Task 1 The history of ice cubes

You are going to listen to the story of how people tried to preserve their food.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, answer the questions (1–9) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

For centuries, the history of ice was really just the history of attempting to postpone the inevitable. The enterprising hacked the stuff from icebergs and lakes and mountaintops; they transported it at no little personal risk to the houses of the rich, who constructed ice houses in which to hoard their treasure.

The economics of transporting something very heavy and highly perishable meant that ice long remained an unattainable luxury for all but the most wealthy. Ancient potentates flaunted ice as a status symbol: in China, during the Eastern Chou dynasty, an "ice-service" detail of 94 people was kept on hand to handle any ice-related business that may occur, from chilling beverages to chilling corpses. Pliny ascribes to the Emperor Nero the invention of the ice bucket, as a method of cooling wine without diluting it with ice that had been stored in pungent straw and cloth.

In 1626, the English philosopher Sir Francis Bacon was one of the first westerners to discover a new use for ice, after packing a dead chicken in snow in the hope of preserving its flesh. He succeeded, but in doing so unfortunately caught a chill that would, several days later, be the death of him.

It was not until 1785 that Bacon's insight found widespread acceptance – and even then, it was only thanks to a chance encounter between one Alexander Dalrymple, an official of the East India Company, and George Dempster, its former director. Dalrymple mentioned in passing that the Chinese fishermen who operated in the waters around the company's trading post in Canton were in the habit of taking ice on their fishing trips in order to preserve their catch at sea, and then to transport it over long distances once on shore. Dempster was sufficiently intrigued to write to his salmon supplier in Scotland, who sent a consignment of fish on ice, by sea, to London – it arrived, six days later, perfectly fresh. This chance conversation set in motion a booming trade in what had been a hitherto overlooked commodity. When Joseph Marr, The Ice Co's founding father, decided to expand his fish-curing business in Hull into a fish-catching one, ice was an absolute necessity.

First, there was the emergence of artificially made ice, which gradually supplanted the natural ice trade. Next came a number of inventions that transformed how ice was used within the home, such as the fridge-freezer and the first packaged ice. In the early 20th century in North America, the iceman had been as much a neighbourhood fixture as the postman or paperboy; by the 1970s, all that remained of a oncemighty trade was a patchwork of scattered regional packaged ice suppliers attempting to find scant space in the nation's freezer compartments.

When Alan Marr, Joseph Marr's great-grandson, visited Canada in 1978, his family business was on the edge of complete failure. But in the new world, Alan saw a new opportunity. He was astonished to see that in every single bar he went into, they ram-packed the glass full of ice.

It wasn't a huge leap to assume that if people wanted ice in their drinks in Canada (hardly the warmest country in the world), they might want ice in their drinks in the UK, too. Back on home soil, he imported an ice machine from the US – which cools water in a tubular system, resulting in the cylindrical cubes so familiar to packaged ice users today – and got to work making ice for an entirely new market.

By 1987, there was enough demand for this strange new product for Charles Marr (Alan's son) ... [fade out]

Task 2 The battle for rare earths

You are going to listen to a broadcast about the production of important elements.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, complete the sentences (1–8) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

When then US President Donald Trump offered to buy Greenland in 2019, the world thought or hoped he was kidding, tweeted Lars Luca Rasmussen, a former Danish Prime Minister: Current Prime Minister Mette Frederiksen's response that "Greenland is not for sale" was a little blunter. But Trump's proposal could also be seen as a strategic move if one overlooks the fact that Greenland wasn't actually on the market. The autonomous territory within the kingdom of Denmark is currently home to the world's biggest undeveloped deposits of rare earth minerals, critical resources that the United States needs to build everything from iPhones to missiles and for which it is almost entirely dependent on China.

What exactly are these minerals and what has made them so highly sought after? These elements have unique characteristics that make them critical components in the development of modern technology.

Lanthanum, for example, can be used to convert raw crude oil drawn from the ground into gasoline and diesel. Neodymium, another element, has magnetic properties that allow it to produce extremely powerful magnets. Magnets that have enabled the shrinking of popular gadgets and such electronics as the iPhone. Rare earths just change everything about automobiles, about green technology, about the accuracy of weapons systems and so they've just become essential.

So they must be pretty rare. Not really. Rare earth elements are actually quite abundant in nature, but finding them in mineable concentrations is another story. It's really hard to find them in rich enough clusters to justify the mining and the processing and the production of them.

Although rare earth deposits have been found all around the world, the industry has come to be dominated by China, which largely controls every step from the processing of ores to refining and magnet production. This wasn't always the case. Up until 1980, the United States was a leading producer in rare earths. Now that title goes to Beijing. China began mining and mining in greater and greater volumes and flooding the world with low-priced rare earth elements to the point that it ultimately pushed others like the US out of the business.

As China cemented its influence over the market, the rest of the world grew increasingly reliant on Beijing's steady supply.

Rare earth mining results in radioactive waste and releases other major contaminants – one reason that rare earth mining in the United States has declined so precipitously in recent decades. In China, the production has also dumped dangerous pollutants into the groundwater and surface water. But they're not all bad. Rare earth elements are also critical to the push for clean energy and are instrumental in the design of eco-friendly wind turbines and electric vehicles. If you're looking for that green future that President Biden is excited about, it is not deliverable without these elements ...

Task 3 The work of a statistician

You are going to listen to Chris talking about his job.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, answer the questions (1–8) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Hi, my name is Chris and I work as a statistician specifically in education research. So people think they know what a statistic is. A statistician is working behind the scenes to calculate those numbers, but also, to estimate the uncertainty surrounding those numbers, the uncertainty often doesn't reach the news headlines. What we have is a small sample from a population, so we will calculate numbers based on a small group of people that we were able to perform our research on. And we have to use mathematical theory-to make educated guesses about a larger population that we've drawn our small sample from, based on the characteristics of that small sample.

Of course, one of them more, one of the better-known applications of statistics is medicine and medical research. We've heard a lot about that recently with Covid. But it can be applied to all kinds of other fields as well. Just as you might have a trial in medicine where statisticians are trying to work out how effective a treatment is on the human body, in education research, we might be trying to work out how effective a training programme is at a school. Or a new education programme for students of the school. The actual day to day work of a statistician can be broken down roughly into three categories, at least in my experience.

The first of those is statistical theory. You have to have a firm grounding in probability and probability models, you have to understand the assumptions that you are making when you are calculating a specific statistic.

Secondly, coding, that is executing commands and manipulating data and calculator models by using statistical codes as an entire coding language for several statistical programmes and you need to be skilled at using that for a range of data manipulations and calculating models.

And then finally, a background knowledge of the area you work in. And so for me, some kind of background knowledge of education research, and what the research question is and how to design a study that will effectively answer that research question without introducing bias. And while also respecting the data protection rights of the people in the study.

