[00:00:00.250] - Speaker 1

Good afternoon, everyone. My name is Bob Usher. I am the content manager at LGfL, and we're absolutely delighted to see you all this afternoon. We've all been really looking forward to meeting meeting Anthony, Jinman, our polar Explorer that we've been working with for many weeks, and we know that you've been looking forward to meeting him in real life as well. So, Anthony, without further Ado, I'm going to hand over to you. It's brilliant to have you here this afternoon. You've been having a very exciting time. In fact, Anthony, where are you at the moment?

[00:00:39.440] - Speaker 1

Are you actually in Antarctica? Over to you, Anthony.

[00:00:44.090] - Speaker 2

Thank you, Bob. Now, I'm not actually in Antarctica, right this second. But the photograph behind me is a photo that I've taken on a previous trip down to Antarctica. This is actually Elephant Island. This is kind of where Shackleton and his team from the endurance expedition actually had a wait rescue on this very island itself. So this is pretty cool and a nice introduction, really about what I'm going to be talking about today. So I've got a short little presentation. This is Ernest Shackleton, who will be doing the Memorial service for.

[00:01:23.570] - Speaker 2

And this is what it will look like with our team dragging our sledges actually over Antarctica. So this is the team. We're a small team of eight, and we'll be flying from the UK down to that red marker down in South America at a place called Ushuaia, where we'll be getting on board our ship and sailing across this stretch of ocean, the Drake's Passage, to get to Antarctica itself. And, yes, that's the ship itself and the Penguins and whales that we're likely to see along that route as well.

[00:02:04.710] - Speaker 2

So once we get down to Antarctica, we get dropped off and get ferried ashore. But the weather isn't always nice. This stretch of Antarctica is often very stormy, and you can see the ship there in the background. There's a bit of a blizzard going on in the Penguins on the shore. So this is my first season working as a guide on board this ship, and it's a beautiful place. So we're going to be dropped off at a place called Portal Point. So this is where we'll be on Antarctica, and we'll go from the ship to the shore in these little inflatable boats.

[00:02:48.440] - Speaker 2

And this is what I do as a guide. I drive these boats and there's actually people on board the ship that are there on holiday to take photographs of the wildlife. And normally we would take them ashore so they can see the Penguins and photograph the whales. And then we take them back on board the ship. So this is how we'll get from the ship to the shore. And this is like the shoreline and the mountains. So the mountains are actually over 2000 metres high. So we're going to go from sea level, dragging our sledges up and over these mountains and back again over 36 days.

[00:03:30.220] - Speaker 2

And we're doing our very own science experiments along the way, which is looking into climate change research. And I can talk a little bit more during our question and answer session at the end about the science work. But really big mountains, really beautiful mountains and the weather conditions on top of those mountains can look like this. So I'll just talk through this. What we're seeing, this is very strong winds. This is our tent that will be sleeping in at night. And you can see that the tents have wind is very strong.

[00:04:16.490] - Speaker 2

So can you imagine living for 36 days in a tent like this having to survive? It's very cold. And we actually have to protect ourselves from the winds and from the code, because the temperature could be as low as, say, about -30 degrees centigrade, maybe even colder with the wind, maybe -40 deg, which is twice as good as your freezer at home. So what happens when we put things in the freezer? Does anyone know what it's called when our fingers or our nose or our ears might actually freeze in this weather?

[00:05:07.170] - Speaker 2

I just wonder if you might know what that's called. Yeah, there's a few hands going up there, so you get a correct answer is frostbite. So if you put your hand up and you think it was frostbite, well done. This is what it looks like. This is not my hands. This is a friend of mine who they were actually skiing, and they were wearing lots of gloves and clothing, and they started to sweat and that sweat went into their gloves. And when they stopped that sweat inside the gloves, it actually froze very, very quickly.

[00:05:47.320] - Speaker 2

And over the course of a day, the more ice built up in their gloves. Well, their gloves didn't keep them warm anymore, and they actually started to get their skin began to freeze. And this is what it looks like. It's frostbite. Now, frostbite, you can actually warm your fingers back up again. And this actually isn't that bad. The skin would peel off and it would die, but it would be okay. Still. So this is what frostbite is. So you have to be very careful that you protect your nose and your ears, your fingers and your toes, so you don't get frostbite.

[00:06:24.900] - Speaker 2

And you need to make sure that if your hands start to sweat, that actually you can take a glove off. And then you can have a number of other clubs on your hands so you can take them off if you start getting too hot. But you can add another glove onto your hands if your hand starts getting cold as well. So that's how we prevent frostbite. And we try not to sweat when we're down here in Antarctica. So this is a tent that we're living in and inside the tent.

