

FUKIEN SECONDARY SCHOOL
S4 Final Examination (2020-2021)
English Language Paper 1
Reading

Reading Passages

Date: 18th June 2021

Name: _____

Time: 8:30a.m. - 10:00a.m.

Class: S4 _____ No.: _____

INSTRUCTIONS

1. Write all your answers in the Question-Answer Book.
2. DO NOT write any answers in the booklet because they will not be marked.

PART AText 1

Read Text 1 and answer questions 1-16 in the Question-Answer Book.

Bill Gates: from software to toilets

'His foundation has spent \$200m since 2011 funding reinvented toilets that kill germs and extinguish smells on the spot'

[1] Whenever Bill Gates visits a slum, an unasked question goes around his mind. 'Do you mention to each other that it doesn't smell good, and I wouldn't like to live here, or is that just inappropriate?' he told me in a phone interview. 'We take for granted that we have a toilet right inside our household.'

5 [2] In fact, it's a luxury. Only 27 per cent of the world's population has a home toilet that sends waste to sewers, then on to a treatment plant, estimates the World Health Organization. Three people in 10 have neither toilets nor latrines. They pay a daily price in disease and lost dignity. 'Sanitation-related diseases, including diarrhoea, cholera and typhoid, kill nearly 500 000 children aged under five, each year,' says the Gates Foundation.

[3] Gates speaks about toilets rapidly, obsessively and with a slight squawk. He can discourse on 'shit-flow diagrams' and has drunk 'poop water': excrement converted to drinkable water by new 'omniprocessors'. He shrugs: 10 'People acted like that was some surprising thing. The input into an omniprocessor is not attractive to drink, but the output is.'

[4] And the developing world cannot accommodate traditional toilets. Fast-growing megacities in poor countries typically lack sewers and waste treatment plants, says Gates. 'The cost to go back in [and build them], just in one Indian city, would be many billions of dollars — so it will never happen.' Even where infrastructure exists, there's 15 often no money for electricity or maintenance. That leaves 892 million people worldwide defecating in places such as 'street gutters, behind bushes or into open bodies of water', reports the WHO.

[5] So Gates's foundation has spent \$200m since 2011 helping to fund research and development into revolutionary new models of toilets. Now they're here: off-grid loos that eliminate human waste, kill germs and extinguish smells on the spot, explains Gates. 'Most of them, I think, have a sort of ashbox that you end up 20 having to empty from time to time. The idea is to get these toilets into slums where there is no chance you would ever build a sanitation system.' The first versions on sale will be multi-unit public toilets. They could replace the filthy communal latrines common in Indian slums. If schools install these toilets, more girls might attend. (South African schoolchildren have drowned falling into latrines.)

[6] But Gates sees public reinvented toilets as an imperfect solution, especially for women and children: ‘Particularly at night, going out to those community toilets that might not smell good, where you might not feel safe, that’s a problem.’ He hopes that in the next few years, companies will be selling ‘the ultimate, which is the household reinvented toilet. It has to be cheap and can’t require much in the way of maintenance.’

[7] Gates’s foundation is not making the toilets. Chinese companies may become the first mass producers, selling mostly in Africa and India. The global market could be worth \$6bn in annual revenues, estimated the Boston Consulting Group in 2016. The problem is affordability. Gates hopes that within four years, the household reinvented toilet will cost five cents per user per day. He says: ‘People value having a good toilet. You could have pay-as-you-go solutions to help with the capital cost, as has been done for solar in Africa.’

[8] However, Steve Sugden of the non-profit Water for People cautions that many poor families cannot afford several hundred dollars up front for a home toilet. Often, says Sugden, the women of a household think it’s worth it but the men, who control the household budget, don’t. Gates admits that household reinvented toilets might initially be bought by the richer citizens of the poor world — the Indian middle classes, for instance, or rural Chinese: ‘Even in China there are quite a few places that the government is saying that the way toilets work right now is completely inadequate.’

Text 2

Read Text 2 and answer questions 17-24 in the Question-Answer Book.

Happy World Toilet Day!

posted 18 Nov 13:43

[1] Tomorrow is World Toilet Day (WTD) – a most unglam holiday. Centring on a taboo subject that is much underappreciated, it was adopted by the United Nations in 2013 in recognition of the 2.4 billion people living without a toilet at the time.

5 [2] Though the modern flush toilet was developed in 1596, it didn't begin to catch on until the start of the Industrial Revolution almost two centuries later, and has spread slowly ever since – in 2018, 4.5 billion people were still without access to safely managed sanitation.

[3] The implications for public health are of serious concern as sanitary toilets that are properly connected to sewers or septic systems prevent the spread of fecal-borne diseases, such as cholera and dysentery (spread by flies, human hands and the poop-tainted water consumed by 2 billion people worldwide).

10 [4] Universal access to safe sanitation – waste management systems that effectively contain, transport, treat and dispose of human waste – is of the utmost urgency, especially in our rapidly urbanised world. Meanwhile, public education on applying personal hygiene to optimise health and safety needs to be implemented. Access to adequate sanitation services is one of life's basics, and until we do, this important advocacy day will continue to bring awareness.

PART BText 3

Read Text 3 and answer questions 25-33 in the Question-Answer Book.

One small challenge, one giant step forward

[1] CarbonCut is delighted to announce the Carbon Challenge, six tasks running for half a year aiming to cut down greenhouse gas emissions.

