
4.The pupil is the black opening in the center of the _____.
5.The lens helps to _____ light onto the _____.
6.The retina is a light-sensitive layer of tissue at the back of the _____.

Q/ Write a short paragraph explaining the **process of vision**. Be sure to use the vocabulary and language structures from above.

A Conversation Between an Optometrist and a Patient.

Optometrist: Hello, [patient's name]. What brings you in today?

Patient: I'm here for my annual eye exam.

Optometrist: Great. Can you tell me a little bit about your vision? Any changes or concerns?

Patient: My vision has been pretty good overall, but I've been having some trouble reading small print lately.

Optometrist: Okay. Let's take a look and see what's going on.

[The optometrist performs a series of tests on the patient's eyes.]

Optometrist: Based on the results of your exam, it looks like you have a mild case of presbyopia. This is a normal age-related change that makes it more difficult to focus on close objects.

Patient: Is there anything I can do to improve my vision?

Optometrist: Yes, there are a few things you can do. First, you can try using reading glasses or bifocals. These lenses are designed to help you focus on close objects. Second, you can make some lifestyle changes, such as getting regular exercise and eating a healthy diet. Third, you can take certain supplements, such as lutein and zeaxanthin, which have been shown to improve vision.

Patient: I'm interested in trying reading glasses. What do you recommend?

Optometrist: I can prescribe you a pair of reading glasses that are specifically designed for your needs. I can also show you how to use them properly.

Patient: Thank you for your help. I'm feeling more confident now that I know what's going on and what I can do to improve my vision.

Optometrist: You're welcome. I'm glad I could help.

2.Passage Title: Case Histories and Patient Profiles

Healthcare professionals often rely on case histories and patient profiles to gain insights into the medical conditions and needs of their patients. These documents provide a comprehensive overview of a patient's medical history, current health status, and treatment plans. Let's explore the importance of case histories and patient profiles in the world of healthcare.

Vocabulary:

1. Case Histories: Detailed records of a patient's medical history, including past illnesses, treatments, and diagnostic results.

2. Patient Profiles: Summaries of a patient's personal and medical information, often used for quick reference by healthcare providers.

3. Comprehensive: Thorough and complete, covering all relevant aspects.

4. Insights: Valuable information or understanding gained from a situation or data.

5. Medical History: A record of a person's past illnesses, injuries, surgeries, and treatments.

6. Treatment Plans: Detailed outlines of the recommended medical treatments and therapies for a patient.

Q1/Match the vocabulary words with their definitions:

1. Case Histories 2. Patient Profiles 3. Comprehensive 4. Insights

5. Medical History 6. Treatment Plans

A. Thorough and complete, covering all relevant aspects.

B. Detailed records of a patient's medical history, including past illnesses, treatments, and diagnostic results.

C. Summaries of a patient's personal and medical information, often used for quick reference by healthcare providers.

D. Valuable information or understanding gained from a situation or data.

E. A record of a person's past illnesses, injuries, surgeries, and treatments.

F. Detailed outlines of the recommended medical treatments and therapies for a patient.

Q2/ Comprehension: Read the passage and answer the questions:

1. Why do healthcare professionals rely on case histories and patient profiles?

2. What information is typically included in a patient's medical history?

3. How are patient profiles different from case histories?

4. Why are treatment plans important in healthcare?

Conversation: Practice a conversation using the vocabulary words:

A: I've been reading about the importance of case histories and patient profiles in healthcare.

B: Oh, really? Why do healthcare professionals rely on them?

A: Well, case histories provide detailed records of a patient's medical history, including past illnesses and treatments. They help doctors understand a patient's health journey.

B: That sounds important. What about patient profiles?

A: Patient profiles are summaries of a patient's personal and medical information, used for quick reference. They're like snapshots of a patient's current status.

B: So, case histories are more comprehensive, right?

A: Exactly! They cover all relevant aspects, while patient profiles are concise. Both are essential for providing insights into a patient's condition and creating effective treatment plans.

B: I see. Treatment plans must be crucial then.

A: Absolutely! Treatment plans outline the recommended medical treatments and therapies for a patient, ensuring they receive the best care possible.

B: Thanks for explaining. It's fascinating how these documents play such a vital role in healthcare.