

The Pop Ups. Stay seated. Three, two, one, ignition. Get ready for an adventure of magnificent proportion.

The Pop Ups. (Singing.) I don't know what you've been told, but we're in a golden age - so many discoveries that are jumping off the page. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world. Wow in the world.

The Pop Ups. With Guy and Mindy. We're on our way, Houston.

(Soundbite of thunder and doorbell.)

Thomas Fingerling. Well, now, who could that be?

(Soundbite of knocking on door.)

Thomas Fingerling. I'm a-coming. I'm a-coming. Hello there.

(Soundbite of door creaking open.)

Thomas Fingerling. Can I help you? Say, now, what's with the mask and the funky looking pajamas? Nothing to say, eh? Well, that's awfully mysterious of you.

(Soundbite of thunder.)

Thomas Fingerling. Hey, why are you wiping your feet on my welcome mat? Oh, easy there. You're building up quite the static charge.

(Soundbite of zap.)

Thomas Fingerling. Ah, no, don't you dare touch me. I hate static shock. It kind of hurts, and it's super annoying. Wait - no, noo!

(Soundbite of woosh.)

Mindy Thomas. (Singing.) I don't know what you been dough, were going to go ba-da.

(Soundbite of static.)

Radio Announcer. In other news, a masked villain named only as Static Man has been tormenting a local neighborhood. According to officials, victims number into the tens of people. The individual in question has been using the power of static electricity to intimidate, shock and generally annoy residents of this small community. Reporter Samantha Squirrel is on the scene.

Samantha?

Samantha Squirrel. I'm here with Thomas Fingerling, a local resident and business owner who claims he was a victim of one of the Static Man's shocking visits.

Thomas Fingerling. That's right.

(Soundbite of clang.)

Mindy. What?

Thomas Fingerling. And I saw him - the Static Man.

Guy Raz. Good morning, Mindy.

(Soundbite of bird cooing.)

Guy. Who's the ready for the Kale Bowl?

(Soundbite of bird cooing.)

Mindy. Shh. Guy Raz, check it out - Thomas Fingerling is on TV.

Guy. Thomas Fingerling?

(Soundbite of bird cooing.)

Thomas Fingerling. Now, there's two things in this world I don't like - being touched and being mildly electrocuted. And this Static Man has got to be stopped.

Guy. Huh?

(Soundbite of static.)

Mindy. Guy Raz, do you know what this means?

Guy. That you're ready to get your bib on and head on out to the Kale Bowl?

Mindy. Ugh. No, it means we have a mystery to solve.

Guy. A mystery to solve?

(Soundbite of bird cooing.)

Guy. But Mindy, what about Kale Bowl? I've been looking forward to this for over a week.

Mindy. But Guy Razzie, look - I'll tell you what; you help me track down this neighborhood nuisance, and then afterwards, we'll go to the Kale Bowl, and I'll even buy you one of those signed photographs of Christian Kale.

Guy. (Gasps.) From "The Dark Bite?"

Mindy. That's the one.

Guy. OK, Mindy, fine. Let's go solve a mystery.

Mindy. Ooh, wait - one more thing. Here you go.

Guy. A magnifying glass?

Mindy. Wouldn't be much of a detective without one, would you?

Guy. Yeah, I guess that's true. So where shall we start, Mindy?

Mindy. Well, the news report said that the masked menace had been wreaking havoc all over the neighborhood.

Guy. So it goes to reason that someone around here must have seen something.

Mindy. Yeah. Who do we know who likes to snoop?

(Soundbite of bird cooing.)

Guy and Mindy. Dennis!

Mindy. Come on, Inspector Raz. Follow me. Walk, walk, walk, walk, walk, walk, walk.

Dennis. Hi, Guy. Hi, Mindy. Ooh, are you two on your way over to Sleuth-Con?

Mindy. Actually, Dennis, we're doing some investigating.

Dennis. Ooh, what are you investigating?

Guy. Oh, well, we're trying to get to the bottom of who this mystery person is who's been going around town zapping people.

Dennis. Oh, yeah. You mean - dun, dun, dun! Static Man.

(Soundbite of bird cooing.)

Mindy. Static Man? Wait - so you've seen him?

Dennis. No, but I've heard some things.

Guy. Oh, yeah? Well, what have you heard?

Dennis. Well, it's a very long and tedious story. It begins at the dawn of time.

Mindy. Dennis.

Dennis. OK, fine. He looks for homes with a carpet welcome mat, rubs his feet on it to build up static electricity and zaps people after they answer the door. Happy?

Guy. That explains why he's called Static Man, Mindy - static electricity.

Mindy. Of course. Good detecting, Inspector.

(Soundbite of bird cooing.)

Dennis. I have one more thing that may interest you.

Guy. What other information do you have?

Dennis. A clue.

Mindy. An old receipt?