I think my favourite part of the job is problem solving. Often when you are trying to execute, when you are trying to use code to make a particular thing happen. [fade out]

Task 4 Equal pay for equal work

You are going to listen to a talk about salary discrepancies.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, complete the sentences (1–7) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

I realised I had walked into a problem of my own making while talking to a smart younger colleague about the things that need fixing in workplaces. Number one on my list for the next year, I said, is equal pay – or the lack of it. I told her I had been on stage at a professional women's event recently, talking about the effectiveness – or otherwise – of the newest ideas to help advance our careers. Employers are supposed by law to give men and women equal pay for equal work. But how do we know if we are being paid equally? Knowing what your colleagues earn is powerful data to have for pay negotiations. Anyway, I said, what have we got to lose by being honest and less, well, British? Who is this omerta helping? Employers. It is liberating to be open with our friends and colleagues.

Ten years ago, I told no one except my husband what I was paid, and no one told me. Now it is more common, becoming rapidly less stigmatised – and men are joining in. Even my father tells me what his pension income is.

Mutual truth-telling about salary works best with colleagues whose jobs are reasonably analogous to your own. It is also useful for freelancers and people working in the same sector, to gauge day rates and for salary negotiations.

There are downsides to sharing ... How will you feel if you turn out to be extremely low-paid compared to your peers? What if that information is used against you in some way? What if – as one woman at the event suggested to me afterwards – your hard-negotiated salary is used to bump up a lazy colleague's pay? If you do go in for transparency, be careful. Prepare the ground, and address only colleagues you know well and trust. Some people overcome their inhibitions enough to offer one-way disclosures to colleagues and friends who do not want to talk about their own pay – this is, after all, a delicate topic and reciprocity is not a given.

Be prepared for big discrepancies, especially in workplaces where pay decisions are opaque, and which do not have banded salary levels. Some companies ban employees from sharing salary information: there are instances when this can be overruled, but check before you talk. If you feel you may have an equal pay complaint, you will need to know the salary of a "comparator" – someone of the opposite sex doing equal work. This may not be easy to find out. The Fawcett Society, a UK charity campaigning for women's equality, wants the legal right to know what a male peer is paid. Fawcett is correct: we need structural change to force pay disclosure. Leaving it to individuals to take the lead is a powerful disincentive to take action. We should be mindful of risks, but there are many upsides to sharing – you may even be pleasantly surprised at what you find out. Shining a light on it might be cleansing and even cathartic. Let me know if you give it a try.

Task 5 Food futurologist

You are going to listen to Morgaine Gaye who specialises in finding out about trends in food. First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, complete the sentences (1–8) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

REPORTER: Food futurologist Dr Morgan Gaye is with us on *Showcase* today. Morgan, welcome. It's a pleasure to have you on our show today.

DR MORGAN GAYE: Thank you so much. Lovely to be here.

REPORTER: Tell me what a food futurologist is.

DR MORGAN GAYE: Well years ago when I first started doing it nobody had a clue, but now people are becoming a little bit more familiar with the fact that when foods are made, it takes years to design the final product. And that's usually a huge amount of work for big organizations and my job is to work with those organizations and tell them what we're going to be eating in five years' time and help them to get there. So really giving them a sense of what people will be interested in, who we are, what will really be the motivating factor to make us buy this thing and not that thing. So we think that we know what normal is because it's what we're doing right now. But what we're doing in the future is something that most people can't really think about and don't really want to accept when we talk about things like we will be eating insects, or things that people think I'll never do that, and then of course they do. So that's my job, really, it's to look at everything from fashion to interiors to design, everything that trend embraces and then distil that for predominantly food-related businesses.

REPORTER: How do you predict what's going to be "in" in the next five years? Five years is a long time.

DR MORGAN GAYE: Sometimes it has to even be further out than that and I have to be fairly accurate. So I look at all sorts of things like I mentioned so it has to really tie-in. It's not just a little bit of a fantasy idea that I might have. I have to really support that with some research. But I think it starts off with a hunch. I start to have little hunches, thoughts, notice little things and then try to find a similar thought or idea across categories. So from how people behave to what people might be watching on TV and then I try to start getting a little feeling. Then I start writing about it. And doing lots of research to see if I can prove or disprove that this thing is going to be "in".

REPORTER You have a whole team that works on this as well with you.

DR MORGAN GAYE: I have lots of different people all over the world who I might just say – have a look at this. I think this is good. And also I have to go there myself.

REPORTER: OK, so tell me about some of the major trends.

DR MORGAN GAYE: When I talk about trends, proper trends, they aren't fads, so we, you know, media loves a fad. For example, yesterday in Istanbul I went into a shop and the guy wanted to show me all of his soaps, and one of them was carbon or charcoal. And I said to him, oh my goodness, this is going to be huge next year. Because black food, black things, charcoal itself as a flavour. Charcoal lattes will be big. So next year when we talk about trends really what we're talking about is fads, things that people will be talking about, or things that might indicate that someone is pretty cool because they're eating that thing.

REPORTER: OK, so genetically modified foods have been something people try to stay away from. What's next? What's the next big thing to be scared of?

DR MORGAN GAYE: Well, I think what we're in at the moment is the sugar ... the anti-sugar movement really, so that we are really becoming aware of the power of sugar? What's in sugar? How does it affect us mentally, physically, dentally? And I think we're going to still be looking at that next year. It's going to get bigger so we're coming away from fruit juices and fruit smoothies, going much more to vegetables and greens.

Task 6 The borrower is slave to the lender

You are going to listen to a university professor talking about a problem students in the USA have. First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, complete the sentences (1–9) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

My name is Robbie Thornton-Peek. I am from Mount Laurel, New Jersey in the United States and at this moment we are having a crisis with our student loans.

Loans are when you borrow money. And sometimes the money is borrowed for a house, is borrowed for a car and it's borrowed for education and that's where the crisis is really bad. So you go to the university, and they say, "Oh you can come here. It costs \$50,000 a year to come but if you sign right here you can borrow the \$50,000 and then you pay it back later". But six months after you graduate from school if you go four years in a row, it's \$200,000 and now you have to pay that \$200,000 back because you have borrowed this money.

In America debt is the most marketed item ever. We have no savings because we are borrowing money for everything and it's creating a tremendous issue. Right now in America, most people cannot come up with enough cash if they need to pay for an emergency expense, without having to take out a credit card.

And yet students still take out these expensive loans. Some of the politicians want to forgive the loans altogether. And from my point of view, I think that to forgive the student loans is not the answer, because

people have signed that they're going to pay this money back. What needs to be done is education to show people that they don't have to borrow money to go to university. So there is no one who tries hard to get scholarships, they are not trying to get grants, and there are many scholarships that go unused. And people overlook those things.

So the movement has been towards getting away from being in debt, paying off everything, and then saving your money and not using credit at all. Because you cannot be rich if you're always using credit. "The borrower is slave to the lender" and if you owe no one anything, you cannot be anyone's slave. Many of us have bought into the lie of "keeping up with the Joneses". The Joneses have a big car, the Joneses have a big house. But what we do not know is that Mr. and Mrs. Jones go into their house and close the door and they have arguments about money. In America the biggest cause of divorce is money because people don't agree on money. One person is spending all the money and sometimes both are spending all the money and they're in deep debt and so it leads to divorce. We look at people on social media and someone is showing that fabulous vacation but what you don't realize is (that) they charged the whole thing. Now they've got to come home and pay it, but they don't have the money to pay because they have a car that's costing them over \$500 a month. Some people have it all, but a lot of people don't have it all. So, you have to stop keeping up with the Joneses.

