Spin ½ Science Comedy
Physics/Astronomy show
For Ages 6-14

AM I FOR REAL, OR IS IT JUST ME?

BY

EVE ARMSTRONG

Characters

HIST 1 (CEM)
HOST 2 (RACHEL)
NICOLAUS COPERNICUS
COPERNICUS' UNCLE LUCAS
COPERNICUS' SISTER KATHARINA
ISAAC NEWTON
NEWTON'S MOTHER HANNAH
NEWTON'S GIRLFRIEND BETSY-ELIZABETH
MARIE CURIE
ARCHIMEDES

Four actors are needed to play all these roles.

HOSTS I – *Introduction*

CEM

Hi everyone! Welcome to Spin ½'s performance of *Physics Live*, or *Am I For Real or Is It Just Me?*. I'm Cem, the show's director, and this is Rachel, who wrote the script.

RACHEL

Hi.

CEM

We hope you'll like what we've got to show you today.

RACHEL

We sure do. We're going to talk about some people who contributed to science, and what their lives were like. (*Ad-lib*) We want to show you that the stuff you learn in science goes way beyond what you do in a classroom.

CEM

Absolutely. Your books teach you stuff that is so important for the rest of your life. In fact, my show is going to demonstrate how relevant science is to everyday –

RACHEL

(*Smiling, to keep a happy face for AUDIENCE*)

Actually, Cem might want to be a little careful there, in calling this *his* show. Since I wrote it, actually, it might be more accurate to call it *my* show. Just a side note. Go ahead, Cem, you were saying? (*Pause*)

CEM

(*Smiling, to AUDIENCE*)

Oh, well, it's true that Rachel did write it, but it takes more than a few scribbles on a notepad to set something on stage, now, doesn't it?

RACHEL (*Still smiling*)

It takes more than a few fancy stage directions too.

CEM

And more than a new computer we had to buy you, which is why we've been broke since November. (*It looks as though CEM and RACHEL may be about to go at it, but RACHEL snaps them out of it.*)

RACHEL

And now, we're excited to present to you some glimpses into the lives of scientists. The first, called *It's All In the Planet Timing*, revolves around a young Nicolaus Copernicus, who started studying the stars at an early age –

CEM

Um, Rachel, can I talk to you over here for a moment?

RACHEL

Sure ...

CEM (*To AUDIENCE*)

Just one second, everybody, we'll be right back. (*CEM brings RACHEL aside. To RACHEL*) What are you doing?

RACHEL

What do you mean?

CEM

You told them we're doing *Planet Timing*?

RACHEL

Yeah.

CEM

Rachel. We talked about this. No way are we doing the scientist skits.

RACHEL

Why not?

CEM

Because we're missing half our actors, that's why! Pat and Mo took off to Vegas this morning to elope, you know, to get married in secret, and Sylvia stopped for pizza on the way over – she's still at the restaurant eating. (*Pause*)

RACHEL

Pat and Mo are getting married? They didn't invite *me*!

CEM

Elope, Rachel. You don't invite people along when you elope, that's the point.

RACHEL (*Sigh*)

So what do you want to do?

CEM

I don't know, we can't do the skits – we don't have enough actors. Why don't we just stand up here and read from a laboratory manual? (*To AUDIENCE*) That sounds like a swell plan, right?

RACHEL

Cem, that would be so boring. No way are we doing that. (*To AUDIENCE*) Wouldn't that be boring? (*Ad-lib*)

CEM

It wouldn't be boring. I loved my physics lab manuals in school. *Loved them.*

RACHEL

Cem, you burned your lab manuals for that end-of-school bonfire last June. Right along with your underwear.

CEM

I did not! Those were the music sheets from my tuba lessons.

RACHEL

Do you have any other ideas?

CEM (*Thinks*)

Maybe we could go out on the street and find some new actors. This is New York, after all.

RACHEL

Wouldn't we have to pay them?

CEM

Maybe.

RACHEL

With what? We're poor as dirt.

CEM (*Thinks*)

Oh! Wait! (*To AUDIENCE*) Maybe you all could give us a hand! Any of you want to play some roles in our sketches? (*Ad-lib*) Great! Great, you can fill in for us.

RACHEL

So we can do the scenes after all!

