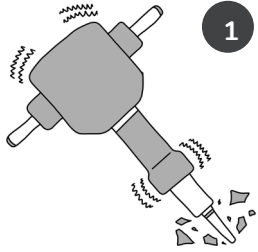


## Hearing Protection

This activity was created by Reem and Brenna

Consider the following scenarios, and see whether you can make the best choice for your hearing! Use the chart on the next page to help you.

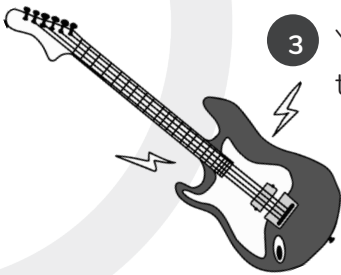


- 1 Your aunt is a construction worker and uses a jackhammer frequently. She asks you to grab her some ear protection, so you grab the...

- a Fuzzy earmuffs
- b Professional ear protections
- c Headphones

- 2 You just got a new blender and its really noisy. You should...

- a Not worry, this could only cause hearing damage after long exposure
- b Only make smoothies when you have ear plugs in
- c Avoid using the blender for more than 2 minutes at a time



- 3 Your uncle is going to a notoriously loud rock and roll concert. You should tell him to...

- a Bring a helmet
- b Bring a jolly attitude
- c Bring ear plugs

- 4 It's raining outside and you can hear raindrops loudly hitting the roof. You should...

- a Wear ear plugs and hide under a blanket
- b Avoid leaving your house to protect your ears
- c Nothing! This is a safe volume of sound



- 5 Your older sister just bought a new pair of headphones to listen to Harry Styles's new album... what should she do?

- a Listen to the album at full blast and shout all the words
- b Listen to Ariana Grande instead
- c Listen with the headphones at a moderate volume

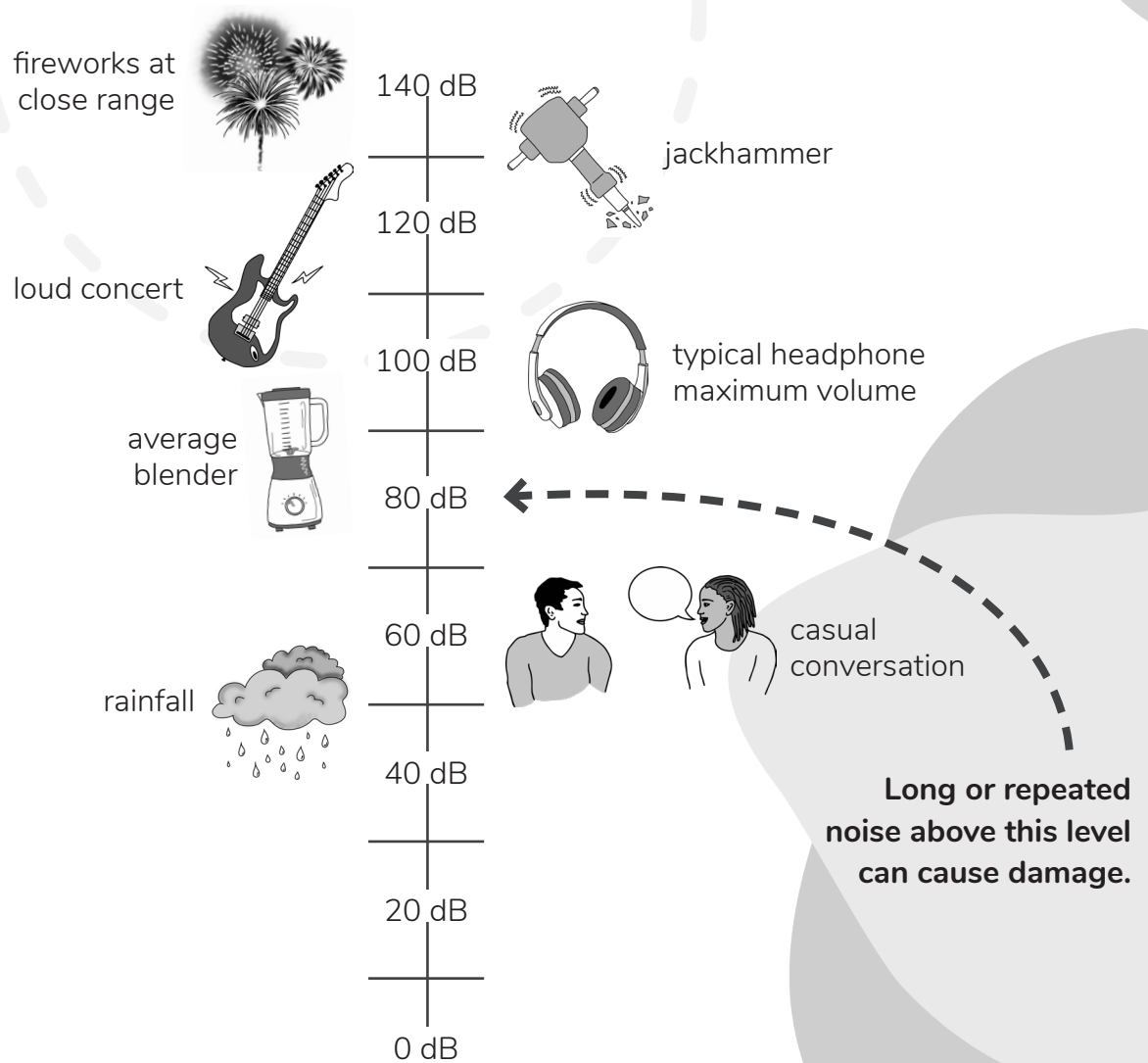
- 6 The park likes to set off some cool fireworks, at which distance should you watch the display from...

- a As close as possible to the set off point to get the best view
- b An appropriate distance (at least 150 meters) away
- c An appropriate distance (at least 100 km) away



Date: \_\_\_\_\_

Name: \_\_\_\_\_



## → SCIENCE OF HEARING

Sounds that are too loud can damage the tiny hairs inside of your ear and once they are damaged, they cannot regrow or be repaired. It is important to be able to identify safe volume levels that won't damage your hearing.

**TINNITUS** is a ringing sound heard after experiencing hearing damage. 90% of people who have had long exposure to loud sounds develop tinnitus.

**LOUDNESS** is the intensity or amount of energy measured in **decibels (dB)**.

For a sound increase of 10 decibels, the sound intensity goes up 10 times. In other words, a small increase in decibels means a much, much bigger increase in loudness!

Another important factor is how long you are exposed to the sound. The higher the decibel number, the less time you can be exposed to it without getting hearing damage.