Dennis. No, not a receipt. It's Static Man's calling card. Here you go.

Mindy. Thank you very much.

Dennis. Now is the dramatic moment of fate. The game is afoot. Au revoir. Au revoir.

(Soundbite of bird cooing.)

Guy. Uh, bye, Dennis.

Mindy. Bye, Dennis. What was that all about?

Guy. What does it say, Mindy?

Mindy. Well, um, hang on - I'm going to need to borrow that magnifying glass. Ahem. It says, I know what you're up to, Guy and Mindy.

(Soundbite of thunder.)

Mindy. Marvel at my command of triboelectricity. Ever since the time of Thales and Miletus, modern scientists have been at a loss. But a new study

did just reveal how this power became so real.

(Soundbite of bird cooing.)

Guy. Huh.

Mindy. What does it mean, Inspector Raz? What does it mean?

Guy. Well, let's investigate, Mindy. Let's break down this clue and see if we can figure out where to go next. Marvel at my command of triboelectricity.

Mindy. What in the wow could that mean?

Guy. Well, triboelectricity is a scientific name for static electricity that is generated from friction.

Mindy. Ah, like the kind of friction caused by rubbing your feet on the carpet or a balloon against your noggin?

Guy. Exactly. Friction is a type of energy that's generated when two things are rubbed together.

(Soundbite of balloon rubbing.)

Mindy. OK, so when this person says, marvel at my command of triboelectricity...

Guy. They're saying, look at how I'm able to control this static electricity.

Mindy. Ah, they're mocking us.

(Soundbite of bird cooing.)

Guy. All right, go to the next line, Mindy.

Mindy. OK. Ahem. Ever since the time of Thales and Miletus, modern scientists have been at a loss. Miletus? What in the wow is that?

(Soundbite of bird cooing.)

Guy. Miletus is a town from ancient Greece, Mindy. And if my knowledge of Greek philosophy serves me correctly...

Mindy. I mean, it hasn't let us down yet.

Guy. ...Thales of Miletus was the ancient Greek philosopher who first observed static electricity caused by friction all the way back in Six Hundred B.C.

Mindy. Whoa, that's, like, twenty-six hundred years ago!

(Soundbite of bird cooing.)

Mindy. And what about this next part? Modern scientists have been at a loss?

Guy. Well, Mindy, my guess is that even though we've known about static electricity for a long, long time now, scientists have never really fully understood why rubbing two objects together creates electricity.

Mindy. Until now!

Guy. What do you mean?

Mindy. It's right here in the next part of the clue, Guy Raz. Look more closely. Here. Do you need my magnifying glass?

Guy. Sure. Thanks. Let me just see here.

Mindy. What does it say?

Guy. But a new study did just reveal how this power became so real.

Mindy. Huh.

Wait, Mindy. This says there's a new study that reveals how static electricity works.

Mindy. Yes. I was just reading about this. OK. So this group of researchers from Northwestern University in Evanston, Illinois, they just recently solved the twenty-six hundred year-old mystery of how friction becomes static electricity.

Guy. Huh. Well, how? What did they find?

Mindy. Well...

Grandma G-Force. Get your little triboelectrical fingers off of me. Get out of here!

Guy and Mindy. Grandma G-Force?

Grandma G-Force. Hee-yah. And one for the road.

(Soundbite of bird cooing.)

Mindy. Quick, Guy Raz. It's coming from inside Grandma G-Force's house.

Run, run, run, run...Kicking down the door. Hee-yah.

(Soundbite of crash and bird cooing.)

Mindy. Hello? Grandma G-Force? We could hear you all the way from outside, what happened in here?

Grandma G-Force. I'll tell you what happened. That little lappy-pappy came in here, tried to give me the business.

Guy. The static man?

Grandma G-Force. Uh-huh. That's what he called himself.

Mindy. Oh, man, Guy Raz. We must have just missed him.

Guy. Where did he go, Grandma G-Force?

Grandma G-Force. I don't know. All I know is he left with his tail between his legs after we got to scrapping. But not before I got a chunk of his funny-looking pajama suit. Must have ripped it off him while I was giving him the old lickety boo.

Mindy. Guy Raz, this is perfect!

Guy. It is?

Mindy. Yeah. We can analyze this piece of material, find out for certain if it's from the static man and then...

Guy. And then trace it back to its owner!

Mindy. Exactoritos.

Guy. All right, Detective Mindy. How are we going to figure out whether this material is the same sort of material that the static man's onesie is made out of?

Mindy. Well, Guy Raz, if you hand me your magnifying glass again, I can show you.

Guy. Okay. Here you go.

Mindy. Because to see how static electricity is made, we need to magnify this material about one million times!

Guy. Whoa, a million times, Mindy? My regular, old microscope at home can only magnify stuff up to forty times.

Mindy. Well this electrical reaction happens on a really small scale called a nanoscale.