CEM

Great! So this show gives you a glimpse into the lives of people who made really strange and useful scientific discoveries. The stories didn't necessarily happen exactly this way, but they're based around real groundbreaking ideas that these people had.

RACHEL

Let's start way back in the late 1480's. That's a little over five hundred years ago.

CEM

That's not very far back.

RACHEL

Well, compared to ancient times, I guess not. But it's far back enough for now, isn't it?

CEM

Sure. For this first scene, we just need one person to act with us. Who would like to play UNCLE LUCAS, the uncle of Nicolaus Copernicus and his sister Katharina? Copernicus became a famous astronomer when he grew up. (*Find someone, and CEM takes her aside and give her HILIGHTED SCRIPT. Explain to her UNCLE LUCAS' character: a big ol' lazy guy.*

RACHEL

We're about to visit the childhood home of our budding young scientist, Nicolaus Copernicus, the future astronomer. An astronomer is a scientist who studies the stars and all the other things up there in the sky. Copernicus is famous because he discovered that the Earth revolves around the Sun. Now, before he came along, everyone thought that the Sun revolved around the Earth. But that's not true! All the planets, including Earth, go around and around the Sun over the course of a year. This was an amazing discovery – it changed the way everyone thought about how our Universe works.

RACHEL (Cont'd)
Now, in this scene we're about to perform, Copernicus hasn't made this discovery yet. He's still a boy – he hasn't grown up yet to become an astronomer. But he's already fascinated by the stars and the sky. And he's got a big sister Katharina, who is not very happy with him at the moment. The Sun is setting, and it's just about time for bed --

CEM
Rachel, let's let the actors tell it.

RACHEL
Oh! Right ...

"PLANET-TIMING"

The Players:
NICOLAUS COPERNICUS – a ten -year-old boy
KATHARINA – his sister, a little older
UNCLE LUCAS (*Around age ten, COPERNICUS and his three older siblings went to live with their uncle.*)

Scene:
COPERNICUS stands alone with sundial on ground in front of him. Stares alternately out Center at horizon and down at Sundial. The Sun will set soon.

KATHARINA (*Off, Gasp*)
Nickie! Where are you? I'm going to kill you, Nick.
(COPERNICUS rolls eyes, while concentrating on sundial and sunset.)

KATHARINA (*Off)*
Nick, did you take my sundial again? You took it, didn't you?

COPERNICUS (*A little nervous*)
Be right in, Kate.

KATHERINA (*Off*)
You bring it back right now or I'm telling Uncle Lucas!

COPERNICUS
Just give me one minute, okay? One minute.

KATHARINA (*Enter, spies sundial*)
I knew it. I KNEW it!

COPERNICUS
Oh, c'mon, Kate, please? What do you need it for anyway, huh? The sun's just about setting, you can't use it again 'til tomorrow, anyway.

KATHERINA

It was a gift, Nickie. I want it back.

COPERNICUS

Just 30 more seconds. Venus is about to rise. I want to know its rise time. Just like 30 seconds, I swear.

KATHERINA

If you're trying to time things, use a clock, why dontcha? It's more accurate.

COPERNICUS

The spring-powered clock won't be invented for another thirty years, Genius.

(KATHERINA *takes exception to the "genius" insult, and grabs sundial indignantly. Starts polishing a smudge on it.*)

Kate! Put it back! Please?! You're going to ruin my experiment!

UNCLE LUCAS (*Enter*)

Kids, what's wrong? You'll bother the neighbors.

KATHERINA (*Whining*)

Uncle Lucas, Nickie stole my sundial again.

COPERNICUS

I wasn't hurting it. I'm trying to time Venus' rise time. That's all. Can't I borrow it? It's almost dark, anyway.

UNCLE LUCAS (*To KATHARINA*)

That seems fine. A sundial is worthless at night, Katie. Can't you share?

KATHARINA

(*Starry-eyed, caressing sundial*)

But it was a special gift.

UNCLE LUCAS

Oh, from Bartholemew?

COPERNICUS

(*Has been anxiously watching horizon; Exasperated*)

Great! The sun set. Now I have to start all over again tomorrow. (*Sarcastically sentimental*) Thank you, Bartholemew.

