

Turning the Tide: A Podcast Game Show Script

[opening theme music]

Host: Hello and welcome back to another episode of Turning the Tide: A Podcast Game Show. I'm your host, Delta Rane. Today we are live at Niles, Michigan, on a gorgeous Sunday morning.

[applause sound effect]

Host: To the two people who are out there listening, our guests will answer a series of open-response questions. The first to correctly answer three questions wins. This week, the topic is coral reefs and climate change, and our prize will be a lifetime supply of eco-friendly sunscreen, brought to you by Skinzo Sunscreen, our sponsor today.

Host: Now, let us welcome our first contestant: Solange Rising!

Contestant 1: Hello! My name is Solange Rising, and I'm from Cape Coral, Florida.

Host: Well although not all heroes wear capes, for the ones who do, a cape made out of coral would look fashionable!

[laughter sound effect]

Host: And next up on our show, Luna Lowy!

Contestant 2: Hi, Delta Rane. I'm Luna Lowy from Riverside, Connecticut. I'm really excited to be here today!

Host: Welcome to the show, Solange and Luna. Let me introduce you both to this week's panel. I will be reading trivia questions involving this week's topic of climate change and the ocean. Whoever buzzes in and responds correctly first gets a point. The first person to reach three points will win our grand prize! Does everyone understand?

Contestant 1: Yes!

Contestant 2: Yes!

Host: Alright, let's begin.

[drum roll sound effect]

Host: List three effects of climate change on the ocean.

[buzzer sound effect]

Host: Luna.

Contestant 2: A common indicator of climate change is an increase in greenhouse gasses. Greenhouse gasses trap heat within the earth's atmosphere, causing oceans to absorb heat and increase sea temperatures. The heat emitted from trapped greenhouse gasses causes glaciers to melt. The melting from glaciers caused by this heat also makes the sea level rise and coastal cities flood. *Furthermore*, the carbon dioxide from climate change dissolves in the ocean, increasing the acidity and changing the chemical makeup of the water. You know, stuff that only chemistry majors like me would understand.

Host: Well, I wasn't a chemistry major, but I have an answer key right here, and Luna, you're spot on!

[yay sound effect]

Host: The score is 1-0, with Luna in the lead! The next question will be true or false. Because there are only two answers, only one person will be able to answer, so you guys must be on your toes... or hands, or head, or whatever it is.

[drum roll sound effect]

Host: True or false? Climate change does—

Contestant 2: False! Climate change does *not* cause—well, whatever you were going to say.

Host: Well, when I said be quick, I didn't mean *interrupt* me, *Luna!* The *question* was: True or False? Climate change does pose a threat to coral reef ecosystems in the ocean. The correct answer was *true*. Like we talked about before, climate change causes a rise in ocean temperatures, changes in ocean currents and storms, and an increase in ocean acidity. All of these things can cause coral reef bleaching, and therefore harm entire coral reef ecosystems.

Host: Now for question 3. This time, I advise you two to actually *listen* to the entire question.

[drum roll sound effect]

Host: We know climate change drastically harms coral reefs. On the other hand, how do coral reefs help *reduce* climate change? If coral reefs are helping climate change, then climate change really should return the favor like a proper citizen!

[buzzer sound effect]

Host: Solange.

Contestant 1: Oh, I think I might know this one! Coral reefs form a barrier and help stabilize oceans and absorb ocean waves—by almost 97%! The conversion of barrier reef to wave stabilization helps reduce the flooding caused by climate change.

Host: “You have answered incorrectly”... is what I would say to someone who *was* incorrect. But Solange, you are in fact correct!

[yay sound effect]

Host: The score is tied: 1-1.

[drum roll sound effect]

Host: Question 4: what exactly is coral reef bleaching? The ocean must be pretty spotless after a coral reef bleach if you ask me!

[laughter sound effect]

[buzzer sound effect]

Host: Solange.

Contestant 1: Coral reef turns white during the process of coral reef bleaching. Negative changes in light, temperature, nutrients, or other conditions of the water cause the coral to expel the algae living in its tissues.

Host: Unfortunately, Solange, you have answered... correctly!

[yay sound effect]

Host: A common cause of coral bleaching is a sudden upward surge in water temperature. (Is this starting to sound familiar to any of you?) The algae living in the coral reef, called zooxanthellae (otherwise known as a great word to win a game of Scrabble), have what's called a mutualistic

symbiotic relationship with the coral reef. This means they both benefit from each other, so the coral provides algae with shelter, and the algae provides a food source for the coral. Another point to Solange. Luna, you've got to keep up if you want to win!

