### **Pearson Edexcel International GCSE**

# **Wednesday 8 January 2020**

Morning (Time: 2 hours)

Paper Reference **4ES1/01** 

## **English as a Second Language**

**Paper 1: Reading and Writing** 

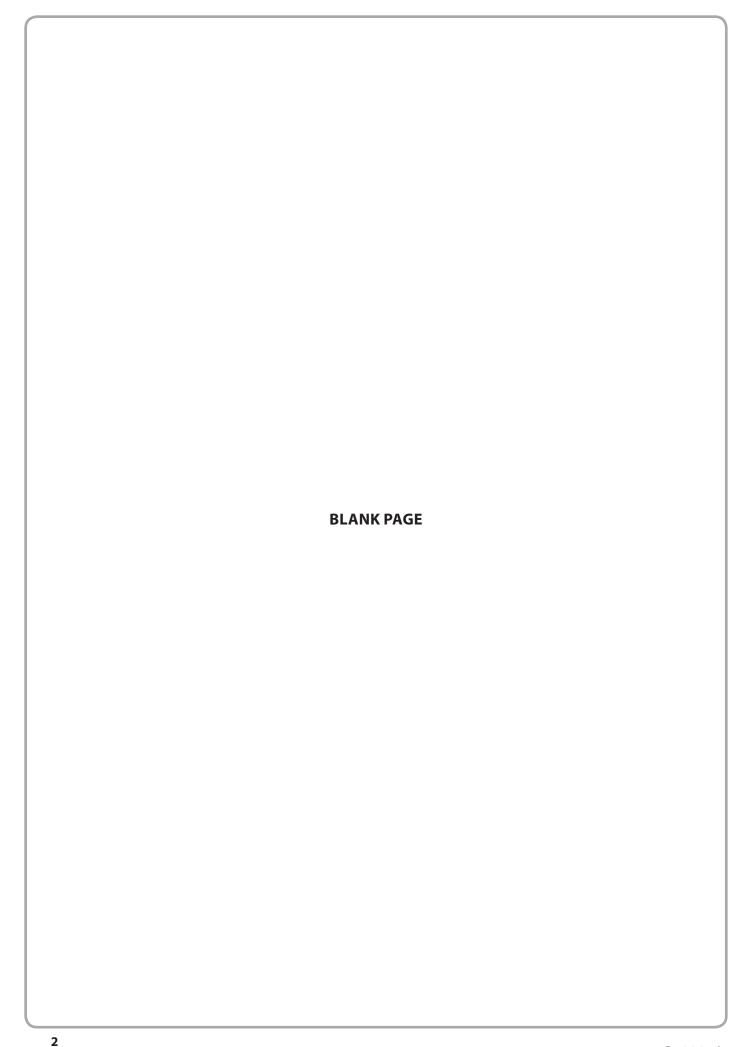
**Insert Booklet** 

For Part 1, Part 2, Part 3 and Part 6

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#### Part 1

#### To The Top: The Story Of Everest

- A It was five o'clock in the afternoon when the howling wind began to quieten down and we made our decision: tonight we would leave for the summit. After weeks of hard work we had reached our top camp on Everest.
- **B** Ed Webster and I were squeezed into a tent no bigger than a single bed, with only just enough room to sit up. Robert Anderson had just walked over from the second tent, but our fourth companion had left us that morning returning down the mountain because of a worrying headache.
- **C** It had been a brave decision to give up his chance at the summit, but he knew that high-altitude sickness can be dangerous if you stay up high too long. At the top of Everest there is no opportunity of a rescue, so he had returned to the safety of the valley to recover.
- **D** That left three of us preparing for the great day ahead. First we had to eat and drink. At that height everything is frozen so Ed dropped chunks of snow into a pan on our gas stove to make water.
- E After about an hour the water was boiling, but at nowhere near the usual temperature: at this altitude Ed could stick his finger in the water without pain. Cooking was out of the question, so he just stirred some instant noodles into the warmish liquid our last proper meal for many hours.
- F The most important thing of all at altitude is to have enough to drink, so we melted more snow, lump by lump, eventually filling two bottles, adding powdered energy drink to keep us going during the long day ahead.
- **G** We were leaving at night. The idea was to reach the summit by early afternoon the next day and return to camp by nightfall. However, if the worst came to the worst and we failed to return in time, I wanted to be confident that I could survive a night out in the open, so I took great care with my many layers of clothing.
- **H** At last, at 11pm we were ready. There was no moon, but the sky was brilliant with stars and there wasn't a breath of wind a perfect night for the job. Even at night we could make out enough landmarks to know roughly where to go.
- I Each of us had a torch strapped to his head and carried an ice axe, which is like a walking stick with a sharp steel pick at the top end. Joining the three of us was a short length of nylon rope. If someone slipped, the other two would hold him on the rope.
- J We started to move very slowly towards the summit, knowing the journey would take at least 12 hours. At first it was flat and we could manage 20 paces before we had to rest. But as the slope became steeper, we were forced to stop every 10 paces. I had never worked so hard in my life.

