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 squeaking and rustling.)

Mindy. Almost got it. Just gotta get my head through this hole here and…

(Soundbite of pop and sigh of relief.)

Mindy. Ah! That’s better. (Yelling.) Hey, Reg! You almost ready?

Reggie. (From other room.) Coo! coo!

Mindy. Well you better shake a tail feather, Guy Raz is going to be here any…

(Soundbite of doorbell ringing.)

Mindy. …second.

Reggie. Coo!

Mindy. (Yelling.) Coming! walk walk walk walk walk…open.

(Soundbite of door opening.)

Guy. Hey, Mindy!

Mindy. Hey, Guy Razzy! Ready to go?

Guy. Woah. What in the wow are you wearing?

Mindy. Oh, thank you for noticing! It’s just my fanciest coat!

Guy. Your fanciest coat?

Mindy. Uh huh!

Guy. Mindy is that coat made entirely out of boo boo baby beanie boppers?

(Sound effect of squeak.)

Mindy. Sure is! And I made it myself! Sewed them all together with my rider sewing machine. Anywho, I think we're just about all ready to go. Hey, Reggie! Done cleaning yourself in that bird bath?

Reggie. Coo coo!

(Soundbite of clattering and crashing.)

Guy. Well, he better hurry up, Mindy. We don't want to be late to the Fine Art and Refined Technology Museum's annual gala!

Mindy. You mean the F.A.R.T. gala?

Guy. Uh, yeah.

Reggie. Coo! Coo!

Guy. Wow, look at you Reggie!

Mindy. Yeah, so fancy! So refined. Look at this! We've got a top hat, white tie, tails…

Reggie. Coo!

Mindy. Wait, nope that's just your regular tail.

Guy. Well, are we all ready to go?

Mindy. I think so!

Reggie. Coo coo!

Guy. Great, I've got the banana scooter parked just down the street.

Mindy. Alright! Let’s kick it, everybody out! Walk walk walk walk walk walk walk…

Guy. Ooh, I am so excited for this art exhibition, Mindy! It's been so long since I've been to a fancy event like this.

Mindy. You know what they say! Ain’t no party like a F.A.R.T party!

Guy. (Groans.)

Mindy. Say, what was the name of that exhibition they were opening up again?

Guy. It’s called ‘Keeping Cool.’ The highlight is a new type of paint a team of scientists from Purdue University have invented to help fight climate change.

Mindy. Well that’s good news, cause I’m really starting to cook in this boo boo beanie bopper coat of mine. Ugh.

(Soundbite of squeaking.)

Guy. And here we are!

Reggie. Coo!

Guy. Check it out, Mindy! My brand new banana scooter! Alright! And here we–

(Soundbite of honk and calm, measured rev.)

Guy. Ah, made it!

(Soundbite of snoring.)

Guy. Mindy?

(Soundbite of snoring and honk.)

Guy. Mindy!

Mindy. Wha–wha–wha–wha? We’re here? What year is it?

Guy. Mindy! You've slobbered all over my tuxedo!

Mindy. Sorry, Guy Raz. it was just such a smooth and calming ride.

Reggie. Cooo!

Valet. Good evening sir, welcome to the Fine Art and Refined Technology museum. May I park your umm, uhh, banana...motorbike?

Guy. Banana scooter!

Valet. Oh! My apologies, sir. May I park the banana scooter?

Mindy. Ooh, valet service…ooh la la!

Guy. Oki dokey, here you go.

(Soundbite of key jangle and bike pulling away.)

Mindy. Come on, this way Guy Raz! The party's inside!

Reggie. Coo!

(Soundbite of party and small chatter)

Mindy. Woah, look at this! Everyone who's anyone in the art world is here!

Reggie. Coo.

Mindy. So, you said this year's exhibition was on some new paint invented by a team of scientists?

Guy. That's right, Mindy.

Reggie. Coo!

Mindy. I don't get it. Why would scientists want to invent a new kind of paint? What's wrong with the old kind?

