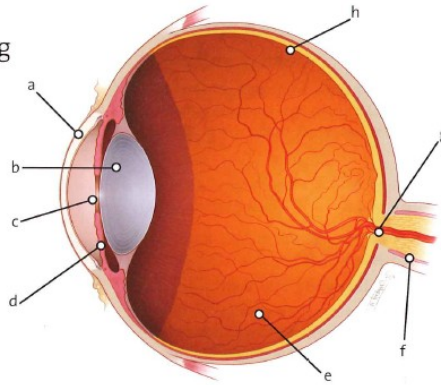


The eye

Label the parts of the eye using the words in the list.

cornea
iris
lens
macula
optic nerve
pupil
retina
vitreous humour



eyebrow, eyelid, eyelash
eye socket/orbit, eyeball
sclera ['skliərə]
aqueous humour ['eɪkwɪəs
hju:mə]
choroid ['kɔ:roɪd]
ciliary muscles
conjunctiva [,kɒndʒʌŋk'taɪvə]
blind spot
constrict
dilate[dai'leɪt], curvature
['kɜ:vətʃə]

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.

- The social effects of glasses _____
- How glasses are made _____
- Sight in the developing world _____
- The invention of glasses _____
- How glasses work _____
- An important invention _____
- The limited life of eyes _____

3 Decide whether these statements are true (T) or false (F).

- Most people of 45 need reading glasses.
- Scientific progress in the Renaissance led to the invention of glasses.
- Haloed are an example of an aberration.
- A squint is a focusing problem.
- People with hyperopia need glasses for reading.
- Glasses doubled the hours that people could work in a day.
- 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, haloed, 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.



The Ear

The ear enables us to hear as well as maintain balance. The external part of the ear consists of auricle (_____), the external auditory _____ (meatus) and the _____ (tympanum). The pinna is an immobile cartilaginous framework covered with skin and provides for the perception of sound. The auditory canal is an S-shaped tube which ends with the tympanic membrane 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 _____. 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 called auditory ossicles (_____, _____ and _____), which serve for the transmission of sound vibrations. These can be reduced by means of two miniature muscles.

The _____ ear is formed by irregularly shaped cavities containing fluid and complex membranous structures (_____, _____ 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 _____ in the middle ear. The stapes, which is attached to the oval window 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.

Reported speech

1 Study the cartoons and complete the dialogues.

1 Present tense reporting



- Nurse Dr Weston says she's sending a patient for observation.
 Ward manager We have a bed available.
 Nurse The ward manager says they _____^a.
 Dr Weston Good, thank you. I suspect he has concussion.
 Sarah The doctor says _____^b.

2 Past tense reporting



The next day

- Nurse Last night she told me she was in pain.
 Doctor Where did she have the pain?
 Nurse _____^a in her chest.
 Doctor How bad was it?
 Nurse _____^b unbearable.
 Doctor Were there any other symptoms?
 Nurse Yes, _____^c stomach-ache as well.

3 Reporting yes / no questions



- 11.00
 Nurse He asked if I could help him get out of bed.
 Doctor I see. Did he ask for any more help?
 Nurse Yes, he asked me _____^a get dressed.
 Doctor I see, and then?
 Nurse He asked me _____^b open a bottle of medicine.

4 Reporting wh- questions



- 4.00
 Patient He asked me what my date of birth was.
 Visitor Did he? What else did he ask you?
 Patient He asked me where _____^a.
 Visitor So you told him your address. Anything else?
 Patient Yes, he asked me when _____^b. I told him that I first became ill in July.