



## **Teek and Tom Explore Planet Earth**

### **Episode 2: The Ocean is Key to the Weather and Climate We See!**

#### **TRANSCRIPT**

##### **Teek**

Hi, I'm Teek. I live on planet Queloz. For my final class project, my teachers said,

##### **Teacher Puna**

Find a planet in this galaxy and explain how its atmosphere works

##### **Teek**

So with my trusty spaceship BARY

##### **BARY**

That's me!

##### **Teek**

I headed to Earth. That's where I met NOAA scientist Tom.

##### **Real Tom**

You've come to the right person.

##### **Teek**

Now he's showing me how awesome Earth is.

##### **Cartoon Tom**

It's so beautiful.

##### **Teek**

I can't wait to learn more. Let's go!

##### **Parental Figure**

Oh, Teek. Wah wah wah

##### **Teek**

Good, parental figure!

##### **Parental Figure**

Wah wah wah wah, Teek.

**Teek**

Yes, parental figure!

**Parental Figure**

Teek, Wah wah wah. Wah wah wah wah.

**Teek**

Yes, parental figure! It's going well. But I really need to go to meet Earthling climate scientist Tom now.

**Parental Figure**

Wah wah, Teek. Wah wah wah.

**Teek**

Yes, okay. Okay. Love you parental figure. Bye. Huh! OK BARY, let's surprise Tom. Go ahead and ring his Zworple Watch.

**Teek**

Hi, Tom from NOAA.

**Real Tom**

Hi, Teek from Queloz. Oh this is so cool. I can see you right now. Where are you? Hello...Hello, Teek, hello? Hello ... Whoa!

**Teek**

Hahaha! Got you! Hey Tom!

**Real Tom**

Heh-heh-heh Hey! Great to see you again! How was your trip? No traffic I hope?

**Teek**

Nope. I took Wormhole 51. No traffic on Thursdays.

**Real Tom**

I hope you liked learning last time how our ocean affects weather on Earth. It's wild, right? And why us humans really care about our weather and climate.

**Teek**

Liked? I LOVED learning so much about weather and climate at the farm. What are we going to learn today?

**Real Tom**

More about how the ocean has a huge influence on our weather and climate. And if we're gonna talk about the ocean, we'd better head to the beach!

**Teek**

Woohoo! BARY, activate Beach Mode.

**BARY**

Activating Beach Mode.

**Teek**

Let's GO!

**Teek**

Oh wow, it's getting late. We really lost track of time.

**BARY**

Not BARY. Our time here has been tracked precisely. We have been at the beach for 3.4 Queloz minutes or 6.2 Earth hours.

**Cartoon Tom**

Thanks BARY. Sunset is a perfect time to talk science. Since the ocean absorbs energy—or heat—from the sun, it has a major influence on weather and climate.

**Teek**

Huh! Sorta like how your body turned all hot and red from the sun's energy?

**Cartoon Tom**

Wait, what? I'm sunburned? Aww, no. I really should have put on sunscreen.

**Teek**

Oh, don't worry. Use this. Been keeping our skin healthy for millennia.

**Cartoon Tom**

Ahhhhhhhhhh! Thanks! Since we can't bring the sun to Earth, thank goodness, let's use a beach bonfire instead to show how water absorbs energy differently than land and air.

**Teek**

Good idea. Someone tried to bring the sun to Queloz once and pkow-ow-ow! I can help with the fire! BARY, put Earthling bonfire experience right here. Huh! Oh my gosh! What are these delicious food concoctions?

**Cartoon Tom**

You don't have s'mores on Queloz?

**Teek**

Mmmmm, No. These are so good! Mmmphm!

**Cartoon Tom**

Remember to chew! So, check this out. Water heats slower than land. Feel how the ground and air around that fire are already pretty hot?

**Teek**

Yeah! I don't want to get my tentacles closer to that fire.

**Cartoon Tom**

Me neither.

**Teek**

BARY can tell us the temperature from now on.

**Cartoon Tom**

But if I put my finger in the water, it's not that hot yet.

**Teek**

Woah! It's warm but not as hot.

**Cartoon Tom**

This is like a summer day by the beach! Hot land, cooler ocean. The hot land heats the air above it causing it to rise. Cooler air over the ocean rushes in to replace it. And that causes a cool sea breeze.

**Teek**

Like when those winds picked up in the late afternoon, and we got some serious kite flying in?

