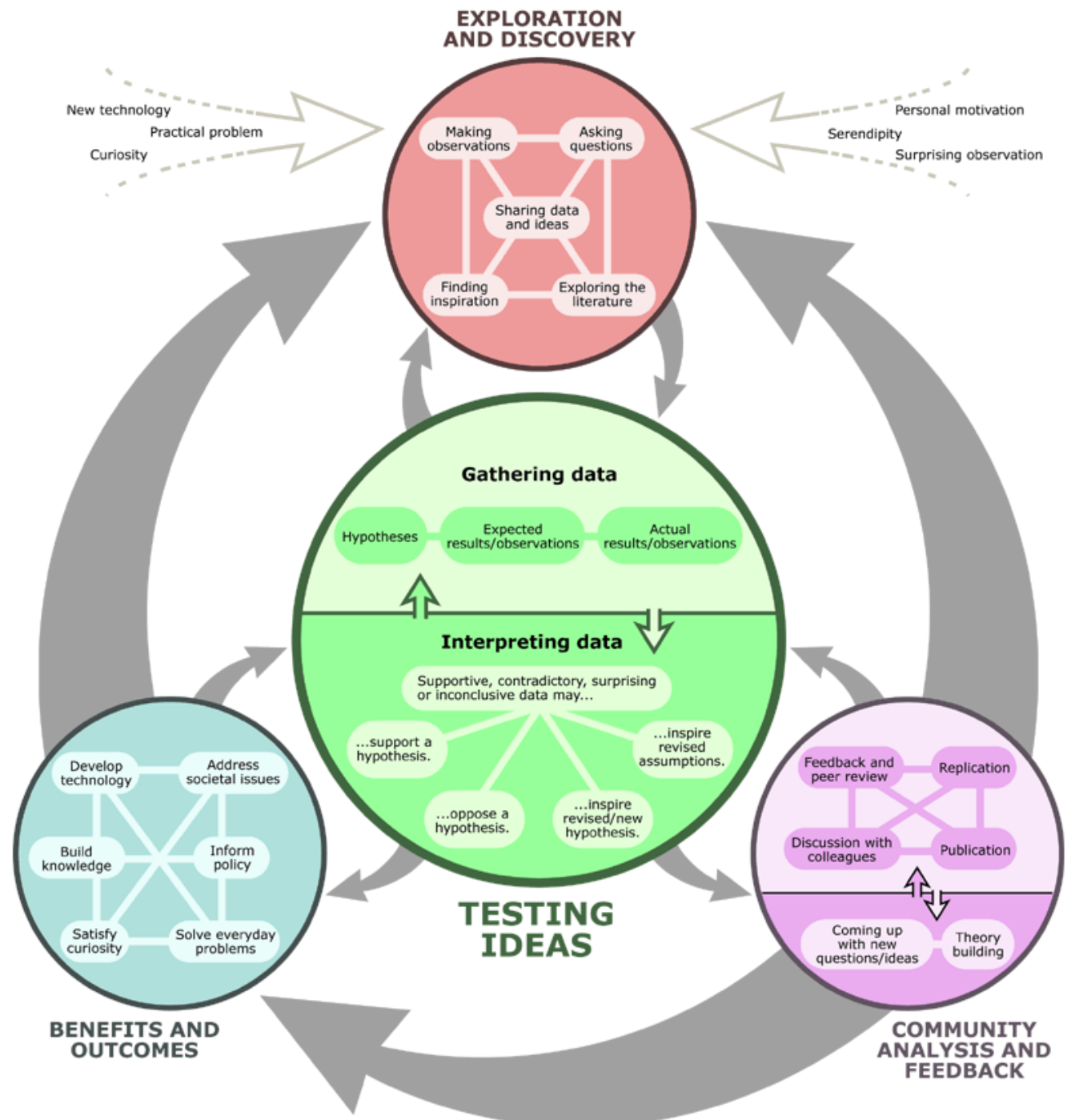


Science Exploratorium

Testing Ideas About our Natural World
Through Scientific Inquiry





Where or how do scientists start?