Task 7 Push the button

You are going to listen to a way of giving feedback.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, complete the sentences (1–10) using a maximum of four words. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

You've probably seen them in the airport, or perhaps at your local bank or hospital, while buying a jumper at a shop, or even at a football game: four plastic faces with expressions ranging from smiley to cross, like a children's toy, that beg you to push them. Sometimes you do press one – it only takes a second or so – the bright green delighted one, maybe, or the paler-green happy one, the light red sad face, or, worst of all, the dark-red, distressed one.

Over the past decade these Smiley Terminals, as they are known, have become ubiquitous. They are the invention of a Finnish company, HappyOrNot, which has sold more than 30,000 of them in 135 countries. Each smiley station has the same four feedback options.

Over the past decade HappyOrNot has found that asking you to rate the service you're given does more than tell companies what people think: it changes how staff members act and therefore how customers feel about their interactions with them. Heathrow, one of the busiest airports in the world, is a good example. In the summer of 2012 an employee from Heathrow called the Finnish company ahead of the London Olympics, seeking help for some "operational improvements". Nine Smiley Terminals were installed for a two-month trial. The terminals immediately changed the behaviour of the airport's security guards Until then, not only did some security guards avoid making eye contact with passengers, they even intimidated them as they went through passport control. Now they began cracking jokes, smiling and giving high fives to passengers. "They wanted to be the best when they talked to people," says Ville Levaniemi, co-founder of HappyOrNot. "It was almost magic ... A miracle."

The Smiley Terminals were the brainchild of Heikki Vaananen, who later founded HappyOrNot with Levaniemi. Vaananen remembers a shop assistant at a computer store being deliberately rude to him when he was a teenager, and wishing that he could have reported the situation without the staff member knowing. Some 15 years later, Vaananen was running a mobile-gaming company and wanted his employees to be able to express their views to him anonymously. The terminals – and company – were born in 2009. They started as a way for employees to give feedback, but sales really took off when the firm started marketing the terminals as tools for customer satisfaction instead

The trove of data the firm has collected about real-life interactions is now a sought-after commodity. The company has a roster of 4,000 clients from Ikea to Shoe Station, and the firm provides them with a "Happy Index": a figure for the "happiness" of their customers on a given day at a given time.

The pressing of a button may seem like blunt analysis, but many companies have determined useful insights. Concerns that seem small or insignificant can make people "unhappy". Nordea, a Finnish bank, found that customers at one of its branches expressed greater contentment after a second entrance was opened to the bank, a mere ten meters away from the first. They expressed greatest "sadness" on Monday mornings because branches were busier after the weekend, so extra staff were put on shift at that time. Queuing suddenly became more bearable.

The speed, anonymity and simplicity of the feedback means that firms can collect large swathes of data fast.

Yet smiley faces have their limits: it isn't always possible to pinpoint why a customer is "unhappy". The terminals have four faces, yet most online surveys have a fifth, a "neither agree nor disagree" box, because when there are fewer than five options to choose from, the resulting feedback becomes less accurate. Why don't the terminals include a button in the middle? "The middle option has no data value for the company," argues Kirsti Laasio, HappyOrNot's chief customer experience officer. She reckons that people rarely feel nothing, no matter how minor a customer service interaction.

Task 8 Doing business in Singapore

You are going to listen to tips about how to behave as a businessman in Singapore.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–8). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Doing business in Singapore

Generally things are more relaxed than they were, say, 30 years ago when I also lived in Singapore. Because of the culture of informality, you can get away with quite a lot in a meeting. Certainly you'll be expected to carry cards, to hand them over and to pay them the usual respect that they receive everywhere in Asia. That is to look at them, to handle them fairly delicately, not just sling them into a pocket or throw them down on the table. But really the ethnicity of your interlocutor makes little difference. In terms of language English is almost universally spoken in business. You will find standards of English vary, but are generally extremely high. It is the lingua franca of business in Singapore, and certainly it's not something that people need to worry about that much. In my own experience, in doing business in Singapore, people work fairly straightforward. Generally, decisions are quick. People pride themselves on that. They're decisive, they like to get things done. It's a fairly straightforward place like that and if people say no, they will say no.

I also found people at every level – from the shopkeeper trying to rip you off with some exorbitant price for a watch, to the lawyer engaged in complex negotiations over a loan agreement – Singaporeans to be temperamental, and by training extremely tough negotiators.

As in so many Asian and particularly Chinese dominated cultures, face is a matter of some importance in Singapore, and it's something that's quite hard to define, but you should always bear in mind that you don't want to make the person you're talking to lose face. That is, you don't want to humiliate them. You don't want to make them look small. For example in front of their boss. So yes, one has to be aware of face, but it's not such an acute issue, as it can be in some other places, like in parts of China or Japan.

Food and eating are important parts of life in Singapore. And so they are important parts of business too. Both business lunches and big dinners, they tend to be seen as times where you are not doing business, but getting to know your prospective business partners. So they should be relaxed, convivial occasions. One

important thing to remember is who is the host. It's normally very clear at the outset. The western habit of arguing about who will pay the bill or competing for the bill is seen as rather uncouth in many ways, and quite often you won't even see the bill. It is just dealt with without you being aware of it.

You very rarely see people drinking much at lunchtime. In the evening, some people like to drink. You don't often see meetings with foreign partners, where either side is getting drunk. And indeed if you were to get drunk it is seen as rather undignified.

Singapore's streets are notoriously safe. It's described as a police state, so effective that it doesn't even need police anymore. Because it's true that you rarely see police officers. But you also see an extraordinarily law-abiding population.

All Singaporeans and foreign residents there have an ID card of some sorts, which is your passport to all sorts of activities, and is quite often demanded, so it's probably wise as a foreigner to carry your equivalent, which is your passport.

The common assumption about Singapore is that it's clean, clinical but rather antiseptic, somehow boring. I actually think that's a little unfair. Singapore is quite a lively, vibrant place once you get to know it. And has a remarkably interesting cosmopolitan lively population.

Task 9 Indigenous land savers

You are going to listen to someone talking about a new environmental project.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–8). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Nature is healthier on the more than a quarter of the world's lands that indigenous people manage or own, according to several scientific studies. Indigenous-managed lands in Brazil, Canada and Australia have as much or more biodiversity than lands set aside for conservation by federal and other governments.

That is in stark contrast from the history of conservation, which has a troubled record of forcing people off their land. So, it is with a mixture of hope and worry that many indigenous leaders view this latest global goal, known as 30x30, led by Britain, Costa Rica and France. Some want a higher target – more than 50 percent – while others fear that they may once again be pushed out in the name of conservation.

In the Brazilian Amazon, Awapu Uru Eu Wau Wau puts his life on the line to protect the riches of his ancestral lands: jaguars, endangered brown wooly monkeys, and natural springs from which 17 important rivers flow. His people, the indigenous Uru Eu Wau Wau, have legal right to the land, but they must constantly defend it from armed intruders.

Just beyond their 7,000-square mile territory, cattle ranchers and soy planters have demolished much of the forest. Their land is among the last protected forests and savanna left in the Brazilian state of Rondônia. Illegal loggers often intrude and fell trees.

