Topic	The Ear	Level	Key Stage 3 (or any course for students aged 11-14)
Outcomes	To relate the structure of the ear to its function by considering different scenarios where hearing is lost		

Instructions – students are introduced to the task - they are the doctor. They are given information sheets on different ear problems and have to use these ideas to complete the table to help diagnose and treat their patients.

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## You are the doctor!

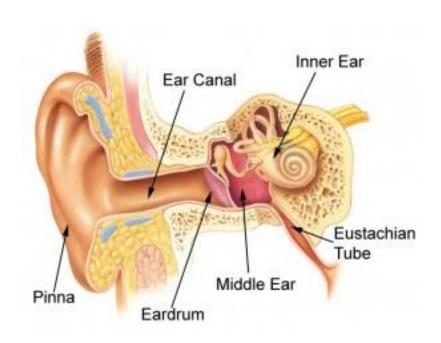
➤ You are a doctor and have five patients with different symptoms.

➤ You will need to read the information sheets to work out what you think is the cause of their problem and suggest some possible treatments.

Patient's symptoms	Possible cause of poor hearing, and part of ear affected	Best possible treatment and a reason why you think this
I woke up in the morning and there was a nasty orange smear on my pillow. I think my hearing is getting worse.		
I am a deep sea diver. Yesterday when I came up from the surface my ear really hurt and I couldn't hear the TV very well in the evening.		
I have had a sore ear and an earache for 3 weeks. The pain is really bad. I think I may have a temperature.		
I am 80 years old. My grandchildren come over every weekend but I find it very difficult to hear them.		
I go to a lot of rock concerts and love listening to music on my iPod. I went to a gig on Saturday and two days later I still can't hear very well.		

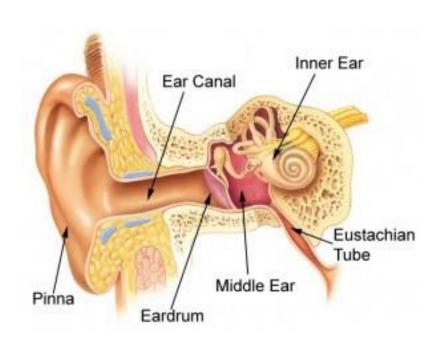
When the ear canal becomes blocked with wax it makes it difficult to hear.

Patients can have their ear canal cleaned out using ear irrigation where water is pushed into the ear by a Doctor. You can also use special eardrops that soften the ear wax so that it falls out by itself. People should never try and remove the ear wax with a finger or putting an object into their ear as this can cause ear damage.



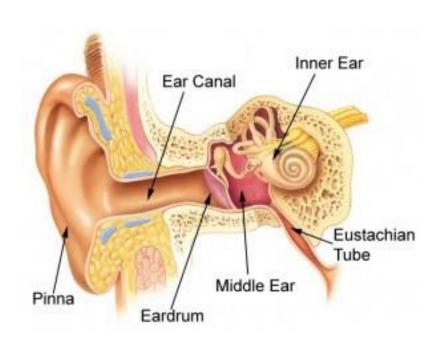
Loud noises can damage the hair cells in the inner ear.

This causes permanent damage to your ear and there is no cure. You can try and improve the hearing using hearing aids and it's also important to avoid exposure to more noise to prevent your hearing from getting worse.



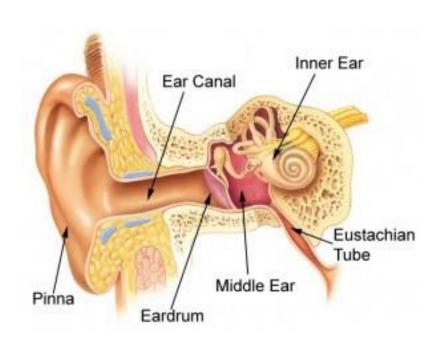
When people are exposed to a sudden, very loud sound their ear drum can tear. This is called a perforated eardrum. It can also happen when there is a change in pressure.

There is nothing the doctor can do but it usually heals over time. It is important to keep the ear dry to prevent it from becoming infected.



When people get old, their auditory nerve and sensitive hair cells inside the ear begin to deteriorate. As a result elderly people often find it hard to hear, particularly high frequency sounds.

At the moment, there is nothing that a doctor can do but wearing a hearing aid may help.



The ear drum or the middle ear may become infected by bacteria. This infection is most common in children between six and 15 months.

Most infections clear up within three to five days. The doctor may prescribe antibiotics to cure it. It is important that the patient completes the full course of antibiotics.