KATHARINA

Don't talk that way about him! Why do you have to measure the stupid stars anyway?

COPERNICUS

It's not a star, it's a planet. (*Looks*) There. There it is, it's just rising now. I just missed it. You couldn't give me ten more seconds?

UNCLE LUCAS (*Looking*)

That's a star, there, Nick.

COPERNICUS

No it isn't, it's a planet. It looks like a star, but it's not. It moves differently than the stars do.

UNCLE LUCAS *(Looking*)

How can you tell?

COPERNICUS

Oh, you can't just look at it once. You have to watch it for a long time, night after night, to notice a difference.

KATHERINA

Yeah, that's why he's out here making himself cross-eyed every night, after you and Auntie think you've put him to bed.

COPERNICUS

(*Ignoring her, to LUCAS*)

And you'll realize it moves differently than the stars. It also moves much more quickly. That's how you know it's closer to us than the stars are.

KATHARINA

Why would it be closer just because it's faster?

COPERNICUS

Don't you notice that closer objects move past you faster than ones that are farther away? Take a look, next time you and Bartholemew are out strolling hand-in-hand through town together.

KATHARINA

You keep Bartholemew out of this.

COPERNICUS (*Chanting*)

Katie and Bartholemew up in a tree. K-I-S-S-I-N-G. First comes love, --

KATHARINA

Stop it.

COPERNICUS

-- then comes marriage, then comes baby –

KATHARINA

Stop it!!

UNCLE LUCAS

Okay kids, it's time for bed anyway. Come on.

COPERNICUS

But don't you realize how important my research is?! It'll change everything! It'll change our view of the Universe as we know it! If my annoying sister would just let me borrow her friggin' sundial for TEN MINUTES, at this very moment I would be on the verge of proving that the earth is NOT the center of the Universe – that in reality, *the planets all revolve around the Sun!!*

(*KATHARINA gasps. Stunned pause.*)

UNCLE LUCAS

You must be tired, Nick.

COPERNICUS

No, I'm serious! Aristarchus thought it was a reasonable idea, and I think he's right. My timing measurements support the idea, anyway. We can understand why the planets move the way they do, if we imagine them all revolving around the Sun – and not the Earth!

UNCLE LUCAS

You probably need a better clock.

COPERNICUS

There *are no clocks yet*, Uncle Lucas. Why else would I settle for a sundial? I mean it, the Earth goes around the Sun! How come no one takes a kid seriously these days?

UNCLE LUCAS (*Shushing him*)

Do you want the neighbors to hear? Come on kids, let's get inside.

COPERNICUS (*Following him inside*)

Just you wait. I'm going to be famous someday. They'll be teaching my name in schools. They'll be honoring my name in plays 'n stuff. Some day.

KATHARINA

(*Following, still tenderly holding sundial*)

Sure they will, Li'l Squirt.

COPERNICUS

Shut up, Worm Face.

KATHERINA (*Chanting*)

Nickie and Venus up in a tree ... K-I-S-S-I-N-G ...

BLACKOUT

CEM

How 'bout we look at the life of another person who contributed to science? Let's visit Marie Curie, the discoverer of radioactivity.

RACHEL

But we're already visiting her house in Scene 3, remember?

CEM

Oh, yeah.

RACHEL

How about Christian Huygens? The guy who invented the clock?

CEM

We don't have the wig for it.

RACHEL

Oh ...

CEM

Oh! Queep. Ignatheus Queep. Let's do him.

RACHEL

Ignatheus Queep?

CEM

Sure! He's the guy who discovered that oranges can be approximated as orange.

RACHEL

What? Cem, everyone knows that oranges are orange.

CEM

But he *discovered* it.

RACHEL

Everybody discovers that.

CEM (*Sarcastic*)

Oh, just like everybody discovers that apples fall to the ground?

RACHEL

Yeah. Everyone knows that too, Cem. But not everyone understands much about the mechanism that makes them fall.

CEM

Mechanism?

RACHEL

As in gravity.

CEM

Gravity. Right.

RACHEL

Oh! Newton! Let's do Newton!

CEM

Newton?

RACHEL

Isaac Newton –the one who explained gravity.

CEM

Do we have a good wig?

RACHEL

It's not the wig that counts, Cem, it's who's *under* it that matters.