[drumroll sound effect]

Host: Question 5: We already talked about how warmer or colder water temperatures can stress out the relationship between coral reefs and algae. What are three other potential causes for coral bleaching?

[buzzer sound effect]

[buzzer sound effect]

Host: Luna, I think you may have hit the buzzer first.

Contestant 2: This show is ridiculously easy. Pollution, sunlight, and tides. Oh, and also, runoff. Do I get extra credit for that?

Host: And finally back on the board, our second contestant has caught up to Solange!

[yay sound effect]

Host: Unfortunately, you do not get extra credit, though with that kind of speed, you probably don't need it! For all of us laymen out here, pollution from rainwater can contain chemicals that disrupt coral reefs and cause them to bleach. Runoff technically falls under pollution because runoff can carry these harmful pollutants. If coral reefs that are close to the surface are exposed to too much sunlight, they can also expel their algae, again triggering the coral bleaching. The score is now tied 2-2; it can be anyone's game!

Host: This has been a very spicy game, and although our listeners may be on the edge of their seats, it's time to hear a word from our sponsor! Join us when we return to our final tiebreaker of Turning the Tide: A Podcast Game Show.

[fancy theme music]

Host: This show is brought to you by Skinzo Sunscreen, the best eco-friendly sunscreen in the nation. When going scuba diving in beautiful coral reefs, sunscreen is a must. Except oftentimes, the sunscreen protecting your skin washes off onto the coral reef, and the chemicals in the sunscreen lead to coral disease and coral bleaching.

Host: Knowing this, the creator of Skinzo Sunscreen set out on an inspirational journey to construct the most effective biodegradable sunscreen formula. After years of experiments trying to find the greatest alternatives to ingredients such as octocrylène, benzophenone, and, woah, this is a big one, methoxycinnamate, he has finally concocted a formula that decays naturally. There is no harm to coral reefs whatsoever. Check out the Skinzo Sunscreen website for more information. Whoever enters in the code “save-the-coral-reefs-2022” will get their order 20% off! Again, that’s “save-the-coral-reefs-2022.” Now, back to the interesting part of this show.

Host: Time for (drumroll please)...

[drumroll sound effect]

Host: the tiebreaker question! The moment we’ve all been waiting for! Solange, Luna, let’s see who will be the winner of today’s episode of Turning the Tide. I’ve asked quite a few questions about the *causes* of coral reef bleaching. Can one of you describe three *effects*?

[buzzer sound effect]

[buzzer sound effect]

Contestant 2: Come on!

Host: Luna, settle down. Solange, you buzzed in first!

Contestant 1: So, not only do algae depend on coral reefs for survival, but the entire ocean ecosystem does as well. Over 25% of all marine species, which amounts to more than a million species, take shelter in coral reefs. All of these species can become endangered without healthy coral reefs to protect them. Not only this, but humans depend on these reef animals and plants for food. They contain a lot of protein. Coral reefs also shelter approximately a tenth of all the fish we eat, and even more in third-world countries that need food the most.

[long pause]

Contestant 1: Sorry, did I say too much?

Contestant 2: Of course you did, know-it-all. But *I* was literally going to say that... I could have sworn that I pressed the buzzer first, this is definitely rigged.

Host: Contestants, please! I can assure everyone that this show is 100% non-biased with the best research out there! Solange, your answer is correct!

[yay sound effect]

Host: I personally liked your impressive explanation—less work for me to do!

[twinkle sound effect]

[drumroll sound effect]

Host: The winner for today's show is... Solange Rising! Congratulations Solange, well deserved.

[applause sound effect with cheering]

Host: Again, congratulations, Solange. We'll send the Skinzo Sunscreen over to your address by next week. Until then, thank you, Solange and Luna, for being here and answering questions today. Both of you did an outstanding job.

Contestant 1: Thank *you* for having me! It was such a pleasure to be on this show today. I still can't believe I won! Good game, Luna. You did really well today.

Contestant 2: Yeah, whatever.

Host: And that's it for today's show! Thank you all for listening to today's episode on climate change. Until the next episode of Turning the Tide: A Podcast Game Show. Delta Rane, out!

[closing theme music]