

Suggested Answers

Task 1

Personal Writing	Academic Writing
Tells a story	Comments, evaluates, analyses
Non-technical vocabulary	Subject-specific vocabulary
'I' at the centre	'I' as observer and commentator
Information comes from the writers experience	Information comes from sources and refers to what others say
Personal views and feelings	Evidence and arguments
Free form of writing	Conventions for citation

Task 2

A survey designed at the University of Wales Institute of Science and Technology (UWIST) offered two different ways of writing up the same information. The two authors were given neutral names, "Smith" and "Brown". Read them through, without pausing too much, and then reflect for a moment on your own impressions of the quality of each writer as a scientist, before reading what other scientists thought of them.

You will not be surprised that 69×3% of the scientists who answered the questionnaire 'preferred' Smith's version. In all, 1380 scientists gave their views. Not only did they prefer the easier passage, but also they found it 'more stimulating' and 'more interesting'. But the main interest of the research was to see if fellow scientists would make a judgement about the competence of the writers, and if so what it would be. In answer to the question, 'Does one author seem to have a better organized mind?', three-quarters said, 'Yes, Smith'.

These results are important for anyone who has to write to communicate information. If the writing is clear and simple, fellow scientists will not only find your writing pleasanter to read, but they will also think you are a better scientist, have a better organized mind, and are more competent. Readers seem less and less prepared to accept the traditional smokescreen. If they can understand easily, they are more likely to be impressed with the quality of the thought behind the words.

A majority of the scientists who answered the questionnaire perceived Smith's version as more impressive, more credible, and more worthy of esteem than the Brown version. These readers saw differences in personality between the writers, such as helpfulness, dynamism, and quality of mind. By looking carefully

at the passages, we can distinguish between what is perceived and what the linguistic facts are. It is worth looking back at the two passages to see just what the difference between them is.

In both passages the information content, and the order in which it is presented, is exactly the same. The use of technical terms is similar too – both passages use five undefined technical words (adrenal, androgen, corticosterone, glucocorticoids and hormone). The difference is more in the handling of ordinary language than in the technical language. Smith's version is more readable because it is written in short sentences with direct, active constructions. It avoids unfamiliar words, and inflated roundabout phrases. Brown's version is difficult to read, with long sentences, convoluted constructions and long words like 'adrenalectomized'. It is all in a single paragraph.

It was these differences in style, not the technical content and organization, which made readers feel that Smith was a more impressive scientist. We think most writers would prefer to read, and probably to write, in a simple, direct style, but they are afraid that such a simple style would make their work less impressive. Often the wish to make a good impression is in the forefront of a writer's mind, before even the wish to communicate information.

Source: Support for Science Students' Writing for Scientists - a brief guide by Ian Saunders (Physics), October 2000.
<http://www.jimrs.ac.uk/cell/site/materials/sciencestudents-writing.html>

Task 3a

1. Pollution is a significant (big) problem in Hong Kong.
2. Living conditions in some housing developments are unacceptable (horrible).
3. The influence of computer games on young people is a controversial (hot) topic.
4. Mark's performance in the examination was disappointing (bad).
5. She received a sizeable (big) sum of money from the insurance company.
6. Chan's (2001) method of investigation is questionable (wrong).
7. The company's awardable (cheap) products have proved to be very popular.
8. A number of senior (old) members of staff have left in recent years.
9. Professor Yan's new book is very stimulating (good).
10. This is a minor (small) detail, which I think we can discuss another time.

Task 3b

1. Plans are being made to develop (come up with) a database containing untitled environmental information for the region.
2. Proposals to construct new nuclear reactors have encountered (met with) great resistance from environmentalists.
3. Subtle changes in the earth's crust were elevated (jacked up) by these new instruments.
4. The process should be repeated (done over) until the desired results are achieved.
5. The temperature decreased (went down) quickly from 97.5°C to 26.3°C in 5 minutes.
6. All these conspire (moke up) destabilizing factors.
7. This experiment was conducted (carried out) to measure the global temperature change over the past decade.
8. We propose (put forward) this theory to explain the current phenomenon.
9. The experiment included (was made up of) 3 parts, namely A, B and C.
10. In Section Four, we will discuss (go into) the causes of the experiment results.

11. Therefore, we can conclude (draw a conclusion) that Quantum Physics is the most successful theory for answering these questions.
12. Scientists are investigating (conducting an investigation) into the cause of the accident.

Task 4a

1. According to our study, there is probably no relationship between gender and life satisfaction.
2. In spite of its shortcomings, the study is still a respectable pioneering effort.
3. As a result of obtaining the assistance of the Department of Census and Statistics, we were able to use an up-to-date sampling frame from which to select our sample.
4. In contrast to the economic downturns of many Asian countries, China's economy has recorded phenomenal growth for at least three consecutive years.
5. With great care and attention to details, our project proceeded relatively smoothly.

Task 4b

1. Taking all these reasons into consideration, I believed we had to proceed as planned.
2. Being a prejudiced person, he refuses to listen to opinions different from his.
3. Not discouraged by unfamiliarity with a strange culture, she tried her best to adapt herself to her new surroundings.
4. Having seen the similarities between sociology and anthropology in Section One, we will next examine their differences in Section Two.
5. Not having been told of the duration of the study, I was unable to decide if I could accept it.