CEM (*Shrug*)

Okay. (*To AUDIENCE*) We need someone to play young Isaac's girlfriend, Betsy-Elizabeth. Who wants to play Betsy-Elizabeth?

(RACHEL takes Volunteer aside and gives her a little background, while CEM continues.)

CEM

Okay, so fast-forward from the previous scene about 180 years. It is now 1659. We are in the kitchen of Isaac Newton's house. Now, Isaac Newton discovered the law of gravity. Who can tell me what gravity is? (*Ad-lib.*) Right – it's the force that makes you stay glued to the ground, instead of floating up like a hot-air balloon. Have any of you ever wondered why you stay on the ground? Why you don't float up? (*Ad-lib*) Well, Newton wondered this. He finally figured out that gravity – the same thing that keeps us on the ground, is the same force that makes the Earth revolve around the Sun. It can explain both those things – even though those things seem so different from each other. Gravity is responsible for almost all motion throughout the entire Universe. That's kind of a big deal, right? (*Ad-lib*)
Okay, now for this scene. Isaac Newton hasn't made his discovery yet. He's still a boy. He's sixteen years old. (*To RACHEL*) So ... are we ready?

RACHEL

Sure.

CEM

Ladies, meet teenage Isaac Newton and Betsy-Elizabeth. (*Secretely*) Oh, and that's Isaac's mom (*points to HANNAH who has already taken her place hiding underneath table.*)

"LAWS OF ATTRACTION"

The Players

ISAAC NEWTON – a boy of 16
BETSY-ELIZABETH – his girlfriend
HANNAH AYSCOUGH – his mother

Scene

A sweet British summer evening in 1659. The kitchen of a house. Table Center. Two objects, one little and one big, both with low air resistance, sit near table edge. HANNAH hides under table. A scarf lies tossed on the floor in a corner somewhere.

At Rise

ISAAC tiptoes in, glances around warily, doesn't see HANNAH, motions for BETSY to follow.

ISAAC

Bets! (*Waits.*) *Bets!! C'mon!*

BETSY-ELIZABETH (*Offstage*)

Are you sure?

ISAAC

It's fine. She's gotta be asleep by now. Come on.

BETSY-ELIZABETH (*Enter*)

This is creepy, Isaac.

ISAAC

I'm telling you, it's fine. Where did you leave your scarf?

BETSY-ELIZABETH

Um ... Near the table, I think.

ISAAC

Okay, well, look around. I'll wait.

BETSY

Okay. (*Starts looking around for scarf. Doesn't see it on floor.*)

ISAAC

(Waiting for her, he accidentally brushes two objects off table with his elbow, and they fall to the floor. He looks at them with interest, picks them up, and drops them from the same height; watches them fall. Notices scarf and picks it up.)

Oh, here it is.

BETSY

Good! Let's get out of here. The dance started at 8. We're going to miss bobbing for apples!

ISAAC

Great. Hey, watch this. Have you ever noticed this?

BETSY

What?

ISAAC

Look. If I drop this light object and this heavier object, which of them do you think will hit the ground first?

BETSY

Uh ... The heavier one?

ISAAC

The heavier one? That's your prediction?

BETSY

Sure.

ISAAC

Watch. (*Demonstrates.*) Ha! Did you see that?!

BETSY

Umm... I couldn't tell.

ISAAC

Neither! They both hit the ground at the same time! Isn't that weird?

BETSY

Are you sure? It's hard to tell. I think the heavier one may have hit a second earlier.

ISAAC

No, I'm pretty sure. Here, I'll try it again.

(*Bends down to retrieve objects; suddenly spies HANNAH under table. Gasp and embarrassed pause; Sheepishly*)

Oh. Hi Mom.

(*BETSY gasps.*)

HANNAH (*Faking surprise*)

Oh! Hello Son! Fancy meeting you here, eh?

ISAAC (*Nervously*)

Um, Mom, I'd like you to meet Betsy-Elizabeth. Betsy-Elizabeth, this is my mom, Hannah.

BETSY

Happy to meet you, Mrs. Newton.

HANNAH (*Standing up*)

Ayscough.

BETSY

I beg your pardon, Ma'am?

HANNAH

Ms. Ayscough. My last name. It's not Newton.

