

NOISE

One of the frequent issues raised when discussing life in a modern large city is noise. In this task, you will study what words you can use when talking about this problem.

Task 1

You will create a collocation profile of the word *noise* as used in texts in an automotive industry corpus. Study the sentences below, underline the collocates of *noise* and then copy them to the table below. Note that one sentence can contain more than one interesting collocation.

<i>(noun/adj.) + noun + noise</i>	<i>noise + noun</i>	<i>adjective + noise</i>	<i>verb + noise</i>	<i>noise + verb</i>

1. A substantial noise reduction requires a fundamental redesign of the vehicles (engines, gas flow and mechanics, tires), pavements, as well as reducing traffic speed, isolating noise sources and moving them away from recipients.
2. All vehicles produce noise from their gear boxes and exhaust systems.
3. As a result, the surface absorbs noise and drains water – thus less water spray is observed by road users and overall noise is reduced.
4. Besides engine noise, the noise from tyres also increases with the speed of the vehicle.
5. Combustion noise refers to noise generated by the vibrating surfaces of the engine structure, engine components and engine accessories after excitation by combustion forces.
6. Copenhageners should be able to sleep peacefully, free from noise harmful to health from street traffic.
7. Efforts to reduce environmental noise tend to be offset by an increase in the number of people being exposed to high noise levels, in particular due to increasing road and aviation traffic, and an increase in the number of city inhabitants.
8. Engine load is an important parameter that affects the combustion noise, as combustion noise increases proportionally with engine load.
9. Engine noise is created during the process of compression and expansion in the engine, which creates engine vibrations which then emit noise.
10. Environmental noise, also known as noise pollution, is a major environmental health concern in Europe.

11. First is ambient noise , which refers to sound pressure of all-encompassing noise associated with a given environment.
12. For example, community noise , including traffic noise, is already recognized as a serious public health problem by the World Health Organization.
13. It required police officers to measure exhaust noise with a decibel meter using the dB(a) standard, which does not measure low frequency noise .
14. Long-term exposure to environmental noise contributes to 48 000 new cases of heart disease and 12 000 premature deaths every year in Europe.
15. Noise has different types according to the intensity, duration and frequency as continuous noise, intermittent noise, impulsive noise and low frequency noise .
16. Since fences are noise barriers , installing them may be a suitable measure in order to accomplish a quieter living space.
17. Since there is so much fluctuation in the level of road traffic noise , these noise levels are often expressed by the L10 (18 hours) index.
18. The motors of all motor vehicles shall be fitted with properly attached mufflers of such capacity or construction as to quiet the maximum possible exhaust noise as completely as is done in modern gas engine passenger motor vehicles.
19. The noise emissions of road construction machines should be factored in as part of the environmental impact assessment of the road construction.
20. The noise emanating from the vibration of the car increases the damage that is caused by the droning engines and the honking horns.
21. The total noise emanating from a given traffic combines noise coming from different components.
22. The total noise generated by vehicles may be correlated directly to the truck traffic volume.
23. These findings underscore the urgent need to reduce both air pollution and noise exposure at school locations, especially in schools attended by higher proportions of socially disadvantaged children that are often additionally burdened with other challenges.
24. This systematic review provides a comprehensive synthesis of recent epidemiological evidence that environmental noise negatively impacts human cognition.
25. Traffic noise disturbs also the quality of sleep and, in some people at least, may lead to insomnia.

Task 2

Complete the gaps with the collocations from the previous task. The first letters have been provided.

1. R_____ t_____ noise could also be r_____ to more desirable levels by better control over the flow and volume of traffic.
2. C_____ noise refers to noise g_____ by the vibrating surfaces of the engine structure, engine components and engine accessories after excitation by combustion forces.
3. As a result, e_____ noise generated in an exhaust system of an engine is reduced.
4. E_____ noise can be defined as unwanted or harmful outdoor sound.
5. L_____ f_____ noise is common with background noise in urban environments and comes from road vehicles, aircraft, industrial machinery, artillery and mining explosions, wind turbines, compressors and ventilation or air conditioning systems.
6. C_____ noise comprised of the noise during a match in the ground, traffic vehicle noise during waste collection, children playing in the streets, dogs barking, and noise during parties.

7. Noise r_____, as well as exhaust emission reduction, is one of the fundamental trends toward cleaner, safer and more user-friendly transport in Europe.
8. Noise e_____ refers to the noise e_____ by the source – in essence the sound power of the source.
9. These findings underscore the urgent need to reduce both air pollution and noise e_____ at school locations, especially in schools attended by higher proportions of socially disadvantaged children that are often additionally burdened with other challenges.
10. They can build noise b_____ in high traffic areas, reducing their effect on the surrounding area.
11. According to the WHO, noise is h_____ when it exceeds 75 decibels (dB) and feels painful at levels above 120 dB.
12. A muffler is designed to a_____ the extremely harsh noise from an internal-combustion engine.
13. The European Commission proposed a policy target of reducing the share of people chronically d_____ by transport noise by 30% by 2030 in the Zero Pollution Action Plan.
14. Road traffic noise clearly c_____ to the greatest level of exposure within the European population, with at least 125 million people being exposed to levels above the END threshold of 55 dB Lden.
15. The noise e_____ from the vibration of the car increases the damage that is caused by the droning engines and the honking horns.

Task 3

Compare the collocational profile you created based on an automotive industry corpus to the collocation profile based on a corpus of general English. Follow the instructions below. Can you see any differences between the two profiles? How can you explain them?

- Go to the following address: SKELL <https://skell.sketchengine.eu/>.
- Type 'noise' in the search box and press 'Enter'.
- Select the 'Word sketch' tab under the search box at the top of the screen.
- Study the collocates.
- Click on selected collocates and study their examples in sentences.