(Adapted from *Effective Writing* by Pedro Pak-iao Ng, 2003, pp. 285-8)

Task 5 <http://www.writing.engr.psu.edu/handbook/exercises/exercise1.htm>

Key to Exercise on Style in Scientific Writing

This exercise requires that you identify the main stylistic problem in each excerpt. Given in Table 1 is a list of common stylistic errors that the excerpt may contain. Given in parentheses are page numbers in *The Craft of Scientific Writing* explaining each problem.

Table 1. List of Common Stylistic Errors

Non-parallel headings (37-40)	Needlessly complex words (84-85)
Weak transition into section (53)	Needlessly complex noun phrase (85-86)
Ambiguity from missing punctuation (94-96)	Needlessly complex sentence (86-90)
Ambiguity from pronoun (93-94)	Run-on sentence (259-260)
Ambiguity from word order (92-93)	Verb tense error (261)
Lack of sentence variety (129-137)	Subject-verb disagreement (260)
Tone problem (97-101)	Usage error (268-272)

1: *Ambiguity from missing punctuation* (see page 96)

Possible revision: Discharges of these hazardous substances occur through the following: (1) spills when loading vehicles, (2) spills and over-spills when filling the tanks, (3) leaks from supply pipes, and (4) pipe joints, rust holes, and cracks in the seams of the tanks themselves.

2: *Lack of sentence variety* (see page 129)

The design of the circuit is shown in Appendix A. The first schematic of the Appendix shows the interface of the EEPROM with the HCl1. The decoder and the bit latch were also needed for this circuit. The decoder made sure that the EEPROM responded to address locations \$6000 to \$7FFF. The latch stored the address lines for the EEPROM when Port C on the EYBU switched from output address lines to input data lines. These integrated chips worked together to give the HCl1 the expanded memory. (*All the sentences begin with the subject followed by the verb.*)

3: *Needlessly complex noun phrase* (see pages 85-86)

Possible revision (note that you would have to read the report to come up with this revision): Damping Values Necessary for Limiting Oscillations of a Boxcar Stopping System

4: *Weak transition into section* (see page 56)

Possible revision:
Standalone Operation. Operation of the HCl1 microprocessor in the standalone mode involved both hardware and software.

5: *Needlessly complex words* (see pages 84-85)

Possible revision: This study will consider why current solar energy systems, such as Solar One, have not reached the commercial stage and will find out what steps

we can take to make these systems commercial.

6: *Tone problem (see pages 100-101)*

Tonal problems indicated by boldface: It has come to my attention that your sport utility vehicles are not as technologically advanced as they could be! Microprocessors are more than just a booming technological buzzword; they are something that can be seamlessly implemented into existing vehicles and will add countless dimensions to their capabilities... These are of course tiny examples in a grander scheme of things that can be accomplished with microprocessors. There are much more useful and innovative things that could be done to improve both the mechanical and ergonomic aspects, which would put you light-years ahead of your closest competitors, all the while fattening your pockets... I enthusiastically look forward to meeting with you!

7: *Needlessly complex sentence (see pages 86-87)*

Possible revision: Enormous mining companies are both continuing operations at old gold mines and proposing the opening of new gold mines. An example of a mine continuing its operations is the Homestake Mine in Lead, South Dakota. This mine has operated continuously since 1877 and is increasing its operations [Hinds and Trautman, 1983]. An example of a proposed new gold mine is the New World Mine, whose proposed location is about 2.5 miles from the border of Yellowstone National Park, near Cooke City, Montana. Like other proposed gold mines, the New World Mine has been postponed because it is in an environmentally sensitive region.

8: *Ambiguity from word order (see pages 92-93)*

Possible revision: Most people with phenylketonuria are diagnosed at birth.

9: *Ambiguity from pronoun (see page 93)*

Possible revision: Since the invention of the catalytic converter, one problem that has baffled people involved with emission control is the converter's lack of effectiveness in oxidizing CO and HC until the engine is warm.

10: *Lack of sentence variety (see page 129)*

Procedures for Design: The procedures for this part of the laboratory began with the ASM command. This command was used to disassemble code. This disassembly began at the specified memory address. This command was useful in examining the code predefined by the Buffalo Disassembler. The "ASM"

command was used at the start of address \$E000. It listed the first three instructions at location \$E000. Table 1 shows both the machine code and the disassembled code for these instructions. (All the sentences begin with the subject followed by the verb.)

11: *Ambiguity from missing punctuation (see page 96)*

Possible revision: To provide spill protection, all tanks were to include catchment basins and one of the following: automatic shutoff devices, overflow alarms, or built float valves.

12: *Non-parallel headings (see page 39)*

Possible revision:
Introduction
History of Computer Viruses

Where Do Viruses Originate?

What Damage Have Viruses Caused?

Ways to Combat Computer Viruses

Physical Barriers

Antiviral Barriers

Conclusions

Summary

Recommendations

13: *Tone problem (see pages 100-101)*

Tonal problems indicated by boldface: Each time we wired the hex display, we placed it in a different location on the bread board. Unfortunately, each time the hex display would show a different reading. The third time proved to be the charm as the hex display read all of the numbers correctly.

14: *Weak transition into section (see page 56)*

Possible revision:
Interfacing the Matrix Keyboard. This section of the laboratory assignment called for a 4x4 matrix keypad and TTL-311 hex display to be added to the hardware wired in the previous section.

15: *Needlessly complex noun phrase (see pages 85-86)*

This title is difficult to revise just having the title. You would have to examine the report and consider the audience.