

**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. Wow in the world.

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

**Mindy Thomas.** OK, Reg. Here we go.

(Soundbite of pigeon cooing.)

**Mindy.** A pinch of Pop Rocks...

(Soundbite of pigeon cooing.)

**Mindy.** ...A sprinkle of sprinkles - you know what? I'll just throw in the whole thing.

(Soundbite of pigeon cooing.)

**Mindy.** A couple of sticks of dynamite.

(Soundbite of pigeon cooing.)

**Mindy.** Yes, of course I'm not sure this is a good idea, Reggie.

(Soundbite of pigeon cooing.)

**Mindy.** You know what? Make it three.

(Soundbite of pigeon cooing.)

**Mindy.** And now for the secret ingredient - a couple of gallons of the old burp water.

(Soundbite of pigeon cooing.)

**Mindy.** And now we wait.

(Soundbite of rumbling.)

**Mindy.** That's not a good sound. Ah! Take cover!

(Soundbite of explosion.)

**Mindy.** OK, I think we're...

(Soundbite of glass breaking.)

**Mindy.** I think we're good.

(Soundbite of doorbell.)

**Mindy.** Coming. OK, Reg, take out the Pop Rocks and try adding in tart pops instead.

(Soundbite of doorbell.)

**Guy Raz.** Mindy!

(Soundbite of knocking.)

**Mindy.** Coming.

(Soundbite of door opening.)

**Mindy.** Guy Razzie!

**Guy.** Mindy, what is with all that noise? I thought we agreed - no exploding ants after seven p.m.

**Mindy.** Guy Raz, that wasn't exploding ants you heard. That was my latest taste sensation.

**Guy.** Your latest taste sensation?

**Mindy.** Yep, I'm trying to invent the world's craziest, most explodiest, most popping candy.

**Guy.** Right.

**Mindy.** I've tried everything, Guy Raz - Pop Rocks, popcorn, Popsicles.

(Soundbite of pigeon cooing.)

**Mindy.** Yeah, we even tried adding in some popcorn shrimp.

**Guy.** Uhh...

**Mindy.** And I think we finally got the recipe down!

**Guy.** Mindy!

(Soundbite of crash.)

**Mindy.** Well, almost. But I still can't come up with a name for it.

**Guy.** Well, maybe you just need a little inspiration.

**Mindy.** Yeah, but it's already dark outside. Where am I going to find inspiration at this hour?

**Guy.** Well, how about your backyard?

**Mindy.** My backyard? What are you talking about, Guy Raz?

**Guy.** Well, I was just reading the other day that one of the biggest explosions in the galaxy could be taking place right now.

**Mindy.** In my backyard?

**Guy.** Well, not exactly, Mindy. It's actually happening about six hundred and forty-two light-years away from your backyard.

**Mindy.** OK. Can you tell me what in the wow you're talking about?

**Guy.** Well, I could tell you. But I'd rather show you.

**Mindy.** Hey, that's my line.

**Guy.** Come on. Follow me.

**Mindy.** OK, but hang on a second - got to grab my 'How I Built a Bear' suit. It's freezing outside.

**Guy.** Your how I built - what?

**Mindy.** My 'How I Built a Bear' suit - you know, that place in the mall where you can stuff a floppy bear.

**Guy.** Oh. Yeah.

**Mindy.** So I bought the biggest one they had, and I stuff it with myself.

**Guy.** Oh, I see. You know, Mindy, they also sell coats at the mall.

**Mindy.** Yeah, I know. But it's hard to find any coats that make me look like a giant teddy bear in a sailor suit.

(Soundbite of zipper closing.)

**Mindy.** What do you think?

**Guy.** Uh...

**Mindy.** Eh?

**Guy.** Uh-huh.

(Soundbite of pigeon cooing.)

**Mindy.** Thanks, Reg.

(Soundbite of pigeon cooing.)

**Guy.** OK. Well, let's just go.

**Mindy.** OK - walk, walk, walk, walk, walk, walk, walk.

(Soundbite of door opening.)

**Mindy.** Guy Raz, it's freezing out here. Why are we doing this again?

**Guy.** We're going stargazing.

**Mindy.** Stargazing? I thought you said we're going explosion-gazing.

**Guy.** Well, we are, Mindy.

**Mindy.** So...

**Guy.** Well, do you see those three stars all lined up right there in the night sky?

**Mindy.** What? Oh, yeah. That's Orion's Belt, Guy Raz. It's all part of this larger constellation known as Orion.

**Guy.** That's right. Now, just look a little bit northwest of Orion's Belt, up towards what would be Orion's left shoulder, and you're going to see another bright star with a bit of a reddish tinge on it. And that star is called Betelgeuse.