So Mr. Uru Eu Wau Wau, who uses his community's name as his surname, patrols the forest with poison-tipped arrows. Others in his community keep watch with drones, GPS equipment and video cameras. He prepares his daughter and son, 11 and 13 years old, to defend it in the years ahead.

The community's efforts have outsized the benefits for the world's 7.75 billion people: the Amazon, which accounts for half the remaining tropical rainforest in the world, helps to regulate Earth's climate and

nurtures invaluable biodiversity. Research shows indigenous property rights are crucial to reducing illegal deforestation in the Amazon.

Nature is under assault because humans gobble up land to grow food, harvest timber and dig for minerals, while also overfishing the oceans. Making matters worse, the combustion of fossil fuels is warming up the planet and making it harder for animals and plants to survive.

There is now broad recognition that reversing the loss of biodiversity is urgent not only for food security and a stable climate, it's also critical to reducing the risk of new diseases spilling over from wild animals, like the coronavirus.

Enter 30x30. The goal is to protect at least 30 percent of the Earth's land and water, long pushed by conservationists, has been taken up by a coalition of countries. It will be part of diplomatic negotiations to be held in Kunming, China, under the United Nations Convention on Biodiversity. The United States is the only country, apart from the Vatican, that has not joined that convention, though President Biden has ordered up a plan to protect 30 percent of American waters and lands.

Indigenous communities are not recognized as parties to the international agreement. They can come as observers to the talks, but can't vote on the outcome. Practically though, success is impossible without their support. They already protect much of the world's land and water.

Task 10 Forestry: working for UNIDO

You are going to listen to a man speaking about his job.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–7). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

I'm Robert Hallett. I am a Canadian but also have British nationality. I studied forestry at university for a total of seven years altogether, including wood processing and research on productivity.

I joined UNIDO, the United Nations Industrial Development Organization, in 1971 and came to Vienna. My job at UNIDO was to support technical assistance projects in the whole world, to try and improve the productivity of wood processing industry, basically furniture and joinery. That's doors and windows and timber construction.

And after four years, I moved back to the United Kingdom to work more with the timber trade, including quality assurance problems, certifying the strength and quality of timber truss rafters for roofing, finger jointing, sticking pieces of wood together, and flame fire resistant timber doors. Basically, to promote the use of timber and to make companies more productive.

Six years afterwards, I rejoined UNIDO, in 1981 with broader scope and I should say at the moment that within the United Nations system the food and agricultural organization, FAO, in Rome has mandate to deal with primary processing, including how trees are cleared from forests whereas UNIDO deals with productivity in secondary processing. That's furniture, doors, windows and construction.

My main projects were to introduce pre-made wooden bridges into developing countries. And ITC, International Trade Center, in Geneva covered the marketing and trade side. So our coverage was global and our whole theory was that if we convince people that forests can be more valuable if they're processed and value is added to the raw timber, then the indigenous people and hopefully the government – so that's

a whole different area – would appreciate them more, possibly protect them and they will serve mankind better. There is an old phrase that says: "if you look after the forest, the forest will look after you." So this is why many people plant and hope they can protect it for the generations to come.

It really annoys me when I hear people saying, "Oh, you must not use paper, because you're destroying the Amazon and the tropical forest." But this is total nonsense because nobody uses the tropical forest to make paper. They clear the forest to plant other crops like soybeans and pineapples, and also industrial crops, where they clear the forest and ruin the land. If you make paper you use plantation softwoods, coniferous species, which you harvest and replant. In fact, Europe even now is planting something like I don't know how many football fields more per day than they are harvesting, and the forested areas are growing.

So part of the job was to combat these misconceptions, concerning what forests and industry is all about. However, we suffered the normal prejudices as well as the prejudice against national industry developing, which was a negative factor for large industrial corporations to come in and make large profits and never mind what the country benefited from.

Task 11 A social entrepreneur

You are going to listen to an interview about a successful business model.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–8). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

HOST: I'm very pleased today to introduce Chuck Slaughter. Chuck is founder and CEO of Living Goods, a social enterprise building a sustainable distribution platform for products designed to fight poverty and disease in the developing world. Living Goods operates networks of independent entrepreneurs currently in Uganda, Kenya, Zambia and Myanmar who make a living by selling medicines and other products to poor people that can help improve their health, wealth and productivity. It uses a successful direct selling model like Tupperware.

HOST: Well thank you very much, Chuck for taking the time today to speak to aspiring social entrepreneurs. CHUCK: I'm glad to be here.

HOST: So you have worn various hats, certainly, and before coming to Living Goods you worked in different areas as an entrepreneur. Can you talk a little bit about maybe your background and how you came to Living Goods.

CHUCK: Yeah, I have, I guess a little bit of a winding path to the beginning of Living Goods. I'm really a private sector entrepreneur. I started a company called Travel Smith which is a travel gear and clothing business in 1991. Uh, which I grew from scratch to over \$100 million in sales, 2,000,000 customers and I had the good luck and good fortune to sell about 10 years ago. But that was not my first business. I tried a couple of things before that, all of which were disasters. One thing that forms my work in anything I do is that you know that failure is part of success and that you have to try a lot of things before you find the thing that works.

HOST: So Living Goods, uh, the idea where did you get the original idea?

CHUCK: So after I sold my company, I found myself having a beer with a good friend who had also sold a company and he was funding a project in East Africa that was a nonprofit; operating a chain of four profit health care providers, so clinics and drug shops. This was in Kenya. And that idea caught my imagination. The notion of using a business model to solve a big social problem. That's really the thing that animates me is using the tools of business to address the needs of the world. This was in the early 2000s and if you recall this was about the same time that Bill Gates was turning his attention to the challenges of public health.

And it seemed like a pretty compelling idea. Well, actually what happened originally was my wife and I donated some money to this nonprofit. My friend Dan asked me to join the board, which I did and then went over to see it. And uh, and I was struck by two things. Yes, a powerful idea, but also it was having real challenges in execution. And I reported this back to their board of directors, and they asked me if I would help them do a turnaround. Uh, which I agreed to do for a period of about a year or so, two years. And here was a network of four profit drug shops operating in rural areas in Kenya. And the observation we made was there was a lot of the day where these drug shop owners were just sitting around idly waiting for sick people to show up. And we thought, well, that's slack time. Can we put it to better use? And so we did an experiment. We got them out of their shops and into the communities, into the schools and knocking on doors. And in short, this proved to be the key element to the turnaround. These stores went from losing money to making money. And then I'm like, well, what if we took this to its logical extreme and got rid of these physical storefronts and made this just a door-to-door business? And I'm like, well, hold the phone, isn't there somebody who's figured out this business model? And of course, one's thoughts turn to companies like Amway and Tupperware and Avon, and I thought well, imagine if you can harness the power of that business model to sell not just discretionary products like lipstick but things people really need like treatments for malaria and diarrhoea and healthy food. And that was the moment of inspiration if you will, and Living Goods began as trying to answer that question, could you adapt that model to providing high quality health care to the poor.