[00:06:55.230] - Speaker 2

This is where we'll be doing our cooking as well. So this is on my south pole expedition. But we actually use the snow and the ice, and we melt it in a little stove that you can see in the middle of that photograph. And then hot water, we pour into a mug and we eat what's called dehydrated food, which is like powdered food. But as soon as you add in the hot water, it's ready to eat. So it's almost like super noodles or something like that.

[00:07:27.710] - Speaker 2

It's crunchy, it's hard, it's dehydrated. Then you add the water in and you can then eat your super noodles. So it's something very similar to that. Now I know that on an expedition as well, you might have to go to the loop. Well, this is my softball expedition. This took 46 days, so I couldn't carry with me 46 days worth of toilet paper. And when it's really windy and very cold outside, then you have to make sure that you don't get frostbite. Right. And you have to go very quickly.

[00:08:00.940] - Speaker 2

So what is there a lot of in this photograph? Snow. Right. So I recommend a triangle of snow, because then you can use the triangle three times and it's a really nice shape as well. It helps when you go to the loo and you can just throw the ice away. And that's no problem at all. So going to the Lou on a polar expedition is actually quite challenging in these conditions. I'm going to leave that to the teachers if they need to further explain that. But that's how you would go to the loo on a polar expedition.

[00:08:40.330] - Speaker 2

You wouldn't use toilet paper. There's an awful lot of snow around, and you could use the snow as a substitute for going to the loo. So the other thing we have to prepare for as well is these things called crevasses, which are cracks in the ice in the mountains. And we have to be very, very careful that we don't fall into these cracks in the ice. And this is what happens if you were to fall in. So you can see that we're connected with ropes to the other team members.

[00:09:13.560] - Speaker 2

And if we fall in, we're still connected to the rope and to the rest of the team. And then the team can actually help pull us out of those crevasses. It's very important that we train hard. And we were just out in the French Alps last week practising to do this. And you can see that Paul here got out of the crevasse. No problem at all. So this is a mountaineering skill. So that's what we were doing last week on a previous expedition. This is a friend of mine who was actually skiing along, and you can't see those cracks.

[00:09:57.650] - Speaker 2

So that crack there in this photograph, you can actually see there's a hole and he was skiing along. There was no hole there 1 minute. And then the next minute, he had disappeared and he had fallen into that crevasse and all that was left we could see is that hole above where he had fallen in. He was fine. But that's what it's like to actually fall in for real. So this is going to be 36 days over Christmas, over New Year, away from family and friends, eight of us in two tents skiing across these amazing mountains to do some science work and to do some research into climate change.

[00:10:57.140] - Speaker 2

So I did get to see my Penguin. You'll be pleased to know, and we'll be photographing and talking about our adventures, but also about all of the wonderful wildlife that we'll see on the expedition as well. So this is a gentle Penguin and chicks, and this is some Adeni Penguins and chicks as well. And I can talk about those an awful lot a little bit later on. And of course, you'll be able to get the latest updates from the expedition on the LikeToBe. Org website. And we'll also have the ability to ask any questions.

[00:11:36.140] - Speaker 2

So if I don't get to answer your questions this afternoon, then as a class, you'll be able to go onto our website and you'll be able to go into our forum and you'll be able to post up any other questions that you might have. And we'll help answer those questions either before we go or when we're actually on Antarctica itself using a satellite phone. So I'll just stop the presentation there. I hope you enjoyed that.

[00:12:05.810] - Speaker 1

Thank you. That was absolutely fantastic. And I thought that the most memorable photograph of the day was going to be you going to the toilet and then you put on the footage of falling down the crevasse. And that really has been amazing to see.

[00:12:20.800]

Thank you so much, Antony. I'm going to hand over to my colleague Bradley now who's got some questions that have been sent in.

[00:12:29.060] - Speaker 3

Bradley, hey, good afternoon, everybody. Good afternoon, Antony. I'm going to give you some questions. Hopefully nothing too difficult for you. We're going to start off with Burdetts Coutts Primary School in southwest London who have given you a question. How long does it prepare? How long does it take you to prepare to go to the Antarctic? And an extra question has COVID affected it?

[00:12:54.190] - Speaker 2

Very good question. So we've been preparing for this expedition for two years, and we were actually due to do this expedition this time last year. But because of COVID and because the flights were cancelled and we were just about to go into a lockdown last December, we actually decided to postpone the expedition for twelve months. So this has been two years in preparing, and one of the hardest challenges is actually raising the finances. And so the money to pay for the expedition and we ask for sponsors.

