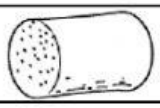
NAME:_____ **DATE:**_____

LOUD NOISES

Noise can be a big problem in the workplace. When working in noisy places, workers may use ear protection. Look at the pictures of various ear protection devices and answer the questions which follow

Type of ear protector	Reduces noise levels by	Disadvantage
A Cotton wool plug 	10 dB	Works loose, needs clean hands to replace
B Greased cotton wool plug 	30 dB	Works loose, needs clean hands to replace, could cause irritation
C Polystyrene ear plug 	30 dB	Can be uncomfortable as it fits tightly in the ear, causes sweating, needs clean hands to fit
D Ear muffs containing sound absorbing materials such as foam, attached to a helmet 	40 dB	Can be uncomfortable as it covers the ear, causes sweating, not as well fitting as the headband type.
E Ear muffs containing sound absorbing material such as foam, attached to a head band 	50 dB	Can be uncomfortable as it covers the ear, causes sweating

For all questions below, type the LETTERS of the correct answers.

1. Which ear protectors:

a. Would be best to use in a noisy work environment? and

b. Reduce noise levels by the same amount? and

c. Are likely to fall off? and

d. Can become uncomfortable? and

e. Give the least protection from noise? and

f. Need clean hands to put them in place? and

2. Trapped air is a good sound insulator. Which of the ear protectors above traps air in the ear canal?

and and

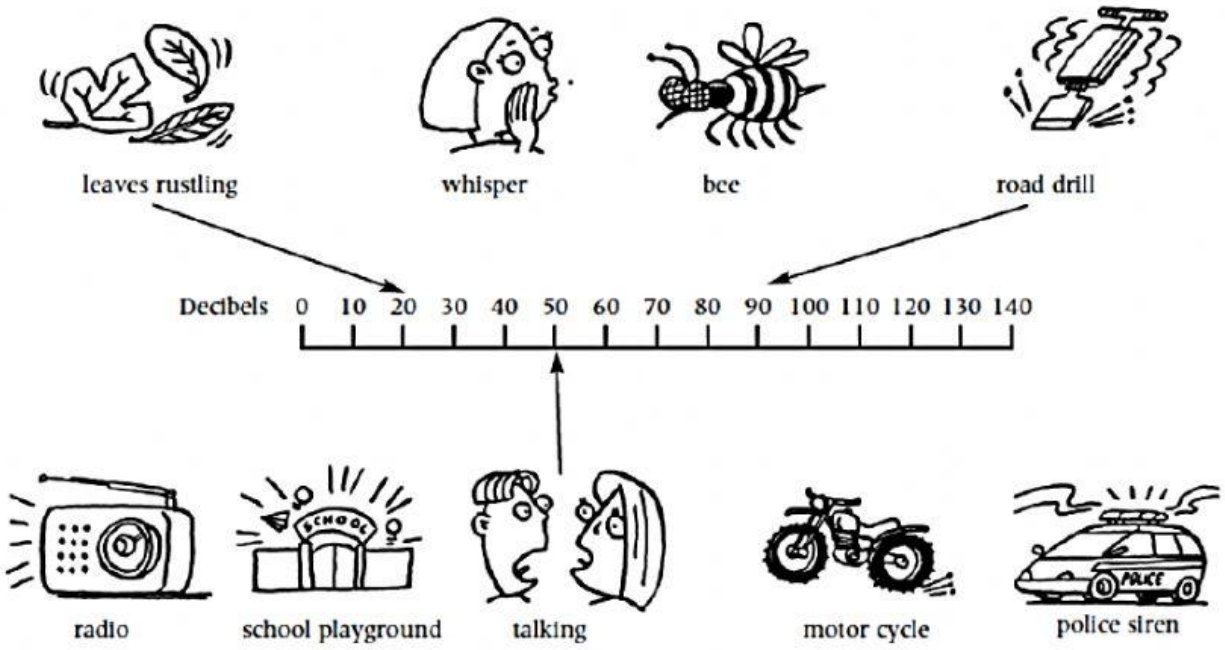
3. Soft materials absorb sound. Which of the ear protectors above have soft materials in them?

and

LIVEWORKSHEETS

NOISE

The loudness of a sound is measured in **decibels (dB)**. A sound which is 0 dB is so quiet that we can only just hear it.



1. Look at the pictures above showing different sounds. In the box below each picture, write ONE possible value from the decibel scale above that would represent the loudness of the sound in the picture. **Just write the number in the space** provided.

2 Fill in the gaps in these sentences using words from the box below or information from the pictures above.

The units for measuring the loudness of a sound are _____. We cannot hear any sounds quieter than _____ dB.

When leaves rustle, they have a loudness of _____ dB. People usually talk with a loudness of _____ dB.

Loud noises can _____ our ears and make us deaf. A very loud noise can break the _____ . The cochlea can also be damaged by _____ noise.

There are laws to protect people who work in noisy _____. The loudest sound allowed is 90 dB. This is the same loudness as a _____ _____. _____ _____ and explosions are louder than this.

damage	decibels	eardrum	factories	loud
police sirens	road drill			

LIVEWORKSHEETS