Task 12 The Wood Wide Web

You are going to listen to a researcher speaking about communication among plants.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–7). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Researchers told me that all plants communicate with fragrances. They warn each other of a coming danger. They allure beneficial insects, they send out SOS signals, they even coordinate the behavior among themselves and their vocabulary is immense. So far about a thousand fragrance compounds have been identified, 5 to 10 of which are common to all plants.

Well, plants can do more. They can perceive about 20 environmental signals more than we humans. Like humans, they can respond to smell, taste, touch, sight and sound, and like birds, they send electromagnetic waves. And under the ground there's a communication too. If you look at the forest, you see individual trees, an oak tree, a fir, a birch tree. But if you look underground, you see that the roots of the trees connect with fungi to build a vast, dynamic net called mycorrhizae, which means fungi roots increase. In science, this net is referred to as the www, the Wood Wide Web, instead of the World Wide Web.

Also most non forest plants build mycorrhizal nets with fungi not visible to us. And research has shown that plants even exchange nutrients among themselves within the mycorrhizae net. So, in good mixed cultures as often seen in traditional agriculture, plants could build something like a dynamic underground marketplace where plants with long roots contribute water to the net, other ones nitrogen or phosphate or sugar compounds. So, it's a constant give and take within the plant community. And sometimes it's a battle too. For example, marigolds sweat a toxic substance through their roots into the net to impede other plants to grow.

And these new studies have shown that the plants even exchange information through this net. So it's like an Internet under our feet.

Knowing all this, when I'm walking through a forest there is a constant whispering and murmuring. A whispering of fragrances I do not understand. And under my feet there's a constant exchange of nutrients

and information. And knowing all this, gives me a completely different feeling. It's not me here isolated and tree and tree and tree, but I have the strong feeling that I'm, too, connected in this intricate web of life all around me.

Well to sum up, plants are by no means passive living automatons always reacting in the same way and following their genetic programme. While this notion is still held within the scientific community the contrary is true. Plants communicate above and below the ground. They engage in lively relationships with their peers and environment, they harass others, they build alliances, they remember what they learn. And some scientists even think they're intelligent. So the more we know, the more the image of the plant is turned upside down. So it's the plants themselves that offer us a great hope for the future if we observe them carefully and help them develop their skills.

Task 13 Hunting telephone scammers

You are going to listen to a report about "L" who goes after internet thieves.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, choose the correct answer (A, B, C or D) for each question (1–8). Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

L. started going after scammers when a relative of his lost money to a tech-support swindle, a common scheme with many variants. Often, it starts when the victim gets a call from someone offering unsolicited help in ridding a computer's hard drive of malware or the like. Other times, computer users looking for help stumble upon a website masquerading as Microsoft or Dell or some other computer maker and end up dialing a listed number that connects them to a fraudulent call center. In other instances, victims are tricked by a pop-up warning that their computer is at risk and that they need to call the number flashing on the screen. Once someone is on the phone, the scammers talk the caller into opening up TeamViewer or another remote-access application on his or her computer, after which they get the victim to read back unique identifying information that allows them to establish control over the computer.

L. flips the script. He starts by playing an unsuspecting target. Speaking in a polite and even tone, with a cadence that conveys naïveté, he follows instructions and allows the scammer to connect to his device. This doesn't have any of his actual data, however. It is a "virtual machine," or a program that simulates a functioning desktop on his computer, including false files, like documents with a fake home address. It looks like a real computer that belongs to someone. "I've got a whole lot of identities set up," L. told me. He uses dummy credit-card numbers that can pass a cursory validation check.

The scammer's connection to L.'s virtual machine is effectively a two-way street that allows L. to connect to the scammer's computer and infect it with his own software. Once he has done this, he can monitor the scammer's activities long after the call has ended; sometimes for months, or as long as the software goes undetected. Thus, sitting in his home office, L. is able to listen in on calls between scammer and targets – because these calls are made over the internet, from the scammer's computer – and watch as the scammer takes control of a victim's computer.

When he encounters a scam in progress while monitoring a scammer's computer, L. tries to both document and disrupt it, at times using his real-time access to undo the scammer's manipulations of the victim's computer. He tries to contact victims to warn them before they lose any money.

L.'s videos of such episodes have garnered millions of views, making him a faceless YouTube star. He says he hopes his exploits will educate the public and deter scammers. He claims that he has emailed the law-enforcement authorities in India offering to share the evidence he has collected against specific call centers. Except for one instance, his inquiries have elicited only form responses, although last year, the

police raided a call center that L. had identified in Gurugram, outside Delhi, after it was featured in an investigation aired by the BBC.

Now and then during our Skype conversations, L. would begin monitoring a call between a scammer and a victim and let me listen in. In some instances, I would also hear other call-center employees in the background – some of them making similar calls, others talking among themselves. The chatter evoked a busy workplace, reminding me of my late nights in a Kolkata newsroom, where I began my journalism career 25 years ago, except that these were young men and women working through the night to con people many time zones away. When scammers called me in the past, I tried cajoling them into telling me about their enterprise but never succeeded. Now, with L.'s help, I thought, I might have better luck.

Task 14 Marie Kondo: Tidying up at work

You are going to listen to someone speaking about a new book by Marie Kondo.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the beginnings of the sentences (1–8) with the sentence endings (A–K). There are two sentence endings that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Marie Kondo is back to spark joy in your work. The 35-year-old tidying guru suggests trying her KonMari organisation method. This encourages people not to tidy room by room, which ends up shuffling things around. Instead, we should organise by category and only keep those items that spark joy.

Ms Kondo came to worldwide attention in 2011 with her book *The Life-Changing Magic of Tidying Up*, drawing on an organising obsession which started at school and later became her career. The method of tidying is rooted in Shinto spiritualism. Tidying and finding objects that spark joy might be better seen not as decluttering and minimalist interior styling but as a form of mindful meditation.

Now the Japanese tidying guru has turned her attention to the matter of work, in her new book, called, unsurprisingly, *Joy at Work*. -"I advise beginning with small steps," Ms Kondo tells me via videoconference. "Even tidying the environment you're in helps a great deal."

This is not just about tidying the physical workspace. But about deleting digital data, organising contracts, setting priorities. Joy at work is essentially about finding meaning in it. Two people won't find joy in the same thing. It's a sense of a pleasure that you get from doing the work that you're doing. Younger generations get this a lot better than older generations. You have to step back and ask yourself honestly what you want to value and what your personal goals are. When you hit them, you get personal joy.

Before Professor Sonenshein agreed to work with Ms Kondo, he wanted to sample her methods. "I decided to tidy my office. I had 400–500 books. I threw all of my books on the office floor and picked up each one and thought, did it spark joy? There were many books I held on to as I studied them in college but didn't need any more. I threw away about half of them. I have the most immaculate office. The transformation is unbelievable. I know where files and books are. I am so much better, I am so much more focused. I feel more in control of my work now." It goes beyond the physical space, he says.

"Tidying time is very important. These are important ways of taking control. Part of this is about experiencing joy but another gift is taking control of an environment that we don't feel we have control over."