[00:13:37.100] - Speaker 2

So we ask companies to give us some money in return for it may be photographs of their logos on our jacket and our clothing. So that's how we raise the money to do the expedition. But yes, it took two years and it was delayed twelve months because of COVID.

[00:13:58.690] - Speaker 3

Fantastic. Thanks for that answer. Another question is, what special equipment do you take with you?

[00:14:06.550] - Speaker 2

So we do need a whole range of different special equipment. So the most important thing really is the skis, the sledges, so we can carry everything in the sledges. So the weights of each sledge will be about 100 kilogrammes, if you can imagine 100 bags of sugar. That's for my body weight is 70 kilogrammes. So it would be almost like two of me in the sledge. So the sledge is really important because it's easier to drag that weight than it is to put it in a rug sack on your back.

[00:14:50.190] - Speaker 2

So the sledge and the skis are really important, of course, a tent, a stove for cooking and the rope that connects all of the team members together as we're skiing along. So all very important equipment for this expedition. And lastly, I'd say the first aid kit and a repair kit is really important as well because if we do get hurt, then we can mend ourselves and carry on going.

[00:15:20.670] - Speaker 3

The last question for the Burdett Coutts is your way for Christmas. What's it going to be like on Christmas Day? How are you going to celebrate?

[00:15:30.510] - Speaker 2

Can you imagine what it would be like to be away from family and friends and just have a think how you might feel about being away from people from your family over Christmas. So I hope all of you listening today when you're sat at home and you're at Christmas Day, please do think of us in our tent in Antarctica because we will be celebrating Christmas as well. We will have a special dehydrated meal and we'll have presents. So we're doing a special present giving within the team.

[00:16:11.630] - Speaker 2

So we're wrapping up the present each and we'll share those presents with one another inside the tent. We'll have as good a Christmas as we can do in the tent. But we will be skiing and working hard towards finishing the expedition as well.

[00:16:28.460] - Speaker 3

So no dehydrated Mince pies?

[00:16:31.290] - Speaker 2

Yeah. It's not going to be a dehydrated roast dinner, that's for sure. It will probably be spaghetti, Bolognese or something like that. Yeah.

[00:16:43.410] - Speaker 3

Well, I will be thinking the one thing that I think on Christmas Day, when I'm warm inside, I'll definitely be thinking about you. We're going to go into some questions from Dove Dell Primary School, the year one classes there in Liverpool. They want to know what happens in Liverpool, for example, like dropping litter. Does that have an impact in the Antarctica? So dropping litter, maybe not recycling. How can that have an effect with something that's so far away?

[00:17:13.050] - Speaker 2

That's a really good question. Very good question. So recently we know that plastic, especially plastic. If we throw that away and we just throw it out of the car or into a river or a stream, then that could actually wash into the oceans. And we know that there's a lot of plastic now, unfortunately, in the ocean, and the plastic can also move around the world. And it could end up in Antarctica. So we have to be very careful that actually we should never litter and throw things away in the countryside or out on the streets.

[00:17:58.870] - Speaker 2

We should always look for a recycling bin. And we should always put the rubbish into the recycling bin where it will be properly recycled into something else. So she'd never litter because it could end up down here on Antarctica.

[00:18:17.310] - Speaker 3

Good point. Now, the next question is it's a big one. How does climate change happen now? You mentioned you were going to talk about it a bit more. So how does climate change happen? And can you do that in a couple of minutes for everybody to understand a couple of minutes?

[00:18:32.960] - Speaker 2

That's a good question. So I'd say, actually, this photograph behind is quite a good photo to help explain that. So you can see that on top of the mountains, there's some snow. And so that snow would have started off as water in the ocean. And so the water in the ocean actually kind of evaporates. And the water will go up into the clouds and the clouds as they move around the planet when they hit land and especially mountains, then the temperature, it actually cools down. And so the water that's in the air will actually kind of turn back into water, which is how we get rain.

[00:19:19.620] - Speaker 2

And that rain will fall down as it is here at the moment where I'm living. But if the temperature is nice and cold, then that rain will turn into snow, and the snow will fall on top of the mountains. Now, here in Antarctica, as more and more snow builds up, then actually, that's how we form glaciers and glaciers could be hundreds, thousands of years of snow that's actually kind of condensed or has formed ice as more and more snow has fallen. And then gravity. If I drop something like this little memory stick, gravity pulls that memory stick down towards the Earth, and it's the same with the snow and ice on these mountains.