Guy. Well, there are a whole bunch of reasons. But most of the time scientists invent paint to either reflect or absorb light. Sort of like the highlight of last year's gala, vantablack.

Reggie. Coo!

Mindy. Ooh, vantablack. Is that the new super villain in the latest Revengers movie?

Reggie. Coo!

Guy. No Mindy, it's not a super-villain. It's a type of material coating.

Mindy. Oh. And a material coating is kinda like paint, right?

Guy. That's right. And it's used to cover the surface of an object. And this coating–

Mindy. Vantablack–

Guy. Yeah, vantablack, is used to help objects absorb light. In fact, this coating is able to absorb ninety-nine point ninety six percent of all the light that touches it.

Mindy. Woah! That coating sounds like a light-eating supervillian.

Reggie. Coo!

Guy. Yeah! Actually, I'm pretty sure that exhibition over there in the corner is covered in vantablack.

(Soundbite of beeping.)

Reggie. Coo!

Mindy. Woah, yeah, what is that exhibition over there, is that a satellite?

Reggie. Coo!

Guy. Well, it looks like it. And that would make sense because in 2015, the European Space Agency sent up a microsatellite covered in vantablack.

(Soundbite of burst.)

Mindy. Microsatellite…that's like one of those satellites that's smaller than a mini-fridge. right?

Guy. Exactly. And on the microsatellite the European Space Agency sent up, the scientists coated the area around the telescope's lens in vantablack to stop light from bouncing off the metal surface and distorting the images the telescope was taking.

Reggie. Coo!

Mindy. Oh, I get it. So the vantablack coating was used on the microsatellite to help absorb all of the excess light that might mess up pictures it was taking of outer space.

Guy. Exactly!

Reggie. Coo!

Mindy. Ugh, must get pretty warm though!

Guy. What do you mean, Mindy?

Mindy. Well, most of the time, things like rockets and space shuttles and satellites are painted white, because it reflects light and heat off the machine and back out into space!

Guy. Huh.

Mindy. But, if this super dark black coating absorbs almost all of the light that touches it, it would get pretty hot, pretty quick.

Reggie. Coo!

Guy. I guess you're right, Mindy. And I guess that's why the scientists who sent up the satellite only coated the area around the telescope's lens in vantablack and not the whole thing.

Mindy. Oh, so they could make sure it wouldn't overheat.

Guy. Exactly.

Mindy. Well, speaking of overheating, this boo boo beanie bopper coat of mine is really starting to seal in my juices, if you know what I mean.

Guy. Ugh!

Reggie. Coo!

Mindy. Here, help me take it off?

Guy. (Sigh.) Okay.

(Soundbite of squeaking and struggling.)

Mindy. Okay, just hold this sleeve here.

Guy. Er, okay…

Mindy. And let me just…and…

Reggie. Coo!

Mindy. Okay, on the count of three, pull. Okay?

Guy. What?

Mindy. One–

Reggie Coo!

Mindy. Two–

Guy. Oh no!

Mindy. Three!

(Soundbite of pulling.)

Reggie. Coo!

Mindy. Ah, there we go.

Reggie. Coo!

Mindy. Now where can I put my boo boo beanie bopper coat? Um…Oh look! A coat rack!

Reggie. Coo. Coo.

(Soundbite of walking.)

Guy. Uh, Mindy. I think that's an art installation.

(Soundbite of clattering.)

Mindy. Oh, sure it is, Guy Raz. And that blank white canvas over there is modern art. (Laughing.) I'm just gonna hang this up right here.

(Soundbite of squeaking.)

Mindy. There we go. You don't go anywhere coat!

Reggie. Coo!

Art Director. Ah-he-hem!

(Soundbite of clinking on glass.)

Art Director. Excuse me! Ladies and gentlemen, thank you all so much for attending the F.A.R.T. gala. We here at FART applaud you.

(Soundbite of applause.)

Mindy. Hey Guy Raz, you know what I just realized about the acronym F.A.R.T.?