**Cartoon Tom**

Exactly! At night, this happens in reverse as the land cools faster than the ocean. Just like if we put *out* the campfire. The air and ground cool faster than that pot of water. Right BARY?

**BARY**

Confirmed. Air and ground have cooled to a manageable temperature. Water has not.

**Cartoon Tom**

So at night, air over the warmer water rises, and is replaced by cooler air over the land. And you get a cool land breeze. Put together, these breezes keep coastal temperatures from getting too hot or cold.

**Teek**

Which we get to take advantage of! My classmates are gonna be so jealous!

**Cartoon Tom**

Congratulations on winning by the way. Maybe next year for me.

**Teek**

The coast is nice and all, but what if you're not near the ocean?

**Cartoon Tom**

What if I told you, that even if the ocean is a *thousand* miles away, it's *still* involved, even in a thunderstorm. Let's head back to space, and I'll show you how!

**Teek and Tom**

BARY, take us to space!

**Cartoon Tom**

[whispers] Yes, space!

**Cartoon Tom**

Four Earth days ago, these Kansas thunderstorms started as a bigger storm over the Pacific Ocean. See there?

**Teek**

Hmmm I can't see. Maybe my vision's too...cloudy.

**Cartoon Tom**

Heh. I shouldn't have taught you what puns are.

**Teek**

Yeah, what on EARTH were you thinking? Maybe my joke didn't...LAND.

**Cartoon Tom**

Please, stop.

**Teek**

Wait Tom! Let's go back in time so we can watch!

**Cartoon Tom**

Really? You can, time travel?

**Teek**

Uh...Yeah! Check this out. BARY, rewind Earth's space time!

**BARY**

Accessing time stream...powering up to reverse temporal speed in 3...2...1

**Cartoon Tom**

Did it work?!?

**Teek**

Of course not! We can't time travel. I was just teasing. That would be cool though! But we can reverse the video.

**BARY**

How many days would you like to access?

**Cartoon Tom**

Let's go back four days.

**Teek**

This is like my favorite kind of movie! Let's watch!

**BARY**

And, BOOM!

**Cartoon Tom**

There's that bigger storm over the Pacific Ocean—see it? It's picking up moisture before moving into the United States and the Central Plains. And there's moisture blowing in from the Gulf of Mexico. The air from the Pacific Ocean collides with the warm moist air from the Gulf of Mexico in the Central Plains.

**BARY**

Tada! Weather!

**Cartoon Tom**

So the next time you're at the beach and swimming in that big blue sea, know you're also swimming in one of the biggest controllers of our planet's weather and climate.

**Teek**

Gosh, this planet is awesome! What are we learning next?

**Cartoon Tom**

We're going to learn about how the ocean influences *extreme* weather and climate events! I know it looks scary, but making sure people are prepared for extremes is why I do this job. Oh, Oh, I gotta go Tom. Parental Figure expects me home by dinner. We're having zworple pie!- Oh, I almost forgot. My parental figure baked you a zworple pie!

**Cartoon Tom**

Thanks! Do you know if it's gluten free?

**Teek**

Ahhh, what now?

**Cartoon Tom**

Nevermind.

**Teek**

Ok, let's drop you off back at NOAA. See you next time, Tom!

**BARY**

[loud belch]

**Real Tom:**

Ahhh, Again? Ugh. The things I do for students.

**Teek**

BARY, open Student Log.

**BARY**

Student Log accessed. Now recording.

**Teek**

Day 2: Final Project. Ok important thing to remember. The ocean has a HUGE influence on weather and climate. That's because ocean water cools and heats slower than the land, which helps to make sure coastal temperatures are not too cold or hot. Oh, BARY, what was that tasty campfire thingie called again?

**BARY**

A s'more.

**Teek**

Some more of what?

**BARY**

Ha. Ha. Earth pun detected

**Teek**

Hehe puns are awesome. Back to sciency things. Fun fact: storms in the middle of the United States could have started thousands of miles away *and* with water that was once in the OCEAN too! Everything is interconnected...WEATHER humans like it or not.

**BARY**

Activate audience groaning.

**Teek**

One last thing. Remember s'mores recipe to share with friends.

**BARY**

Recipe saved. Student log archived. That was a...breeze.

**Teek**

Uhh, HEY!

**Teek**

Aww, no. Whee! Haha.

**Real Tom**

Whoaaaaa! Whoaaaaa! Ahhhh!

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