#### Part 2

#### Time to Declutter?

For a very long time, I thought that decluttering and zero waste were opposites. Didn't decluttering mean throwing items away, and zero waste mean throwing nothing away and keeping it all? I couldn't imagine that the two could work together yet decluttering has been an essential part of my five-year zero-waste journey.

When it comes to getting rid of unwanted items, the two most common options are discard or donate. Discarding really should be a last resort, saved only for those things that are damaged beyond repair, non-recyclable, and possibly dangerous. But what about donating?

Charity shops want goods that are clean, in working order and desirable. They need to be able to sell them. But charity shops aren't the solution for everything and, sadly, they don't have limitless storage. Donating our winter wardrobes in the height of summer will likely mean items in excellent condition remain unsold, simply because there isn't the demand. Offloading goods in the week after the New Year when the rest of the country is doing the same thing isn't to be encouraged, either. Not all charity shops can accept electrical items.

Before donating, I always call the charity shop and ask if there are things that it needs. There will always be things in high demand and things that aren't. Don't limit your donating to the charity shops. Schools, community groups, craft societies and animal sanctuaries all have needs and might be able to help take unwanted items. Online community sites are a great way to find new owners for unwanted goods, and a way to offer broken goods for parts and spares.

Decluttering is about removing the unnecessary, the unused and the unwanted from our homes. It's about removing the excess, and keeping only the things we find useful and beautiful. If our homes are filled with items we use regularly and appreciate, there is little or no waste. Yet decluttering will only reduce waste if it's treated as a one-way process. The purpose of decluttering is not to make room in the house for a shopping spree. Until people change their way of thinking, and needless things are no longer brought into the home, decluttering can never mean less waste.

Rather than keeping things to ourselves, we should embrace the opportunity to share what we have. Donating items we don't need gives somebody else the opportunity to use them and, most significantly, helps prevent new purchases. Owning stuff we don't need, don't use and don't like is a complete waste. As far as I'm concerned, there are two main reasons we keep things we don't need: 'just in case' or 'guilt'.

We tell ourselves we might need the item in the future. But if we haven't needed it so far, what are the chances? Could we get a replacement quickly, affordably and second-hand? In most cases, there is no need to keep something 'just in case'.

We might feel guilty. There are many reasons that we feel guilt: we made a poor choice, spent too much money, dislike the handmade gift that we know took so much effort and time. Keeping something out of guilt does not increase the chances that we will use it.

I have always found decluttering hard because I was forced to confront my poor decisions (impulse purchases, wasted money, clothes I never wore), and my failure to continue a hobby after I had started it. My biggest struggle has been to part with items I have kept in cupboards for years because they have sentimental value. I now think much more carefully about what I bring into my home and have convinced friends and family not to buy me unnecessary presents. The whole process has forced me to examine my life and formulate new and healthier habits; I now make better choices. With fewer possessions, my home is definitely tidier and I feel more positive.

I can appreciate well-made clothes or admire clever designs, but that doesn't mean that I need to make a purchase. If I don't need it, or can't see how I will get rid of it responsibly, then I don't buy it.

Part 3
Smart Hand Pumps



(Source: © francovolpato/123rf.com)

Around the world, millions of people live without basic and reliable water supplies. This is especially the case in some parts of Africa where people in rural communities depend on hand pumps for water. Figures suggest up to a third of those hand pumps are not in use owing to faults. Although these may be easily fixed, repairs are often delayed for weeks. In the meantime, less safe water sources are used by the local people.

A team of researchers at Oxford University has developed a transmitter that can be fitted to a hand pump. This generates data on pump usage and sends this information over the mobile phone network to a central server. This, in turn, provides an immediate alert to a maintenance team if the pump is not working and then generates a guaranteed repair service.

Prior to having smart pumps, non-monitored pumps took on average over a month to be fixed. Most smart pumps are repaired within two days. In those cases where a repair is not carried out within three days, a refund is given.