[2] We are dedicated to providing a joyous and interactive platform for green lovers to meet and join hands in making the globe a more sustainable place to live. Over the next six months, we will introduce one task each month for everyone to challenge themselves to go that extra mile to do the right thing: Go Veggie, Local Produce Only, City Cycle, Cut Your Energy Bill and more. These are the initial steps which we hope will evolve into lifelong green living habits and scale up from individuals to communities.

[3] Simply register for an account with CarbonCut (remember to check the box for receiving updates and newsletters before submitting your online application), make a pledge and join the challenge under the theme of the month anytime. There is no specified time for engagement, though a seven-day timespan is the norm. After completing these steps, you will gain instant access to the Carbon Challenge community, where you can connect with fellow participants, exchange tips to help each other survive the challenge, and even win an energy monitor app. You can also tune in to our round-the-clock live updates featuring our bloggers of the month, who have been bold enough to accept our merciless Ultimate Challenge.

[4] To launch the event, we begin with a task with a most profitable return – cutting your electricity bill by 10% – a win-win situation for all. While our members should readily meet the target, our special guest and blogger of the month, Dr E. Morrison, who has to cut his in half, will have to draw sustenance from his urban survival skills.

[5] With Dr Morrison's brilliant track record, we have every confidence in him to outperform the rest of us. Having received a doctorate in Environmental Science, Dr Morrison lectured at several universities before becoming president of a green foundation. Currently, he is working on his book about green living, which is due to be published in the coming year. So stay tuned to find out how our hero fares.

[6] For the time being, do not forget to make a pledge and join in the action. Remember to tell us how you are getting on with it. We would love to hear about your ups and downs along the way and are more than happy to offer advice. Also, we would be immensely grateful if you could give us a push on social networking sites to boost this Carbon Challenge of ours.

Text 4

Read Text 4 and answer questions 34-43 in the Question-Answer Book.

E. Morrison

6 July 10.07 am **A cool (looking) gizmo?**

[1] Okay. I confess – I brought in outside aid to keep my consuming desire to maintain my winning record in the green game in check. I dug out the gizmo to record my family’s normal energy consumption.

[2] To conclude the control week, I connected the gizmo to my notebook, which plotted me a graph like that of the fluctuating stock market index. I had spent \$24.82 for the week, which meant my target for the challenge was to keep
5 the consumption within \$12.41 until the challenge’s end. For the benefit (and clarity) of my concerned green comrades, let me just mention that my household had generated 94 kg of carbon.

[3] So much for the statistics. I settled the designer gizmo by a north-facing window, to ensure it could capture the maximum possible sunlight. Only the size of a smartphone, it recharges in no time and has a battery life of 48 hours.

[4] Over his morning cereal, my tech-savvy son grabbed the opportunity to investigate it.

10 [5] ‘So it’s going to save us some bucks? How?’

[6] ‘By alerting us. See, it’s a whopping \$2 364 now.’

[7] ‘So we’re wasting \$ 2 364?’

[8] ‘That’s just a projection – if we keep the coffee machine, the toaster, the air-conditioner, etc., on all the time, we will have to pay this amount at the end of the year.’

15 [9] ‘It’s part of the bill, isn’t it? It’s plugged in.’

[10] ‘It’s also solar-powered, though it can’t be totally self-sufficient.’

6 July 2.29 pm **Shall I shut down?**

[11] I decided there should be no more delay of my bookkeeping work. I turned on the household appliances and jotted down the energy consumption rate as shown by the gizmo. I did a full load of laundry but this couldn’t

alleviate my guilt when the neon red display flickered and stopped at \$6 882. When the neon red display flickered and stopped at \$6 882, I felt as though my flat had been struck by lightning and the overloading current was flowing through my limbs. The rumbling spin of the washing machine pulled me out of my trance – those white goods are always at the top of the energy-wasting list.

[12] Cutting down on consumption doesn't have to mean stopping my household (and myself) from functioning or from maintaining a certain degree of material comfort, right? My washing machine's got an energy star label and alternatively, hand-washing my laundry might actually consume more water and man-hours. But of course, I have decided to switch from baking to cooking, and from tumble-drying to hang-drying from now on.

COMMENT

Louisa Tam

6 July 3.09 pm

[13] *If energy consumed equals energy wasted, human beings deserve to disappear completely from planet earth, as we are the species eating up the most resources. Like you, I'm also trying to find an equilibrium between environmental impact and efficiency.*

6 July 6.43 pm

Headache

30 [14] It was only when my son returned home that I realised what a mistake I had made. I paced restlessly, watching the digits flash on the sleek screen one second, putting my ear to his door the next.

[15] I shouted outside his bedroom, 'I'm sure you'll give me a leg-up in this challenge, right?' Silence. 'You know I'm going to write about you in my live blog?' Silence until he turned the volume of his hi-fi up. I bet he had been recharging his phone and checking his status updates with it, and at the same time watching the NBA play-off replay on his desktop. Gusts of cool air rushed onto my feet from underneath his door.

[16] So now I'm giving him a public shaming here. Am I being mean? I didn't expect to take this challenge on behalf of my family, who didn't pledge to do it with me.

COMMENT

earthsong

6 July 8:01 pm

[17] *He should be able to enjoy himself with just one device. Certainly he needs some public pressure.*

END OF READING PASSAGES