Guy. Mindy, look at that. This piece of fabric this close up looks like a forest.

Mindy. It's like a flat surface with all of these little, bumpy-looking tree things poking out of it.

Guy. Yeah, but when I touch it, it still feels so smooth.

Mindy. Well, when you magnify something this much and look at it this closely, almost everything looks like this.

Guy. Huh. OK, so how does rubbing this material against, say, Grandma G-Force's carpet create electricity?

Mindy. Well, let's take a look. You hold the magnifying glass while I rub this material on the carpet. And then tell me what you see.

Guy. You got it, Mindy.

(Soundbite of rubbing material.)

Mindy. Do you see anything?

Guy. Yes, Mindy. I do. All those little tree things that were poking up from the material are now bending and flexing all over the place.

Mindy. Perfect. That's exactly what those researchers at Northwestern University found when they were studying static electricity.

Guy. Oh, yeah?

Mindy. Yeah. They discovered that when these little trees flex and bend back and forth, they actually generate electricity.

Guy. Really?

Mindy. Yeah. It's a phenomenon known as the flexoelectric effect.

Guy. Flexoelectric, huh?

Mindy. Now, of course, you can't see this electricity because it's stored in those little tree-like looking bumps, but, and this is a big butt, you can feel it.

Guy. You can?

Mindy. Uh-huh.

(Soundbite of static shock.)

Guy. Aah, Mindy...

(Soundbite of bird cooing.)

Mindy. (Laughter). Yup, dolphinitely works.

(Soundbite of static shock.)

Guy. Aah. (Groaning).

Mindy. Wait a minute.

Guy. What is it, Mindy?

Mindy. A breakthrough!

Guy. What do you mean?

Mindy. I've seen this fabric before, Guy Raz.

Guy. Really? Where from?

Mindy. That discount fabric store down the street.

Guy. The discount fabric store? I bet that's where our masked menace is heading right now to repair his costume.

Mindy. Maybe we can still catch him.

Guy. Better hurry up.

Mindy. Race ya! Run, run, run, run...

(Soundbite of whoosh.)

Mindy. Come on, Inspector Raz, follow me. Walk, walk, walk, walk.

Mr. Maverick. Hello. Welcome to Mr. Maverick's Fantastic Fabrics. We've got all your favorite fibers.

Guy. Actually, we're here on official business.

Mr. Maverick. Of course you are. I can tell by the music. And your official business fedoras. How can I help you, detectives?

Mindy. We found this material at the scene of a crime.

Mr. Maverick. Gasp. My specially formulated flexoelectric wool blend...

(Soundbite of bird cooing.)

Mr. Maverick. ...In midnight black.

Guy. And who did you last sell it to?

Mr. Maverick. A peculiar young man, fussy and opinionated with a voice that cut the air like a dentist's drill.

Guy. Wait a minute.

(Soundbite of door opening.)

Dennis. Hello, Mr. Maverick. I need some more of that super zappy black fabric. (Gasping.) Gadzooks. Detective Mindy and Inspector Guy, private eye.

Guy and Mindy. Dennis?

Dennis. You may have discovered my secret identity, but you'll never catch me. (Evil laughter).

(Soundbite of crash.)

Dennis. Ow, my nose and face. Who closed this door?

(Soundbite of bird cooing.)

Guy. Dennis, you're the neighborhood's masked menace? You're the Static Man?

Mindy. Dennis the menace?

Dennis. Yes. T'was me, Dennis.

Mindy. But, Dennis, why?

Dennis. You two are always learning about cool scientific stuff, testing things out for yourselves, going on wacky adventures filled to the brim with high jinks and tomfoolery.

Mindy. What?

Dennis. And did you ever stop to think that maybe Dennis would like to have a fun science adventure, what with all the antics and shenanigans?

Mindy. Uh...Dennis, you're more than welcome to join us on any of our adventures. We love having you around. Right, Guy Raz?

Guy. Yeah. We love having you around.

Mindy. All you have to do is ask us.

Dennis. Guy, Mindy, no, quit being nice. You're ruining my brooding villainous monologue.

Guy and Mindy. Oh.

Dennis. So I decided to go on my own scientific adventure. (Evil laughter.)

Mindy. In zapping people with static electricity?

Dennis. A-ha. Excellent question, Detective Mindy. You see, I read a new scientific study that said scientists discovered how static electricity is created. And with all of that scientific knowledge, what else was I to do?

(Soundbite of bird cooing.)

Dennis. Oh, woe is me. You're right. What have I become? Take me away. Lock me up and throw away the key.

Mindy. Dennis, you're not going to jail.

Dennis. I'm not?

Mindy. Of course you're not. But you have to promise to stop zapping people all the time.

Dennis. Oh, I promise, Mindy. I cast aside my life as a famous supervillain and begin my new life as a superhero!

Mindy. Oh, boy.

Dennis. I am Static Man.