EXPLORATION AND DISCOVERY

New technology
Practical problem
Curiosity

Making observations

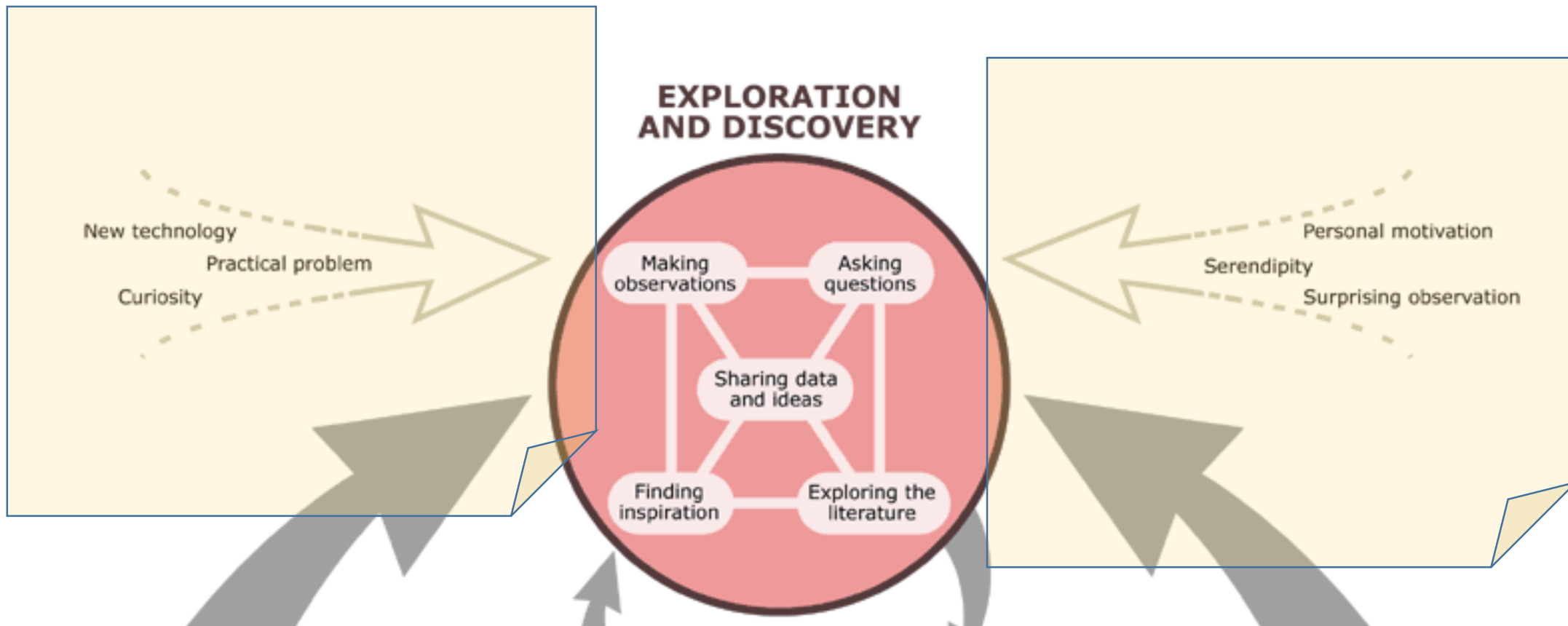
Asking questions

Sharing data and ideas

Finding inspiration

Exploring the literature

Personal motivation
Serendipity
Surprising observation





“Turn
down that
music
before you
go deaf!”



Hypothesis:

Thirty percent of students at Hortonville Middle/Fox West Academy listen to their music at levels that will cause hearing loss.

What information should we collect?

- Gender
- Student/Adult
- Song Title
- How long on average do you listen to your music with earbuds or headphones?
- Genre of music
- Brand of headphones
- Grade/Age
- Device
- What activities do you do while listening? Running, riding the bus, ...