[00:20:08.520] - Speaker 2

Gravity starts pulling that ice down off the mountain. And that's what we call a glacier. Now, glaciers are really important, because if the Earth's temperature gets colder and there's more snow, right. And so the more snow that falls on the mountains and the bigger the glaciers are going to be. But if the Earth's temperature warms up, then actually that ice will start to melt. So if we put ice cubes on our table at home and take them out of the freezer, then they'll actually start to melt.

[00:20:44.280] - Speaker 2

So the Earth's temperature, if it begins to warm up, then the ice melts. So this is a really good way of seeing how the Earth's temperature is changing. What is climate change? Climate change is how the Earth's climate warm or cools over a period of time. Now, what scientists are concerned about, in fact, all of us should be concerned about it is how we are making that happen faster. And so if we burn lots of coal, if we use lots of oil, if we chop down all of the trees in the rainforest, then what we're doing is we're adding what's called carbon dioxide into the atmosphere, and that acts like a greenhouse effect.

[00:21:45.760] - Speaker 2

So if you were to walk into a greenhouse during the summertime, it's really warm inside the greenhouse. And so if you were to put ice inside the greenhouse, it will Mount even faster than if you left it on your kitchen surface. So climate change is the change of the climate over a period of time. But we as people as we're adding more carbon into the atmosphere, we could be making climate change happen faster. In fact, we know we're making it happen faster. And we can tell that by how quickly these glaciers in the Arctic and Antarctica are melting.

[00:22:33.150] - Speaker 1

Quick message for all the teachers on the call. We've got some practical activities in the Polar Exploration portal and one of them is how to make your own glacier in the context of a classroom. Have a look at that. It's well worth giving that a go, Bradley. Back to you.

[00:22:48.870] - Speaker 3

Thanks, brother. So we know what you eat so dehydrated things that sound okay. But when you're Firstly, what do you drink? What do you have to drink?

[00:23:02.370] - Speaker 2

Good question. We just melt the snow and the ice to get water. And we have to do that every single day. And we might have, say, some fruit, tea or some tea and some coffee. Hot chocolate is very popular on an expedition, but it's just literally from the melted snow and ice. For the meals, we would have porridge for breakfast or oatmeal, which is heated up. And then during the day we would have a meal for lunchtime, a meal for the evening which might be like spaghetti, bolognese, pasta, Curry, Thai.

[00:23:45.450] - Speaker 2

And then we have desserts, which could be like Apple and custard or something like that. Then during the day you would have snacks, so nuts, dried fruits, chocolate. And that's basically how we get the energy for the day. But we're going to be burning about 6000 calories a day, so that's three times the amount of

food that I would normally eat. We would need to eat three times the equivalent to have the energy to do this expedition.

[00:24:17.310] - Speaker 3

Well, that's probably about as much as I at Christmas day. So it's probably very similar. Next set of questions from Barrow Hedges in Carshalton. And now I don't know about everyone else where you are at the moment, but I know where I am. I think it's quite cold now, at the moment, in London, where I am. But you mentioned about being cold and how cold it gets, what's the coldest temperature you've ever experienced. And how did you get with it? And second, have you ever had frostbite?

[00:24:47.970] - Speaker 2

Yeah. Good question. So the coldest temperature I've had was on my North Pole expedition. So I was skiing from Canada to the very top of the planet, the North Pole, across the Arctic Ocean. And the cold temperature I had on that expedition was -65 degrees Centigrade. So, yeah, about three times. His code is your freezer at home. Have I ever had frostbite? No, I haven't. I have had what's called Frost nip, which is where you begin to start getting frostbite. But there's nothing dangerous or anything like that.

[00:25:32.270] - Speaker 2

So. Yeah, lovely.

[00:25:33.950] - Speaker 3

No, that's a good thing. That's good to hear. So the next question again from year six class in Barrow Hedges in your many travels, what is the most unusual thing you've ever seen?

[00:25:48.390] - Speaker 2

That's a good question.

[00:25:57.550]

Okay, my favourite most memorable encounter. I wouldn't say it was unusual, but it was in the Arctic. We were getting ready to get dropped off at the start of the expedition. And as we were getting dropped off, we actually bumped into a mother polar bear and two Cubs. And we were getting dropped off on what's called a snowmobile, which is like a motorbike that travels on the frozen ground. And the noise of it is just like a motorbike as well.

[00:26:35.720] - Speaker 2

And it scared the mother and one of the Cubs to run off in one direction. And the other cub just stood there and didn't know what to do. And so what we did is we actually snowmobiled up to the polar bear cub because after ten minutes, the mother hadn't come back. So we were like, what are we going to do? So we actually picked up this polar bear cup. And we then followed the mother's footprint and we dropped off the polar bear cub when we found the mother and the polar bear cub.