**Mindy.** Guy Raz, be careful. You say that two more times and we can be in some serious trouble.

**Guy.** But, Mindy, that's the name of the star. The star is called Betelgeuse.

**Mindy.** Guy Raz, one more time and we're all going to...

**Guy.** Betelgeuse.

**Mindy.** Oh.

(Soundbite of crickets chirping.)

**Mindy.** OK, I guess we're fine.

**Guy.** Anyway, as I was saying, that star...

**Mindy.** You talking about Betelgeuse?

**Guy.** Yeah. Betelgeuse is showing signs that it might be about to explode in a celestial event known as a supernova.

**Mindy.** A supernova?

**Guy.** Yeah. And if it does start popping, we'd be able to see it right here from your backyard.

**Mindy.** Oh, so this is the big galactic explosion you were talking about before. The star Betelgeuse is going supernova?

**Guy.** Yeah.

**Mindy.** Well, I think we can do a little better than standing out here in my backyard with our necks craned up to the sky.

**Guy.** What do you mean, Mindy?

**Mindy.** I mean, I have a mostly functional Wow Machine in the garage with a fresh coat of butter. So I say we take this thing for a quick hop, skip and a six hundred and forty-eight light-year jump over to Betelgeuse! See this thing up close and personal. What do you say, little buddy?

**Guy.** Do I have much of a choice?

**Mindy.** All right, let me just open the hatch here.

(Soundbite of hatch creaking.)

**Mindy.** Wow Machine, sweet Wow Machine.

(Soundbite of water dropping.)

**Guy.** Mindy, why is the ceiling leaking?

**Mindy.** Oh, man. That's probably the hot tub I installed on the second floor of this thing. Hey, Reg.

(Soundbite of pigeon cooing.)

**Mindy.** Do you mind putting a bucket under that thing?

(Soundbite of pigeon cooing.)

**Mindy.** All right. Let me see here. Where are we going again?

**Guy.** Just set a course for the constellation of Orion.

**Mindy.** Got it. Orion - locked and loaded baked potato.

**Guy.** Oh, and make sure you set the date for seven hundred years in the past, OK?

**Mindy.** Because why?

**Guy.** Well, because the light from Betelgeuse takes seven hundred years to get to Earth. So if we want to see Betelgeuse up close, but in the same way that we see it back here on Earth...

**Mindy.** Oh, so then we would have to also go back seven hundred years. Got it.

(Soundbite of beeping.)

**Mindy.** OK. Orion, seven hundred years ago - everyone ready?

**Guy.** Oh, let me just strap in here with these - wait a minute. Are these my shoelaces?

**Mindy.** Uh...no.

**Guy.** Mindy!

**Mindy.** And here we go...and stop!

**Guy.** Mindy, Mindy, look out the window.

**Mindy.** Wow. I guess now we know why they call them red supergiants. This thing is enormous.

**Guy.** Wow. Isn't it? Betelgeuse is actually fourteen hundred times bigger than our sun.

**Mindy.** That is bonkerballs.

(Soundbite of pigeon cooing.)

**Guy.** And it's also up to fourteen hundred times as bright.

**Mindy.** Bet you're glad you're wearing those welder's goggles now, huh?

**Guy.** Well, yes, but...

**Mindy.** Is this a big but?

**Guy.** Huh?

**Mindy.** Never mind.

**Guy.** Well, Mindy, this actually isn't as bright as it could be. Betelgeuse has a tendency to brighten and then dim over and over and over again.

**Mindy.** Like when I take control of your dining room chandelier over a Thanksgiving dinner.

**Guy.** Well, yeah, even though that's a little bit annoying. But Betelgeuse goes through a similar process, this dimming and brightening cycle every fourteen months.

**Mindy.** Huh.

**Guy.** In fact, why don't we take a look? Where's the rewind button on this thing?

**Mindy.** Rewind button - I think I stuck it in the glove compartment last week. Let me just check here. Here it is.

**Guy.** OK, great. Well, let's just put this thing in rewind and keep an eye on what happens to our red supergiant, OK?

**Mindy.** All right! Three, two, one - be kind, rewind.

(Soundbite of rewind sound.)

**Mindy.** Whoa. Look at it go, Guy Raz. It's brightening.

**Guy.** And then fading.

**Mindy.** And then brightening.



**Guy.** And then fading.

**Mindy.** OK, that's enough.

**Guy.** But this not-so-little twinkling star could soon be coming to an end.

**Mindy.** What do you mean, coming to an end?

**Guy.** Well, astronomers from all over the world have noticed that in recent months, that dimming and brightening cycle that we just saw...