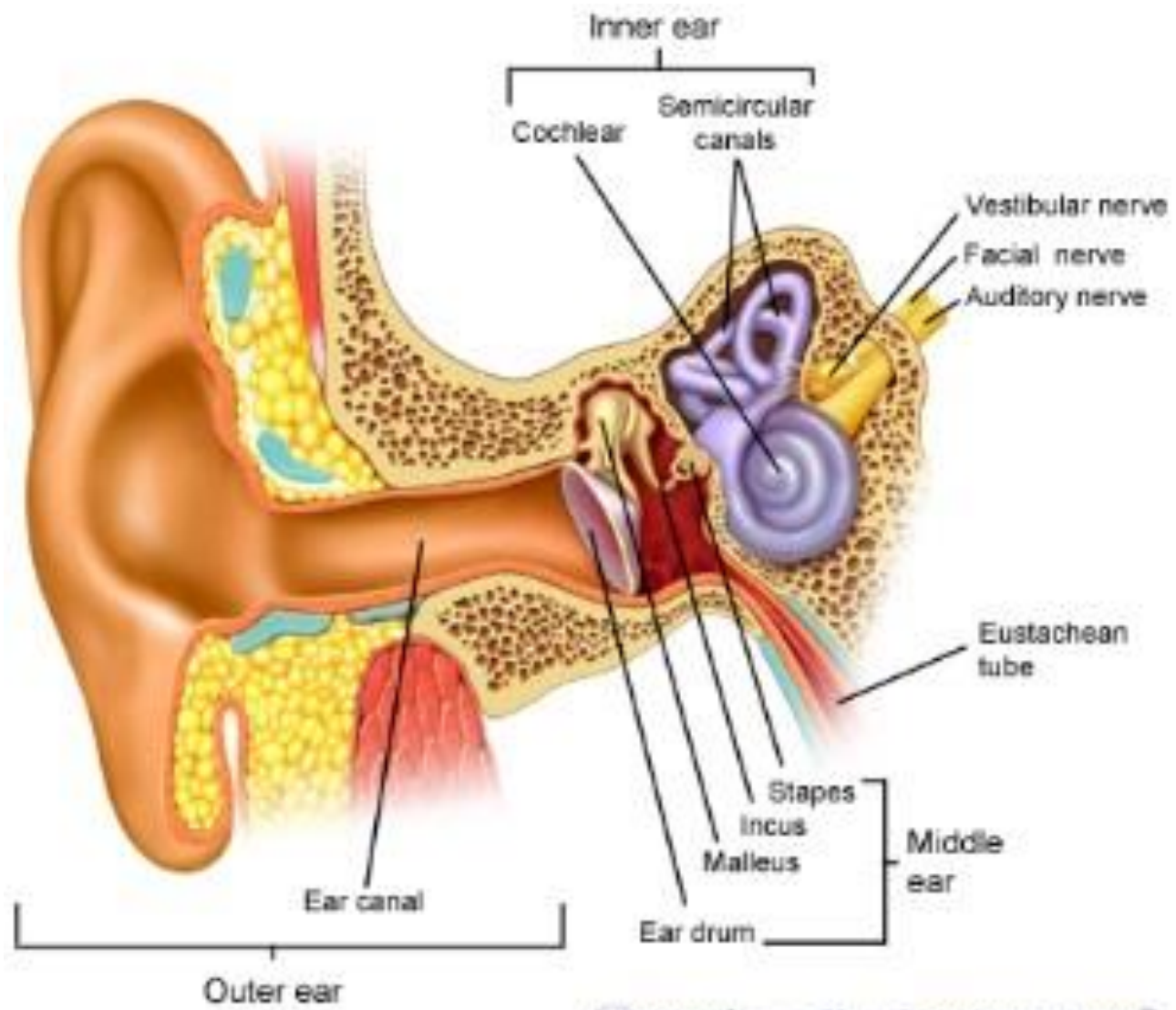
Pre-investigation Research :

Scholastic Action April 6,2015 Article “Attack of the Earbuds”

- READ the article given out in class and record three facts from the article in the space below. Due 11/3/15 A PDF of the article is on the daily agenda
- A 2008 study found that listening to music **too loud** can cause hearing loss.
- Noise-canceling earbuds are safer than earbuds.
- 2010 study found that 1 out of 5 teens suffer from hearing loss.