BETSY

Oh! But ... ?

ISAAC

Dad died before I was born. It's a long story.

BETSY

Oh.

HANNAH

What are you two children doing alone together at this hour?

ISAAC

Calm down, Mom, we're just going to a dance.

BETSY (*Excited*)

They're having a dance at the apple orchard tonight! Isaac and I are going. It started at 8.

HANNAH

Then what are you doing here?

BETSY

I forgot my scarf last time I was here. We came in to pick it up.

HANNAH

Last time you were here? You've been here before?

BETSY (*Realizes her slip*)

Oops.

HANNAH (*Sigh*)

You children are too young to be traipsing about town together like this.

ISAAC

Too young? We're 16, Mom.

BETSY

17 in January.

HANNAH

I don't care if you're 67, young lady. It's not appropriate.

ISAAC

It's perfectly appropriate, Mom. Haven't you ever heard of the laws of attraction? It's natural.

HANNAH

It isn't. You two should be going to school and studying.

ISAAC

It's Friday night!

HANNAH *(Conceding*)

Well, maybe it's all right to take a break now and then, but certainly not to traipse around the neighborhood after dark. How about a nice sunny game of croquet tomorrow morning, instead?

BETSY

Um ...

ISAAC

Seriously, Mom, croquet is for babies.

HANNAH

What is the matter with croquet? My father taught me to play croquet when we lived on the camel farm in Kennebunkport.

(*tears up at the memory; dabs eyes*.)

He taught me everything there is to know about croquet. *Everything*. You remember your grandfather, don't you, Isaac?

ISAAC (*Shrugs*)

I remember he smelled like cantaloupe.

HANNAH

What?! What an outrageous thing to say! Your grandfather hated members of the melon family. They gave him hives.

ISAAC

Oh, sorry. Grapefruit. Not canteloupe.

HANNAH

Oh yes.

(*Tearing up again at the memory*.)

Your grandfather and his grapefruit. He taught me how to slice it just right, so that the peel came off in one long spiral. He taught me everything about grapefruit. *Everything*. Did you know that?

ISAAC (*Rolling eyes*)

The entire town knows that by now, Mom.

BETSY

I didn't know that.

ISAAC

Well, here's something else you didn't know.

(*Raises the two objects*)

Watch this. Mom, when I drop these two things, which do you think will hit the ground first – the lighter one or the heavier one?

HANNAH (*Thinks*)

The lighter one.

ISAAC

The *lighter* one?!

HANNAH (*Shrugs*)

It must be a trick question, or you wouldn't have asked.

ISAAC

No, it's no trick. Watch. (*Demonstrates*.) So?

HANNAH

It was hard to tell.

ISAAC
No, it's not hard to tell! Why does everyone say it's hard to tell?

HANNAH
Well, which is it, then?

ISAAC
It's neither! Neither! They both hit the ground at the same time! Gravity acts the same way on both of them! Isn't that weird? I wonder what it means. What does it *mean*? (*Pause*)

BETSY
So ... Are you ready to go now?

HANNAH
Well, if you children insist on dancing the night away, I'll be your chaperone. (*Grabs coat*) You're too young to have a girlfriend.

ISAAC
Oh, come on, Mom, you can't fight this. It's the law! The gravity of one material object attracts a second material object. It's simple!

HANNAH
Well, now it's more complicated because I'm coming.

ISAAC
You bet it's more complicated. You're turing this into a three-body problem.

BETSY
A three-body problem?

ISAAC
Mom, the three-body problem is way complicated. College students don't even study it. The three-body problem is for physics graduate students.

HANNAH
Nonsense, you've always been a precocious child.

BETSY
Um, what is the three-body problem?

ISAAC
It's the gravitational formulation when you have *three* things to consider, rather than just two. Like, when you're talking about a person being gravitationally attracted to the ground – that's just two things – person and Earth. When you're talking about Earth and the Sun – that's still just two things. But when you talk about *three* things all being attracted to each other, gravity's harder to understand.

BETSY
That does sound complicated.