Here are some tips on finding joy at work:

 Set daily goals for yourself in the categories of mind, body and soul. Mind could mean making progress on a work project or making a list of your most critical functions at work; body could mean taking a

- walk while talking to a colleague on the phone or getting enough sleep that night; and soul could mean saying thank you to someone supporting your work or phoning a friend at work to check in on them.
- Practise gratitude. Appreciate what you do have, and focus on what you are thankful for. Be thankful
 for being healthy and the opportunity to help during the crisis your work supports you and so many
 others.
- Make human connection. This is important to our well-being. Hop on conference calls a few minutes before the start time and chat with whoever joins early. Ask colleagues how they are doing "today", given how our moods fluctuate. Give people an outlet to share how they are coping. During times of severe stress, everyone can benefit from building quality relationships.

Task 15 Lady Knox Geyser in New Zealand

You are going to listen to a guide talking about a natural phenomenon in the Wai-o-tapu geyser region in New Zealand.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the beginnings of the sentences (1–9) with the sentence endings (A–L). There are two sentence endings that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Our main geyser here came about, it was back in 1901. Now back then New Zealand decided to build its first open prison. And they decided to build the prison right here at Wai-o-Tapu. The prison was actually just built just on the other side of the main car park here.

Now when this prison was built its main objective was to bring all the prisoners from the jails of the Rotorua Lake District. So all the prisoners came out here and when they came out here they were also told they had to work off their time as well.

So most of the prisoners were employed to cut the light bush and the shrub to make way for the roads and also the planting of pine trees for the surrounding forest as well. Now as you can imagine way back then it would have been a very hard and a very dirty job. So when some of the prisoners went exploring the area, they came across this geyser field. When they first came across this geyser here, it was not cone-shaped at all. It was just a little hot spring and all the prisoners got quite excited about it because hot water wasn't freely available to them back at the camp. So they decided to use hot water in the hot spring to their advantage. They used it to wash their clothes and themselves with.

One day when they were doing their washing at the geyser here, when they were scrubbing their clothes one of the prisoners by accident dropped his bar of soap into the spring. Now what he did is he changed the surface tension in the water, so by accident actually setting off the geyser. So all of a sudden the geyser just erupted shooting water and the clothes into the air. All the prisoners ran back into the shrub. It's quite an effective washing machine and dryer at the same time as well, it's pretty cool. After the geyser had done its eruption, the prisoners came back down to here and they all started talking and they all agreed that the soap was actually setting off the geyser.

So they started setting off the geyser frequently all the time just for their own entertainment.

Now some of the prisoners also decided to place rocks around the base of the spring to enhance the geyser eruption. So they made that cone shape up to it and so enhancing it to erupt even higher. Now what I'm actually adding to the geyser this morning is our chemically engineered surfactant. Now it's environmentally friendly but it sets off the geyser in the same way that the prisoners were doing back then.

 $\mbox{l'll}$ just quickly add it into the geyser now.

So the geyser would naturally erupt on its own without me adding any surfactant to the geyser. But the geyser's natural eruption cycle would be anywhere between 24 hours to 72 hours, so yes, the geyser does go off on its own but just anywhere between those times and we wouldn't know when. So the only reason why we add the surfactant to it is that you guys can come and see the geyser erupt.

So what's actually happening underneath the geyser here? Just below my feet there's a large cool chamber of water. Now below that there's also a hot chamber of water, now that hot chamber of water is reaching temperatures of over 150 Celsius. So what's actually stopping that boiling water just erupting out of the geyser? It is that cooler water; it's a little bit above it and that cooler water is around about 90 Celsius.

What the surfactant is doing right now is it's breaking the surface tension of that cooler water. So the cooler water is now starting to mix in with that hot water. And when you get these two different temperatures of water meeting the water turns into steam and expands and it just keeps expanding and pressurizing and building up the pressure and then eventually the geyser will just suddenly erupt. When the geyser does erupt it can reach up to heights of 20 meters and the eruption can last up to an hour as well. Both chambers of water hold about 27,000 litres, so there is a fair bit of water just underneath the ground here.

This water source is very rich in a mineral called silica. Now silica is a mineral that you'll find in every rock anywhere around the world and on every sandy beach. So when the geyser erupts, it deposits the mineral silica around the geyser; that's what's giving it the white cone shaped appearance.

Now the geyser is named after Lady Constance Knox. She was the daughter of Lord Rainfarli. Lord Rainfarli was the 15th governor of New Zealand back in 1903 and part of his job was to inspect all prisons throughout New Zealand. So when he came out here to the one at Wai-o-Tapu to do an inspection, he decided to bring his family along as well because they heard about the geyser. After they'd done an inspection, they came down here to do a bit of a photo shoot and to set off the geyser, and Lord Rainfarli gave the privilege to his daughter Lady Constance Knox to set off the geyser. She set it off and it got christened from then onwards as the Lady Knox geyser.

Task 16 The early years count

You are going to listen to an expert speaking about children's brain development.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the beginnings of the sentences (1–8) with the sentence endings (A–K). There are two sentence endings that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

For a long time now, scientists have known that "early stimulation" of children's brains can help them to develop faster. But what does this really mean? Stimulation is a very broad term but essentially it means active communication.

It has become increasingly obvious that parents and teachers alike need specific guidance about what "early stimulation" is in order to help children reach their full potential. For example, experts suggest that if more details about the benefits of early communication were provided, and the guidance was followed, there could be a significant impact on children's IQs and emotional intelligence.

However, an important thing to remember is that working on a child's brain development should not be all about "work". It is about playtime too. In fact, even playing simple games like "peekaboo" regularly can have an effect on how a child's brain develops. Playing this game builds up memory and trust. The interaction between the adult and child helps the child to recognise patterns and facial expressions.

Now, there is plenty of evidence to suggest that working on children's brain development should start during pregnancy. This raises the question of how to communicate with someone who has not even been born yet. One way, and indeed the most popular way, is to play music to the belly. This can help the unborn child's brain to make connections that have been proven to improve language-learning abilities later on in life. Simply put, playing music to an unborn child can make it easier for them to learn languages.

The key to all this "early stimulation" is to do it in small amounts but regularly and often. Each time someone interacts with the child it strengthens their understanding of relationships, improves their mental wellbeing, and builds on the child's ability to communicate and make connections. Not receiving these regular interactions can even cause confusion and stress for the child, so it is important to make sure that opportunities for early stimulation are not missed.

It is also essential to begin as early as possible. The first seven years of a child's life is the prime time for this behaviour. At this stage of life, the child's brain is expanding faster and making more neural connections than at any other stage of their life. Therefore, people should not be scared to talk to children as they would to other adults. This helps to build up a wide vocabulary much more quickly than when children are talked to using simpler language. Teachers should make an effort to explain new words to their students, rather than trying to use only easy words that the students already know.

An important factor to consider is where all this early stimulation is taking place. A child's development is much more effective when that child is in a happy home, surrounded by loving people, who can provide a sense of community. Growing up in such an environment makes a significant difference to how well the child understands empathy, amongst other things. This also goes for the classroom. Children who feel comfortable at school tend to be better behaved and learn faster than those who do not feel comfortable. It also increases the confidence of the child when they learn in an environment they see as safe.

So, how do you start practising "early stimulation"? Just remember, start early, interact in small amounts, regularly, and make sure children feel comfortable in the space around them.