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The slides with the yellow background were completed on Monday Nov. 2nd



virtualmedicalcentre.com

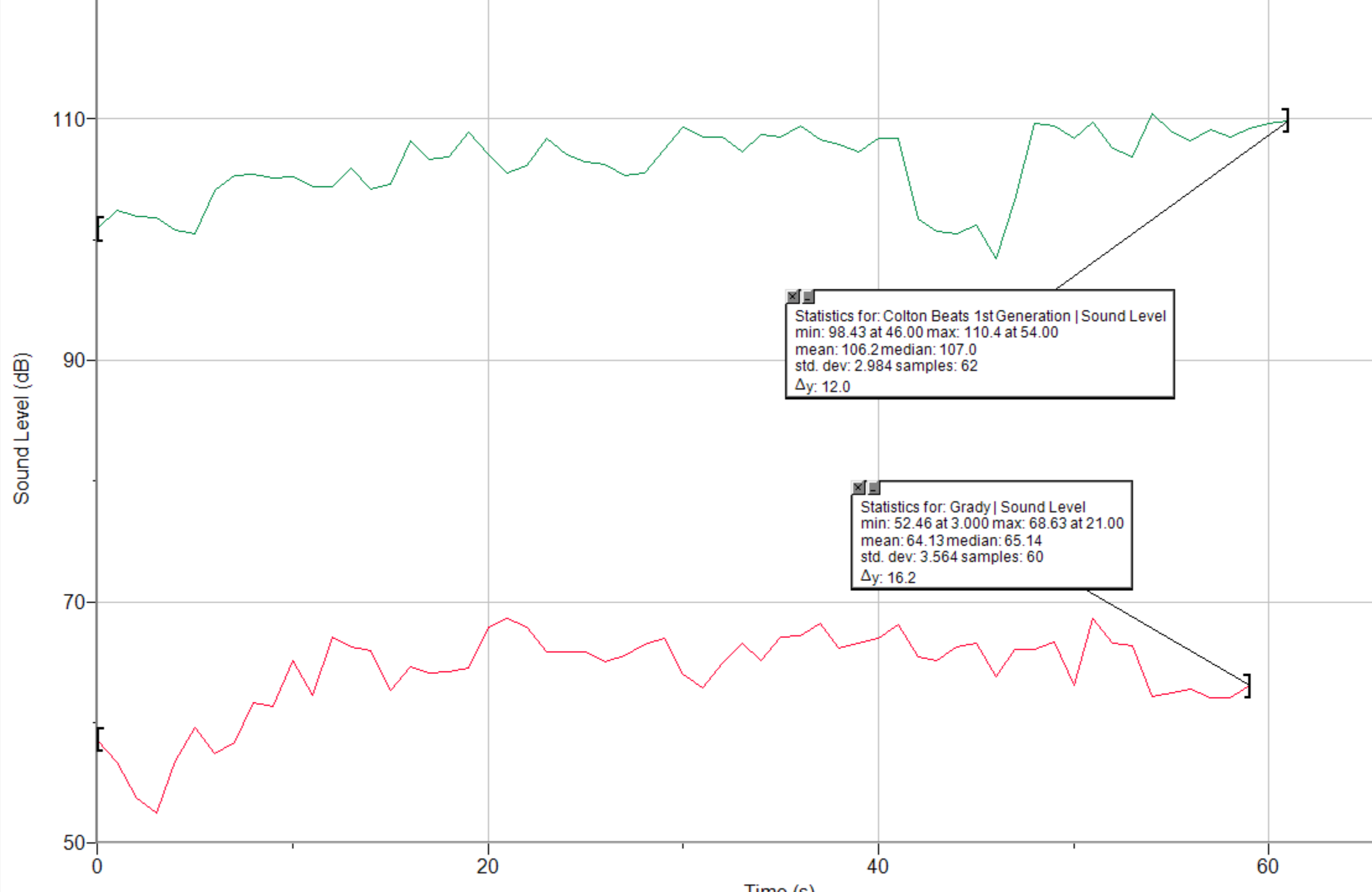
Read online article from Kids Health on hearing and hearing loss. [Link](#)

Ran sound tests on students

What are the three most important ideas from the article?

Time (s)	Level (dB)
0	58.6
1	56.7
2	53.7
3	52.5
4	56.8
5	59.5
6	57.4
7	58.3
8	61.7
9	61.3
10	65.1
11	62.3
12	67.1
13	66.2
14	65.9
15	62.7
16	64.6
17	64.1
18	64.2
19	64.5
20	67.8
21	68.6
22	67.9
23	65.8
24	65.9
25	65.9
26	65.1
27	65.5

Sound Level
2.0 dB



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