**Mindy.** Yeah?

**Guy.** ...has stopped.

**Mindy.** Stopped?

**Guy.** Yes! And from Earth, scientists have observed that Betelgeuse has gotten a lot dimmer than usual. And on top of that, it hasn't been brightening up again as it usually does.

**Mindy.** And so what does that mean for this star named Betelgeuse, Betelgeuse, Betelgeuse?

**Guy.** Well, it means that this supergiant could be going supernova any minute! And when it does go supernova, there's going to be such a big explosion that it won't only be visible from Earth during the day. It's going to shine as bright as the moon in the night sky.

**Mindy.** Bonkerballs.

(Soundbite of pigeon cooing.)

**Guy.** And it looks like you, me and Reggie have a front-row seat to the biggest light show in the galaxy.

**Mindy.** All right. Guy Raz, you get the popcorn. Reggie, you help me get the lawn chairs. Come on, everyone. We got to hustle. Walk, walk, walk, walk...

**Guy.** I'm on it, Mindy. Hey, where do you keep the popcorn again?

**Mindy.** It's all over the floor.

**Guy.** Oh, of course.

**Mindy.** We're back. Two lawn chairs and a telephone pole for Reggie.

(Soundbite of pigeon cooing.)

**Mindy.** Guy Raz? Guy Raz, how's that popcorn coming along?

**Guy.** Almost done. I hope you don't mind...it's covered in hair and dirt.

**Mindy.** Are you kidding? That's my favorite flavor. Mmm - not bad. And this bite has a Pop Rock stuck to it.

(Soundbite of pigeon cooing.)

**Mindy.** You want some?

**Guy.** I think I'm good.

**Mindy.** Suit yourself.

**Guy.** Anyway, all we have to do now is just sit back, relax and wait for the show to begin.

(Soundbite of pigeon cooing.)

**Mindy.** Guy Raz?

**Guy.** Yeah?

**Mindy.** When exactly is this supernova supposed to happen?

**Guy.** Oh, oh, any minute now, Mindy. Astronomers believe that Betelgeuse could go supernova any time from now to one hundred thousand years from now.

**Mindy.** A hundred thousand years? Guy Raz, that's, like, a billion Mindy years!

**Guy.** Well, in the grand cosmological scheme of things, it's actually not that long at all.

**Mindy.** OK. Well, I am not about to wait around here for one hundred thousand years when I've got a perfectly good, mostly functional Wow Machine with a fast-forward button that I just installed.

**Guy.** That's a good point, Mindy. But are you sure we're going to be safe in the Wow Machine when this thing finally explodes? I mean, we're kind of close.

**Mindy.** Yes, of course I'm not sure it's safe, Guy Raz. This thing is made out of corrugated cardboard. You ready? And fast forward!

(Soundbite of pigeon cooing.)

**Guy.** Whoa, whoa. Look at that! Betelgeuse just keeps getting dimmer and dimmer.

**Mindy.** Whoa. What's happening to it?

**Guy.** It seems like it's using up the last of its fuel and turning its core from helium into iron. And when all that helium is gone...

**Mindy.** Whoa.

**Guy.** Whoa.

**Wow Machine.** Warning, warning. Catastrophic failure of the papier-mache shield generator. Mindy's terrible idea alarm activated.

**Mindy.** These alarms are so annoying.

**Wow Machine.** Warning. Mindy's terrible idea alarm...

**Mindy.** OK. All right. Everything's fine. See? I told you that duct tape was going to hold, Guy Raz.

**Guy.** Duct tape?

(Soundbite of pigeon cooing.)

**Mindy.** Maybe I spoke too soon.

**Guy.** Mindy, I think it's time we probably headed home.

**Mindy.** Yeah, that's not a bad idea. Setting a course back to Earth. And here we - whoa.

(Soundbite of music.)

**Mindy.** And home. That was nice.

**Guy.** Mindy...

(Soundbite of crash.)

**Guy.** Looks like we made it back just in time. The only part of the Wow Machine still in one piece is the steering wheel, and that's just because you're holding it.

**Mindy.** Aw, man, it's going to take me hours to tape this whole thing back together.

**Guy.** But at least you did get some inspiration for your exploding candy, right?

**Mindy.** Well, I think I finally have a name for it.

**Guy.** Oh, yeah? What's that?

**Mindy.** I'll call it the supernova, like an exploding star in your mouth.

**Guy.** That sounds a little painful.

**Mindy.** Hey, Reg.

(Soundbite of pigeon cooing.)

**Mindy.** I just cracked open a new idea!

(Soundbite of pigeon cooing.)