Only a small number of smart hand pumps are estimated to be out of action at any one time, compared with up to a third of non-monitored pumps across Africa. In addition, smart hand pumps have greatly reduced the time people, especially women and girls, have to spend collecting water from alternative sources.

The researchers' aim was to look at how community water services in rural Africa were currently managed and to improve this system. The main goal was to achieve reliable and regular access to water services. Communities would, quite rightly, be expected to pay a monthly maintenance charge to the company providing this service.

In the 12-month trial in Kenya, the researchers put their transmitters in 66 hand pumps providing water for up to 20,000 villagers. After the trial, those households that took part in this study were asked about their previous payments for pump maintenance and their

willingness to pay on a monthly basis for the new service. Where the hand pumps had broken and been repaired, there was a significant increase in the number of communities willing to pre-pay regularly for a continued maintenance service. I did not expect people to be so willing to pay, even though it makes complete sense.

The researchers have since created and introduced a financial model for a payment system covering regular maintenance and repair of the smart pumps. This could help to solve the problem of achieving universal and reliable water-service delivery. This would be particularly beneficial in the case of community-managed pumps, as prior to this many users were paying nothing towards the service.

The research team has also helped set up a local repair business for the hand pumps and introduced a system for villagers whereby a mobile phone can be used to make payments for the use of smart pumps. The operation of each smart pump is overseen by a local water-user committee. This committee is responsible for the payment of the maintenance service charge and for collecting the money from local people. A monthly payment is made that is based on how much water has been used.

The researchers continue to assess whether people are prepared to pay a fairer and more flexible payment for reliable water-service delivery. The Government of Kenya's Water Services Regulatory Board (WASREB) has already, thankfully, acknowledged the importance of the performance data from the smart pumps. It makes it possible for them to monitor how well the pumps are performing and to maintain them. At the same time, communities will become more responsible for their water supplies and the services they receive.

It also means that any future investments in smart pumps can be tracked against performance over time. In addition, high or low demand for a pump, and how a pump is used differently in the dry or wet seasons, can also be tracked. This is very beneficial in terms of assessing user behaviour and the value for money of investments.

The original 12-month pilot has since been expanded. More than 300 smart hand pumps are now operating across three counties in Kenya. These smart pumps continue to greatly improve the reliability of water supplies for many rural people. Another local repair business has also been set up. Although I can see the purpose of the research into smart pumps, a lot of work still has to be done to reach all those in need. The researchers will continue to work in this area for the next four years.

#### Part 6

#### Why Travel by Train?

With ever-increasing fuel prices, car and air travel become more expensive each year. Train travel is becoming an increasingly popular way to see a country and reach your destination. There is no need to watch the road and worry about getting lost the way you can in a car. In Europe, trains are generally more convenient and sometimes faster door-to-door than airplanes. Comfort and a little old-fashioned appeal make train travel an attractive alternative.

#### Cost

Train tickets are almost always cheaper than airplane tickets, especially if you are travelling for shorter distances, and you do not have to pay for your baggage. A train trip longer than 24 hours can be less expensive than car travel since there is no need to pay for hotel rooms.

#### Convenience

When you travel by train, you just buy your ticket and board. You do not have to arrive two hours early at an airport and endure long security lines. Baggage weight limits for trains are considerably higher than those for airlines; restrictions on what you can carry onto the train are fewer, and there is no standing around in baggage claim when you arrive. Unless you are taking a long-distance trip, a missed train usually means only a short wait until the next one comes along.

While train trips might last longer than air trips, the total time door-to-door is often less because of station locations and less waiting. Train stations tend to be centrally located in cities, so there will not be another long trip from where you get off to your final destination. High-speed trains in Europe and Asia have made some trips even shorter than air travel, with better access to local public transportation.

#### Comfort

Most passenger trains offer more leg room than airplanes do. You are free to get up and walk around and use your phone, and many trains in the United States and Europe have free Wi-Fi. You can bring your own food and drinks, or sit at a table in the dining car and enjoy a proper meal with other passengers.

Instead of watching the clouds while the pressure builds up in your ears, you can watch changing landscapes pass by as you relax to the rhythmic, rocking sound of a train. Train travel can be part of the destination itself because you can visit little towns you might not have seen otherwise, and see sights you would miss in the air.

Train travel is not only more relaxing and enjoyable, but it is kinder to the environment. Research into pollution has shown that a person travelling by car uses much less carbon than for the same distance travelled by airplane. Travelling by train uses even less.