Task 17 Not in my backyard

You are going to listen to Linda speaking about an environmental threat to Caceres, a Spanish world heritage city.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the beginnings of the sentences (1–7) with the sentence endings (A–J). There are two sentence endings that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

When I first heard about the proposal for a lithium mine-on the edge of the small Spanish city of Caceres, I just couldn't believe it. I mean, what city government in its right mind would give permission for a project like this in the backyard of its beautifully preserved medieval town, a UNESCO World Heritage site? A city that can boast some of the cleanest air in the world. Had nobody considered the impact on tourism and film industry revenue? *Game of Thrones* was being filmed here!

Many locals had already mobilised to fight the mine. Their slogan was "No a la mina" and in January 2019, they marched in solidarity to the mine where they held hands to form a human circle around the proposed site for the project. Petitions were signed. "No a la mina" posters appeared in the windows of businesses and homes, and demanded that the municipal and regional governments put an end to the project.

A critical development soon after that was the change in leadership at the town hall. Incoming Socialist Mayor Luis Salaya, who had a bold vision for tourism development in the city, took steps right away to block the mine, which was supposed to supply lithium for car batteries to be manufactured in Barcelona. He then made international headlines when he suggested that this was like asking Catalans to put up with a mine next door to Gaudi's famous cathedral in Barcelona. The push to designate the area as a protected National Park of environmental importance has gained momentum too. It's one of the last traces of Mediterranean forest in Spain, and more than 50 protected species of bird breed there.

Despite this progress, I can't help feeling doubt about my own role in a push to mine lithium. Actually, we all have to own up to the fact that we're part of the problem as we've come to depend on the smart phones and laptops that operate on lithium batteries. Lithium is a key component of electric car batteries too, giving rise to the expression: "The curse of white oil". Since Cacares has the second highest lithium deposit of this type in the EU, it's no wonder that the Australian corporation Infinity Lithium is pursuing a Cacares project. It may be dead for now, but what will happen if there's a change in political administration?

We can only trust that the power of the people will prevail. In the middle of the pandemic, with folks still required to wear masks in public, Cacares residents formed another human chain, this time a socially distanced one. To me, the flashlights and flickering candles they held symbolised a growing and determined opposition to an ill-conceived scheme that would benefit only outside interests.

Task 18 Why ditching meat is not the answer to climate change

You are going to listen to Thomas talking about farming.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the beginnings of the sentences (1–8) with the sentence endings (A–K). There are two sentence endings that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Suddenly meat is out in the high-end food world. 11 Madison Park, a New York City restaurant with three Michelin stars, recently announced that when it reopens after a pandemic forced hiatus, the menu will be vegan and the San Francisco restaurants run by another three Michelin starred chef Dominique Crenn went meatless in 2020. At first glance, this seems like good news. Many of these restaurants cite boosting sustainability and reducing their carbon footprint as reasons for their decisions, forcing the food system to reckon with how commercial meat production contributes to greenhouse gas emissions is a noble goal. Some of these shifts away from meat might help slow that depletion, but the change the world needs will take more than that. We should use sustainable regenerative livestock production to help us get there.

I run a small family operated pig farm in upstate New York. We believe in practising agriculture in a way that regenerates the land. Our pigs live outdoors, in the woods and eat a diverse diet of nuts, grasses and other forage supplemented by non-genetically modified grain, grown on a nearby farm using regenerative practices — a system of farming involving reducing or eliminating tillage, cover cropping fields to increase their fertility instead of spraying fertilizer, and integrating trees and animals into their management plants. We don't raise more than our land can sustain, and we're preserving habitat for myriad plants, animals and fungi to thrive. Our pigs represent a new life for the farm.

It's painful to see the destruction that conventional farming causes when I know how beneficial and rewarding it can be to do this sustainably.

When farms mimic a healthy natural environment, our food system can be a force for sustainability and a healthy natural environment doesn't necessarily mean one without animals. Often peas, soy and potato crops don't resemble natural ecosystems. They are vast monocultures that rely on large machinery, intensive processing and global distribution. Just like the industrial system that produces meat on a large scale. Farms that resemble natural ecosystems, by definition, must include animals.

Creative farmers are coming up with all kinds of ways to raise food while building a healthy ecosystem. One model is Veta La Palma in southern Spain. This 28,000-acre estate could be described as more of a wildlife sanctuary than a farm. In 1982, Veta La Palma reflooded a drained marshland and immediately became a successful fish farm and a large bird refuge with more than 250 species of birds returning to the area. The operation even gives up about 20% of its fish to birds and other native predators each year.

When working with nature, the farm can sustainably supply healthy food for consumers while keeping wild populations extant and remaining profitable.

Writing meat off completely is taking the easy way out. Commercial meat production got to be the monster it is because corporate interests monopolized the market and began seeing animal life as a commodity, something to be produced and traded at the lowest cost possible at the expense of the environment, animal welfare and working conditions for farmhands. This same set of values dominates the non-meat elements of our food system as well. With monocropping operations deteriorating our soil quality, chemicals flowing into our waterways and human rights being violated throughout the system. There's no getting around the fact that Americans eat a lot of meat. In 2020, about 225 pounds per person. Measuring

the economics of meat production is complex, but US consumers pay artificially low prices. If Americans eat less meat, but better meat, we can help keep smaller local farms in business and weed out the mega operations that are fraught with ethical and environmental concerns. It will cost more, but the elite restaurants that have opted to abandon meat and their customers could afford to purchase more sustainable meat rather than rejecting it outright. And as we buy more from producers we know and trust, we can feel confident that as they expand their operations, they will continue to provide a fair price to us while farming in a way that serves the planet.

Task 19 Job descriptions

You are going to listen to the introduction of six jobs in science.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the speakers with their statements (A–L). There are two extra statements that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Speaker 1:

Environmental scientists and specialists use their knowledge of the natural sciences to protect the environment and human health. They develop strategies to clean up polluted areas, and work with industry to reduce waste or hazards. Environmental scientists gather and analyze data to shed light on important questions, then use their findings to inform the public about environmental hazards. Day-to-day tasks can vary a lot among these specialists: Climate change analysts study the effects of changing climatic conditions on ecosystems. Environmental health specialists study how environmental factors affect community and individual human health.

Speaker 2:

The chemical engineer, wearing trademark white lab coat and goggles, pouring strange liquids from beaker to flask, is an image straight out of science fiction. However, the reality is that chemical engineers are an essential part of 21st century manufacturing-designing processes for the production and use of chemicals, fuels, food, drugs, and more. The ultimate tinkerers, these engineers continually conduct research to develop new ways to separate components of liquids and gases, or to generate electrical currents using chemistry. They must use not only their science and math skills, but also creative problem-solving and troubleshooting, especially when designs don't work the first time.

Speaker 3:

Park naturalists establish a connection between parks and the public. They educate park visitors, student groups, and others about the natural bounty, history, scientific opportunities, and ecological diversity of the country's local, state, and national parks. Park naturalists develop presentations, hands-on demonstrations, and interactive programs that help audiences get familiar with the park, everything from its geological formations and plants to the creatures who make their homes there.

