

# TECHNICAL ENGLISH FOR CHEMICAL ENGINEERS [1-8]

## References:

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a) Write the topic sentence of the following paragraph

**Besides using polymer in concrete, builders can also add them to other ordinary materials.**

b) What is the following paragraph about?

**The addition of polymers to materials other than concrete**

“Besides using polymer in concrete, builders can also add them to other ordinary materials. The addition of polymers results in much stronger and more durable materials. For instance, with the addition of polymers, paper becomes much tougher and stronger. In fact, it can even replace the wood inside buildings; in this way, builders can use doors, window-frames, wall coverings, etc., made of polymer paper instead of wood.

“[1]

**Read the following paragraph carefully, then write two advantages and two disadvantages of nuclear power.**

**Advantages: 1. The technology exists. 2. Small amounts of fuel needed for enormous amounts of energy.**

**Disadvantages: 1. Pollution 2. The danger of an accidental explosion**

“Nuclear power has often been presented as the only means of ‘saving’ our standard of living when the fossil fuels like oil, coal and gas run out. It is attractive in that we have already developed the technology to exploit the energy stored in the atom. In addition, small amounts of fuel release enormous amounts of energy. However the problems of nuclear power have become increasingly clear in the last decade. These range from the threat of pollution to the danger of an accidental explosion and these make nuclear power a less desirable solution to the energy crisis. Furthermore, to completely replace fossil fuels by nuclear power would require the construction of about fifty times the present number of nuclear power stations by the end of the century, which is beyond our resources.”[1]

**Complete the paragraph with the words in the list. Use each word only once.**

**( durable useful properties require certain materials special constructions resist able )**

“Because of their special properties, polymer materials are very useful in certain constructions. For example, roads, bridges, and tunnels require very strong, durable materials because such constructions must be able to resist heat, cold, and water.”[1]

Complete the paragraph with the words in the list. Use each word only once.

**( take variety provides benefits careers team excel willing compensation like)**

The career of engineering is one that provides many benefits to the ones who are willing to work for the degree. This field has a variety of areas to excel in. It provides creative work, the chance to work with a team, and the compensation is far from the average. Engineering is also one of the most important careers in our society. Without it, our civilization would be nothing like it is today; and the pleasures that many of us take for granted would not be here to comfort us.

**Complete the sentences with the words in the list. Use each word only once.**

**(provided quality concise checked measure obvious instrument benefited determine expect)**

1. Environmental pollutants have had dramatic effects on water quality of rivers and streams, although the effects are not always obvious.
2. The experiment was an effective way to learn about pH, how to measure pH with a digital instrument and how to determine correlation from a set of data.
3. The hypothesis should be a concise statement predicting what you expect to find in the experiment.
4. This seminar report has been benefited from the many useful comments provided to me by the numerous of my colleagues. In addition many other of my friends have checked it and have offered many suggestions and comments.

**Give the same information of the last sentence of the following paragraph in other words?**

In other words, you need to have certain forms of energy in order to run machines; for example, electrical energy or heat energy. As a result, we change these forms into mechanical energy.

“We are able to change energy from one form to another for three main purposes – to provide heat, light, and power for machines. For instance, we can burn wood and the fossil fuels and in this way change their chemical energy into heat energy. We can also change this heat energy into electrical energy (i.e., electricity). We can use different forms of energy, such as electrical energy and heat energy, to run machines and thus obtain mechanical energy. “[1]

Rewrite the sentences below with the correct word order to make the phrases

dissolved of in of were 250 Ten ml NaCl g water

Ten g of NaCl were dissolved in 250 ml of water

oxygen. The the to be in of limiting seems factor availability freshwater

The limiting factor in freshwater seems to be the availability of oxygen.

**Rewrite the sentences below with the correct word order to make the phrases**

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**Speak slowly so that everyone can understand what you are saying.**

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**Let's look at this more closely**

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**The subject can be looked at under five main headings.**

**Complete the sentences with the words in the list. Use each word only once.**

( depends conveyed exclamation plan quote completion emphasis source extending gratitude )

1. Use the pause. Silence is an excellent **exclamation** point. By slightly **extending** a pause, you can add **emphasis** to a key point in your presentation. All presenters pause naturally, but the best presenters **plan** their pauses for maximum impact!
2. Never directly copy or **quote** sentences from your sources. Ideas should be **conveyed** in your own words, and the **source** of this information should be cited and referenced.
3. I express my sincere **gratitude** to him for his constant support and valuable suggestions without which the successful **completion** of this seminar would not have been possible.
4. The number of slides **depends** upon the time that you take in giving seminar, so have one slide for each minute of that time.