[00:27:11.500] - Speaker 2

Actually, they bark. The polar bear cub were like bark bark. And the mother answered. And the cub walked up to its mother and they were reunited. And they walked off together. And that was really cool. That was definitely unusual because we turned around to one of our guides and we said, hey, Charlie. So how often does that happen up here? And he was like, That's never happened. So really unusual. But a fantastic memory to have actually held a polar bear cup and reunited it with its mother and to hear it bark as well.

[00:27:54.960] - Speaker 2

It was super cool.

[00:27:56.010] - Speaker 1

Definitely Anthony and Bradley. Before we go into the next and possibly last question here, Anthony, can I just ask, do you plan to hold any polar bears on this trip to Antarctica?

[00:28:08.370] - Speaker 2

Good question. Can I have a show of hands? Do polar bears live in Antarctica? True or false? Hands up. If you think that polar bears live with Penguins in Antarctica, hands up. If you think no polar bears don't Yay? Okay, brilliant. Unanimous there. So polar bears live in the north, in the Arctic. And polar bears have never seen a Penguin in real life because they live down in the south around Antarctica.

[00:28:45.330] - Speaker 1

Good question, Bradley. Last question from you.

[00:28:49.670] - Speaker 3

Okay, so last question today from Wormholt Park in Hammersmith and Fulham, how do you mentally prepare for these trips? You're going to be away from home for a long period of time. There's harsh conditions. How does that feel for you? And are you excited or nervous or maybe a bit of both.

[00:29:10.370] - Speaker 2

So I'm really excited to be going away again. I love going on expeditions because I get to learn so much about something new. So every day we're always learning something new. How do you train for this? This is expedition, I think number 24 for me. And when I was starting expeditioning, so I've done my own solo expeditions where it's just me. It's important to go and learn from other people. So just like being at school, you learn different subjects and then you have to practise and sometimes go get qualifications and pass exams so that you have the skills to go off on these expeditions and survive.

[00:29:57.910] - Speaker 2

So I'm a qualified guide and I'm an international mountain leader. So I've had to get those qualifications and I've been tested to make sure I've got the skills to survive. And that also helps me mentally prepare for these expeditions, because I know that I have the skills to live in this environment and lots of expeditions, lots of practise, lots of experience.

[00:30:30.710] - Speaker 1

Thank you, Antony, and thank you, Bradley, for asking the questions.

[00:30:34.720]

And thank you everyone for sending in such excellent questions just to finish this session off. I just wanted to say a few things to everyone out there in the schools as well as other partners that have helped make this project such a success. Thank you very much. To Busythings, to J2E and to the Widget team. We really appreciate your support and for the teachers out there, you've got some fantastic material to use with your classes from those different partners.

[00:31:07.210] - Speaker 1

But this is for the children as well. One of the things that makes this project so unique is that we've been running three competitions and we haven't really got time to go into it now. But I have uploaded the flag that we've designed, which features two of the designs from the schools taking part. And Congratulations to Leys primary and Anson Primary school who managed to get their designs on the flag. Fantastic work there. We love looking at all of that you sent in. And those are the two that have made it onto the flag.

[00:31:41.750] - Speaker 1

But we've had another competition where children were able to send in your poetry for Antony to read out at the commemorative service in Antarctica. Right. I think at the start of January, we haven't quite decided who's going to win that one that Anthony is going to read out. We will sort that out this week. We will send

a copy of the flag and also update all of you so that you can see the winning poetry. But for everyone listening in, there is a further opportunity for you all.

[00:32:15.670] - Speaker 1

We're running another competition for poetry that's linked to this project. It's not too late if you haven't given this a go. And that is later in January, when Antony still out in Antarctica. But fingers crossed, you've stayed fit and, well, you haven't fallen down a crevasse. And just before you leave the continent of Antarctica, you're going to do some video recordings of your work children that you've sent through. We're going to try and use the technology, satellite phones and that kind of thing to get to Antony, and he's going to read some of your work out.

[00:32:54.360] - Speaker 1

So teachers, we will be in touch with you about that extra opportunity. And we hope you've been inspired this afternoon by what Anthony's done and planning to do. And on behalf of the whole team. Anthony, thank you so much for being part of this. We've loved listening to you this afternoon. Thank you for sharing all of your experiences with us and on behalf of the team at LGfL, all of our partners and on behalf of all of the children and the 50 schools on this call this afternoon.

[00:33:31.250] - Speaker 1

Good luck. We wish you well, safe travels. And of course, we want to hear all about it when you get back.