

1. Glasses or lenses - that is the question...

Read the text and complete the correct form of the words in brackets.

While more people prefer to wear glasses exclusively, wearing contacts has been growing in _____ (POPULAR) ever since scientific _____ (ADVANCE) made contacts _____ (AFFORD) and practical for people in the late 70's and 80's. Whether you choose to wear eyeglasses or contact lenses for vision _____ (CORRECT) mostly depends on personal _____ (PREFER). Lifestyle, comfort, _____ (CONVENIENT), budget and aesthetics should all factor into your decision-making process.

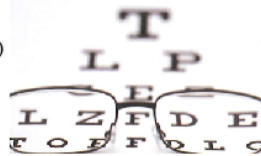
Before deciding between contacts and glasses, keep in mind that one is not _____ (NECESSARY) better than the other; each has its pros and cons in terms of vision, _____ (EASY) of use and eye health.

Eyeglasses offer many benefits over contact lenses. They require very little cleaning and _____ (MAINTAIN), you don't need to touch your eyes to wear them (decreasing your risk for eye infections), and glasses are cheaper than contact lenses in the long run since they don't require frequent _____ (REPLACE). There are some drawbacks as well, you will have to deal with lens _____ (REFLECT) and glare. Glasses fog up with changes in temperature and they may be a _____ (DISTRACT) during sport activities.

That being said, contact lenses have many advantages over glasses. Contacts sit directly on your eye, so vision, particularly peripheral vision, is _____ (OBSTRUCT). You can participate in sports and outdoor activities without fear of eyeglasses getting in the way, falling off or breaking. You can even change the colour of your eyes with colour contact lenses.

2. Reading

The **Snellen chart** measures a person's eyesight according to which line they can read from 20 feet (6 metres). 20 / 20 (or 6 / 6) vision is normal. 20 / 40 (or 6 / 12) is roughly half as good, and 40 / 20 (12 / 6) twice as good as normal.



Lea symbols are often used to assess visual acuity in children who cannot read. Do you know of any other ways of measuring visual acuity?

Reading

Glasses

- 1 Discuss the questions with a partner.
 - For you, is wearing glasses positive or negative?
 - What is the price range for glasses with lenses in your country?
 - Imagine there were no glasses or contact lenses. How many of the people who you work with every day would not be able to work?
- 2 Read the text. Match these titles with paragraphs A-F. One title is not needed.
 - 1 The social effects of glasses _____
 - 2 How glasses are made _____
 - 3 Sight in the developing world _____
 - 4 The invention of glasses _____
 - 5 How glasses work _____
 - 6 An important invention _____
 - 7 The limited life of eyes _____

- 3 Decide whether these statements are true (T) or false (F).
 - 1 Most people of 45 need reading glasses.
 - 2 Scientific progress in the Renaissance led to the invention of glasses.
 - 3 Haloes are an example of an aberration.
 - 4 A squint is a focusing problem.
 - 5 People with hyperopia need glasses for reading.
 - 6 Glasses doubled the hours that people could work in a day.
 - 7 Cheaper glasses would help the economies of developing countries.

- 4 Do you know of any charity that helps restore vision to people in the developing world? Tell the group about it.



THE IMPORTANCE OF SEEING CLEARLY

A

If you had to make a list of ten inventions that have changed the world, glasses would be on it.

B

Most people's eyes can work efficiently for only about 35 years, and after that they may need reading glasses. 800 years ago there was no such thing as correcting sight and early in life almost everyone became disabled by failing eyesight.

C

Glasses were invented in the fourteenth century and very quickly spread throughout the world. Their invention was vital to the creative and intellectual progress of the Renaissance – a period of rapid development in mathematics, science, commerce, medicine, and art.

D

Spectacle lenses correct focus, and can be used to correct other problems too, such as aberrations (seeing ghost images, haloes, waves, or rainbows) and squints (strabismus), when the two eyes do not point in the same direction. However, their most common use is to correct long-sightedness (hyperopia) – where you cannot focus on near objects, short-sightedness (myopia) – where you cannot focus on distant objects, and the loss, through ageing, of the eye's ability to change focus (presbyopia).

E

The invention of glasses freed people from the effects of ageing. At the point in their lives when their knowledge and skills were at their highest level, people could continue to read, do accounts, write, and do small-scale, detailed work. Glasses have effectively doubled the length of time one can expect to live a productive life.

F

The link between glasses and poverty can be seen in developing countries today. The World Health Organisation says that 28 million people in developing countries, where a pair of glasses can cost several months' salary, are blind from treatable conditions. Educated people like engineers and teachers have to retire early, and millions never learn to read, simply because they cannot see.



5. Find a word in the text which means:

A machine, tool, or system that someone has made for the first time - _____

Useful and effective and working correctly - _____

To gradually affect a larger area/amount of people - _____

Another word for glasses - _____

Something that is not normal or not what you would usually expect - _____

A luminous or coloured circle, as seen around a light in glaucoma - _____

A disorder in which the eyes point in different directions - _____

To adjust a lens or instrument to produce a clear image - _____

6. The Ear: Read the text and complete one word into each gap.

The ear enables us to hear as well as maintain balance. The external part of the ear _____ of the auricle (also called the _____), the external auditory _____ (meatus) and the ear _____ (tympanum). The auricle is an immobile cartilaginous framework covered with skin and provides for the perception of sound, its bottom part is called the **earlobe**. The auditory canal is an S-shaped tube _____ ends with the tympanum separating the _____ and _____ ear. The skin of the canal is furnished with hairs and special glands which produce yellow _____ secretion for protection against insects and dust.

The middle part embodies a small cavity in the temporal bone. The cavity is connected with the nasopharynx by means of the auditory tube, known as _____ tube. Both are lined with mucous membrane which enables infection to permeate from the throat to the middle ear.

The cavity of the middle ear contains three tiny bones _____, _____ and _____, which serve for the transmission of sound vibrations. These can be reduced _____ means of two miniature muscles.

The _____ ear is formed by irregularly shaped cavities containing fluid and complex membranous structures (_____ canal, _____ and _____ which are filled with a fluid termed _____ and are surrounded by _____) initiating nerve impulses. It functions as the actual receptor of sound. Sound _____ received by the external ear hit the _____ membrane causing it to vibrate. The vibration is transmitted to the small bones in the middle ear called _____. The stapes, which is attached to the oval _____ of the inner ear, causes the membrane of the inner ear to move with the sound which is thus carried forward to the canals of the inner ear and recognized by its volume.