

Task 2 – Sound and Decibel cards

A whisper, leaves rustling



Task 2 – Sound and Decibel cards

Busy city traffic, a hairdryer, a loud shout, a child screaming



A quiet area (e.g. library), a fridge humming



A typical nightclub or rock concert



Background music, a normal conversation, a noisy classroom or restaurant



Ambulance siren, shotgun



Task 2 – Sound and Decibel cards

Fireworks or a jet plane taking off



A rocket launching



Task 2 – Sound and Decibel cards

120 decibels

110 decibels  
Probably the loudest you can shout

85-90 decibels

60 decibels  
It might be hard to concentrate

40 decibels  
This is a quiet level of noise

180 decibels  
You can't hear anything else!

140 decibels  
This might cause you pain!

20 decibels

Task 2 – Ear Labels

Pinna

Eardrum (Tympanic membrane)

Hammer (malleus)

Anvil (incus)

Stirrup (stapes)

Cochlea

Auditory (hearing) nerve

Eustachian tube

Ear Canal

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Task 4 – Have I damaged my hearing?

**Paul aged 10**

*My mum always seems to be hoovering around the house!*

*It sounds pretty loud to me and she does it for a least 10 minutes every day.*

*Is my mum damaging my hearing?*

Things you need to know:

- The vacuum cleaner that Paul's mum uses makes a noise of about 70 decibels
- She vacuums once a day for 10 -15 minutes

Task 4 – Have I damaged my hearing?

**Rosie aged 9**

*My little sister has this really annoying musical toy. She plays with it all the time.*

*My mum's friend said it could be bad for her ears. Is that true?*

Things you need to know:

- Rosie's sister's toy is a *Tickle me Elmo*.
- She plays with it for about 30 minutes at least 3 times a day.

*Last Christmas, the noise levels of some children's toys were measured. This is how loud the noisiest toys were:*

- *High School Musical Rockerz Jammin Guitar* – 106
- *Cheetah Girls – In Concert Collection Doll* - 104
- *Hannah Montana – In Concert Collection Doll* - 103
- *VTech V.Smile Baby* - 103
- *CAT Motorized Dump Truck* - 102
- *Tickle Me Elmo* - 100
- *Transformers Trans-portable Activity Center* - 99
- *Tonka Lights and Sounds Hummer* - 97
- *Bob the Builder Deluxe Talking Tool Belt* - 96
- *Bosch Toy Chainsaw* - 95
- *Tickle Me Cookie Monster* – 94

*(all numbers are decibels)*

#### Task 4 – Have I damaged my hearing?

##### **Steve aged 13**

*I went to a gig with my brother and his friends. The next day my ears felt kind of fuzzy like I was hearing everything with cotton wool in my ears. The gig was really cool and my hearing is ok now so I haven't hurt my ears have I?*

Things you need to know:

- A typical rock concert is as loud as 110 decibels
- The concert lasted for 2 hours.

#### Task 4 – Have I damaged my hearing?

##### **Zoe aged 12**

*I love listening to my favourite bands on my music player. My friends get annoyed sometimes because I don't hear what they're saying when I've got my headphones in. Sometimes people ask me to turn it down when I'm on the bus. I'm not harming anybody am I?*

Things you need to know:

- If other people can hear her music Zoe is listening to music at least 100 decibels
- She listens on the school bus twice a day for 10 minutes and at lunch times and break times.

When listening to music players, if other people can hear sound leaking out the ear-buds -- the volume is probably too high to be safe.

Task 4 – Have I damaged my hearing?

**Lucinda aged 9**

*Last Guy Fawkes night, some of us were messing around and let off a rocket. Trevor was standing right next to it when it went off and he said it made his ears hurt. He says he's ok but sometimes he can't hear what I'm saying. Did the firework damage his hearing?*

Things you need to know:

- A firework let off 1 metre away makes a noise of 140 decibels
- It only happened once.

Task 4 – Have I damaged my hearing?

**Rosalind aged 9**

*My sister shouted right in my ear. She shouted so loud it made my ear hurt. I'm scared because I might go deaf.*

Things you need to know:

- The loudest a human can shout is 120 decibels. Rosalind's sister probably wasn't that loud but her shout could have measured 70 decibels
- It only happened once (so far!)

Task 5 – Which platform?

# Platform 1

Task 5 – Which platform?

# Platform 2



Task 5 – Which platform?

**Platform 3**

Task 5 – Which platform?

# Platform 4

Task 5 – Which platform?

You need to travel to  
**NEWCASTLE**

Listen to the announcement to find out which platform you need to go to.  
When you think you know, go and stand by that platform number.

You need to travel to  
**MANCHESTER PICCADILLY**

Listen to the announcement to find out which platform you need to go to.  
When you think you know, go and stand by that platform number.

You need to travel to  
**SOUTHAMPTON CENTRAL**

Listen to the announcement to find out which platform you need to go to.  
When you think you know, go and stand by that platform number.

You need to travel to  
**NOTTINGHAM**

Listen to the announcement to find out which platform you need to go to.  
When you think you know, go and stand by that platform number.

**Hate it!**

**Love it!**