Guy. Shh!

Mindy. Sorry, sorry.

(Soundbite of applause.)

Art Director. Today, we celebrate the breath-taking world of color science. Only a few years ago, the world was introduced to the darkest of black colors, vantablack!

(Soundbite of oohs and applause.)

Art Director. And this year, the Fine Arts and Refined Technologies Museum, in collaboration with Purdue University, proudly present…the brightest of white colors! Now, before we unveil, put on the protective eyewear you were given upon arrival.

Reggie. Coo!

(Soundbite of people putting on glasses.)

Guy. What?! Protective eyewear? I wasn't given any eyewear!

Mindy. Pfft! Protective eyewear. How white can it be?

Reggie. Coo. Coo!

Art Director. Everyone ready? And voila!

(Soundbite of oohs and ahhs and beam of light.)

Guy / Mindy. Gah!

Mindy. Quick, Guy Raz here, put on these blackout sunglasses.

Guy. Well Mindy, these sunglasses are so dark I can't see a thing!

Mindy. You're also not burning out your eyeballs! You can thank me later.

Guy. Ugh.

Reggie. Coo!

Art Director. Able to reflect ninety-five point five percent of all sunlight that touches it, this paint, made from acrylic, will be a revolution in how we keep buildings cool. Now and into the future.

(Soundbite of applause.)

Reggie. Coo!

Guy. Wow, that’s pretty incredible, Mindy.

Mindy. You’re telling me. Want to get a closer look?

Guy. Um, you’re going to have to guide the way.

Reggie. Coo!

Mindy. Alright, let me just make my way through this gaggle of art critics here.

(Soundbite of crowd.)

Mindy. Excuse me, excuse me, I’m sorry, coming through. Watch your back. Ooh, nice dress. Sorry, sorry I’m gonna just squeeze in here, thank you, thank you.

Guy. Sorry, ah, sorry.

Mindy. Sorry! (Gasps.) Here we are, Guy Raz. Lift your black out sunglasses and take a peek.

Guy. Alright, let’s see here. Huh.

Reggie. Coo!

Guy. Are you sure this is it, Mindy? It just looks like a blank canvas to me.

Reggie. Coo!

Mindy. But…it’s actually a canvas that has been painted with this brand new ultra white paint!

Guy. Huh.

Mindy. Let’s have a look at the artist's description here.

(Soundbite of clearing throat.)

Mindy. There are more than five hundred shades of white currently circulating in the art world. Off white, egg-shell white, crisp white, betty white…

Guy. Get to the part where they talk about the science, Mindy.

Mindy. Oh, okay, okay, okay. Um, blah blah blah, blah, blah, blah, blah. Ah, here we go. This paint was created by Xiulin Ruan, a medical engineer from Purdue University.

Reggie. Coo!

Guy. Wow, this is an original Ruan?

Mindy. Looks like it! It says here that the paint was tested over two days by painting an entire building in this super white paint.

Guy. And what did they find out?

Mindy. Well, it says here Guy Raz, that during the hottest part of the day, the surface covered in this paint was cooler than the surrounding air by a whole three point zero six degrees Fahrenheit or one point seven degrees celsius.

Guy. Wow!

Reggie. Coo!

Mindy. And that's not all, Guy Raz. It also says that at night the surface covered in this reflective paint was a whole eighteen degrees fahrenheit, or ten degrees celsius, cooler than the surrounding air.

Guy. That's incredible, Mindy!

Reggie. Coo!

Mindy. But didn't he, or maybe it was you, say that this paint was going to help fight climate change?

Guy. Yeah! Well, think about it for a second. A building covered in this paint would reflect more light, and light often creates heat which means that the building would also reflect more heat.

Mindy. And with all of that heat being kicked off of the building, the inside of the building would be cooler!

Guy. Exactly! Which in turn would reduce the amount of air conditioning you would need to cool the building.

Mindy. Wow. Well, I guess now I can see why all these art aficionados are so excited about this new paint!

Guy. Yeah!