Speaker 4:

Tinkering on a computer, at a drafting table, or in an office late at night, mechanical engineers pull modern marvels out of their imagination and into the world. Mechanical engineers design devices such as generators, engines, thermal sensors, and tools. Most projects start with an analysis of a problem to determine how a device might solve it. They make prototypes of their designs, and work with teams to build and improve them. Mechanical engineers design air conditioning systems, elevators, and the automated conveyors we see in stores, or that factories use to keep things moving. They are experts at making machines efficient, and integrating all the parts into a smoothly functioning whole.

Speaker 5:

Urban and regional planners develop plans for how land will be used, and oversee complex projects that help accommodate population growth while retaining – or revitalizing – functional communities. Using statistical techniques, field investigations, and technology, urban and regional planners gather and analyze data to understand the current and future needs of their local area. Urban and regional planners present their project proposals to communities, officials, and planning commissions. Their recommendations help guide decision makers to consider all the factors involved in a new project.

Speaker 6:

No amount of regulations or safety measures can completely eliminate risk from the world, but health and safety engineers use engineering tools and technology to make our lives as safe as possible. They focus both on preventing hazardous conditions, and developing safety measures to control problems when they do occur. There are several types of health and safety engineers: industrial safety and health engineers often team up with public health and safety workers to investigate industrial accidents and injuries, find their cause, and prevent future problems. Product safety engineers test products, from nuclear submarine reactors to children's toys, to ensure they are safe and meet regulations.

Task 20 Importance of work experience

You are going to listen to six people speaking about how they prepare for their job.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the speakers with their statements (A–M). There are two extra statements that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Speaker 1:

It is important to gain early work experience. I worked as a lifeguard and as a swim instructor in high school and it taught me responsibility and not just responsibility for myself, but for other people. You can imagine when you're a lifeguard, other people's lives are in your hands. And you have to not only help them in an emergency, but help them understand how to prevent a problem. I also worked on a team and so it taught me how to work with other people in an effective way.

Speaker 2:

My very first job was a summer job selling shoes at a Sears store, so I was very diverse in my job history, so it doesn't mean that you can't become a doctor if you sell shoes in the summer. I wrapped gifts during the holidays at the store. And probably in my later couple of years in college I got a job at the local hospital picking up all the sterilized equipment.

Speaker3:

Part of how you find a summer job when you're younger is the same way that you might find a job when you're older and that is, you want to start talking to people, you wanna start talking to everyone you know. People at your school, maybe your teachers, administrators, parents of your friends. People at your place of worship and if you can figure out a specific area that you're interested in, that's even better. If you say I'm really interested in a job where I can do some research in marine biology. Like can I go to a lakeside and really study some of the marine life there? Do you know anyone who's doing that kind of work, paid or unpaid? Please put me in touch with them, so that's what I mean about getting specific.

Speaker 4

Really focus on what you want in life: if you wanna become a dancer, enroll yourself in some amazing dancing courses. If you wanna be a doctor, maybe do a few medical retreats. I mean, for young girls I'm sure there's camps out there. Or if you want to become a publicist like me, you know, see if you can get an internship at some of the PR firms.

Speaker 5

Internships I feel are really important because you're getting that reality of what the industry is and so being able to work day in, day out by people who have chosen this as their career path. You're really seeing what it is that you enjoy about it. What it is that you're not enjoying about it, and it's a great experience to be able to do a trial period.

Speaker 6

So when you're interviewing for the first time and you're thinking about how you want to sell yourself to that hiring manager or recruiter, you want to be very focused and specific about what the qualifications are for that particular job and why you think that you're a match for them. You want to give specific anecdotes, specific examples in your past that illustrate why you are the perfect person.

Task 21 What is leadership?

You are going to listen to seven people speaking about how to lead a team.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the speakers with their statements (A–K). There are two extra statements that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers.

Speaker 1:

Tips for being a good leader and to leading a successful team is being able to look at the individuals that are on your team, to look at their strengths and their weaknesses and what they bring to the table.

Speaker 2:

I think of leadership as service. Leadership really means that I'm going to have a team. And I'm going to make this team successful. And how do I bring out the best? How do I get the best out of everybody that's around me?

Speaker 3:

If you can't speak effectively, you're not going to be a leader, so having conversations, sharing your opinion, showing that you can incorporate the ideas of others is really, really important.

Speaker 4:

Being a team leader requires taking a lot of feedback from a lot of different directions and setting the team up to still meet a goal.

Speaker 5:

Building a team full of experts and people who are smarter than you is really important. And then listening to them but then not being afraid to speak up and take control of situations.

Speaker 6:

You have to think of yourself as a woman leader, as a female leader. And how you're going to react to certain situations so that you can plan for how you want to lead in the leadership example you want to set. And get a good mentor. Because you should always have mentors and advocates.

Speaker 7:

As people say, get comfortable in your own skin. I think you know there's a lot of literature about what makes a good leader, and the one thing that stands out is authenticity - that sense of knowing who you are and being comfortable with it.

Task 22 Great success tips for entrepreneurs

You are going to listen to a successful businessman talking about important qualities for success.

First you will have 45 seconds to study the task below, then you will hear the recording twice. While listening, match the tips with their statements (A–K). There are two extra statements that you should not use. Write your answers in the spaces provided. The first one (0) has been done for you. After the second listening, you will have 45 seconds to check your answers

For 13 years, I worked alongside a multi-millionaire and serial entrepreneur. I watched him launch businesses, negotiate million-dollar deals, and transform dead-end projects into world-class enterprises. Over my time with him, I learned great success tips for new entrepreneurs.

Here are those lessons:

Example

Seek feedback everywhere from everyone. Never be too proud to ask others how you could do even better. Ask for feedback and give good feedback to others around you. That's how you grow teams, projects, and profitable businesses that change the world.

Tip 1

Once you choose your path, give 100% to your chosen project until you succeed.

Don't hold anything back or give yourself permission to slack off at any time.

When things get hard – and they will – it is your engagement that will see you through to the end.

Tip 2

Always be the hardest worker in the room.

Show up for your job, your project, and yourself.

There will be mornings when you won't want to get up.

It's on those mornings that the decision between your success and failure happens.

Tip 3

Always seek ways to improve every aspect of your business and life.

My mentor attended workshops and participated in conferences even though he was a recognized expert in at least five different fields.

In his mind and heart, he was never finished being a student of life and business.

Tip 4

My mentor practised what he preached.

He was 100% himself everywhere, no matter who was in the room.

He never backed down from his personal opinions or watered down his true beliefs to make others more comfortable.

Tip 5

My mentor didn't understand mediocrity.

He never aimed for anything less than extraordinary results. That's probably why he often achieved them.

Tip 6

My mentor would often say that he never accomplished anything by himself.

Every award, achievement, or recognition resulted from a team effort. Although he didn't have to, he always lifted up people around him.

Tip 7

My mentor was one of the most compassionate people I've ever met in my life.

Because of his success and wealth, people would often come to him in need. I don't remember a time that he ever turned anyone down.

Tip 8

My mentor didn't believe that anyone could control other people. Therefore, he gave up any attempt to control anyone but himself. In doing so, he allowed other people to feel free and independent. The result? People liked him more and would often follow his lead.

By giving up control, he gained influence.