

1. Complete each gap with one word / number that you will hear.

1. One person produces this amount of trash pounds/day
2. Where a portion of the trash is taken to
3. Percentage of CH ₄ that the gas comprises %
4. Besides dewatering and pressurizing, the gas is
5. The pressure is so high that the gas can be used as
6. In after-cooler, any remaining moisture is
7. How many times the gas undergoes filtration
8. How much time the whole process takes
9. Engine that runs on this gas is similar to engine
10. The gas going through the engine is

2. Use the words below to complete the text. You will not need two of them.

dispose ranges hygiene identified unstable abundant removal abandoned caches

We often find, especially in academic labs, 1 _____ of old chemicals that have been stashed in a corner or closet and forgotten. Perhaps a researcher left or moved on to another project and did not 2 _____ of the chemicals; therefore, these 3 _____ chemicals have fallen off the map. Any number of bad things can happen, such as picric acid coming in contact with metal shelving and forming metal picrate, a highly 4 _____ explosive. These lost chemicals need to be located, 5 _____, and removed. This is certainly something that chemical 6 _____ officers should be on the lookout for and discuss with staff, and perhaps they can even organize "amnesty days" to encourage the discovery and 7 _____ of these waste chemicals.

3. Write questions in which you ask about the underlined parts of the sentences.

1. Addition of another oxygen atom to an aldehyde yields an acid.
2. Goggles must be worn at all times in the laboratory.
3. Session topics will be announced by the conference chair in due course.

4. Choose the right connector.

1. Research is underway to develop a vaccine for the toxin., testing is underway for a new drug to treat individuals following exposure. A *However* B *Nevertheless* C *Also* D *Therefore*
2. save money, many laboratories purchase chemicals in bulk.
A Due to B So that C Because to D In order to

5. Use the word given in brackets in capital letters to form a word that fits in the gap. Do not use -ing or -ed forms.

1. Do you know when the deadline for sending the is? (APPLY)
2. Intense heat would cause a quick of the tungsten filament. (DETERIORATE)

3. In the process of , two or more reactants combine to form one product. (SYNTHETIC)
4. Many of crude oil compounds are separated out in oil (REFINE)
5. Classification according to groups includes, for example, halogen derivatives. (FUNCTION)
6. Chemicals with short shelf life can form peroxides and become unstable. (CONSEQUENCE)
7. Acute toxicity is the effect after a short but relatively large (EXPOSE)
8. substances are known to cause cancer. (CARCINOGEN)

6. Write a new sentence so that it has a similar meaning to the original sentence, using the given words.

1. Transition from structure to disorder allows some reactions to start.
Transition from structure to disorder lets (3 words)
1. Heating one end of a wooden stick doesn't cause the heat conduction to the other end.
If you heated one end of a wooden stick, the heat to the other end. (4 words)
3. Tough materials do not break easily.
It is tough materials. (3 words)
4. Carbon aids the transportation of pollutants because it binds with toxic metals.
Carbon aids the transportation of pollutants with toxic metals. (1 word)

7. In the text below find three words that match the meaning of the three explanations below.

When foreign material like bacteria or viruses is introduced into the body, the immune system acts to protect the body against the material. Vaccination makes this process happen, so the body is more ready to act if the same material is met again. After vaccination, antigen-presenting cells (APC) take in the virus and then start the immune response by presenting antigens on their surface. Immature T cells bind to the antigen and recognise that this is foreign material.

1. unnatural, not familiar
2. reaction
3. identify or know

8. Translate into English

Odevzdat abstract	Digestoř
Přechodné kovy	Vhodný oděv
Mezimolekulární přitažlivost	Forensní toxikolog
Elektricky nabitý	Hlavní přínos

KEY

1. <https://www.youtube.com/watch?v=w1RKMMpRRHY> Landfill Gas to Energy (LFGTE) How It's Done
1) 4.5 2) landfill 3) 50% 4) filtered 5) fuel 6) condensed 7) twice 8) seconds 9) car 10) combusted
2. 1 caches, 2 dispose, 3 abandoned, 4 unstable, 5 identified, 6 hygiene, 7 removal
3. What does additionyield?, Where must goggles be worn at all times?, When will session topics be announced?
4. Also, In order to
5. application, deterioration, synthesis, refineries, functional, consequently, exposure, carcinogenic
6. some reactions start, would not be conducted, hard to break, by binding
7. foreign, response, recognise
8. submit an abstract, transition metals, intermolecular attraction, electrically charged, fume hood, appropriate clothing, forensic toxicologist, major benefit