ISAAC

Seriously, Mom, you're making this a lot harder than it could be. The dance is a five-minute walk away. There will be tons of people there. We're just going to have a good time. I would even give you the phone number, except phones won't be invented for another couple centuries. (*Pause*) Have I ever given you a reason not to trust me? (*Pause*)

HANNAH (*Sigh, removes coat*)

I guess you haven't. It's just hard to see my little boy grow up. (*Pause*) You two be careful.

ISAAC

Thanks, Mom.

BETSY

Yeah, thanks.

HANNAH

Don't stay out too late.

BETSY

We won't.

HANNAH (*To ISAAC*)

Walk her home after.

ISAAC

I will.

(*He and BETSY prepare to leave. ISAAC has a sudden thought*)

Hey, wait a second, what was I just saying about gravity between .. um ... your feet and the ground, versus ... gravity between the sun and ...

(*struggling to recall*)

What did I say? What was it?

BETSY

What?

(*Pause. ISAAC racks his brain*)

Come on, we're going to miss the free food!

ISAAC (*Shrugs*)

Well, I guess if it was important, I'll remember it later. G'night, Mom.

HANNAH

Good night, kids. Have fun.

BLACKOUT

RACHEL

And now we come to our final scene of the day. What happens when we toss these scientists, with all their brilliant ways of thinking, in the mix together? Will they agree or will there be conflict? What do you predict? (*Ad-lib*) Well, let's find out ...Welcome to the home of Marie Curie and Nicolaus Copernicus. Don't ask me how these two managed to get hitched, considering they lived a few hundred years apart, but hey. Weirder things have happened. And, they're about to have friends over for dinner. Archimedes the Butler is helping them with preparations. Archimedes is the ancient scientist and mathematician you may have heard about. He has an incredible gift for math, especially geometry – that's the study different shapes. Like circles 'n triangles 'n stuff.

CEM (*Snickering*)

Yeah, and he thought the Earth was the center of the Universe.

RACHEL

Yeah, but don't forget, he lived during a time when they didn't have very accurate measuring instruments. So it would have been hard for anyone to figure out the truth.

CEM

I guess.

RACHEL

We need a third volunteer actor for this one. Who wants to play Albert Einstein?

(*Get volunteer. CEM takes volunteer aside, gives script, explains a little about it, as RACHEL continues to AUDIENCE.*)

So now Copernicus the astronomer, who you met when he was a boy, is all grown up. He's married to Marie Curie. Marie discovered that tiny, tiny particles exist – particles that are so small that you can't even see them. Like atoms. She also discovered radioactivity. Anyone know what radioactivity is? (*Ad-lib*) A radioactive atom is an atom that releases energy all on its own. It can be dangerous – you don't want to let your body absorb more radiation than it should. Marie Curie exposed her body to this radiation for many years, which eventually harmed her and may have led to her death. The dangers of radiation were not known at the time when she was alive. So you could say that she truly gave her life to science.

Then we have Albert Einstein. He created the law of relativity. That means, basically, that everyone will see the world differently depending on who they are. For example, take a tree. Say a squirrel is sitting in the tree, and a possum is crawling along the ground past the tree. To the squirrel, it seems like the tree is standing still. But to the possum crawling by, it seems like the tree is moving backwards. Does that make sense? (*Ad-lib*) So you have two different ways of seeing the tree. The way you see a tree is relative to how you're moving. That's what he means when he says "it's all relative."

And finally, we have Isaac Newton, the gravity guy from the last scene. He's all grown up now too. (*To CEM*) We ready?

CEM

Good to go.

RACHEL

Ladies 'n gentlemen, for our final scene of the day, welcome to the home of Nicolaus and Marie. Oh, and Archimedes, their Butler-slash-mathematician.

"TWO'S COMPANY, SEVEN'S A BATTLE"

The Players

ARCHIMEDES: The Butler. And the ancient mathematician. Favored earth-centered Universe.
COPERNICUS: 1500's astonomer. Favored a sun-centered Universe.
MARIE CURIE: Discovered radioactivity
NEWTON: Universal law of gravity
EINSTEIN: Theory of Relativity

Scene

The dining room of NICOLAUS COPERNICUS and MARIE CURIE.

At Rise

COPERNICUS and CURIE are busy setting table for dinner guests. CURIE seems a bit on-edge. Now and then, CURIE makes a funny little buzzing noise ("Zzzzzktz!") and a tick – which we later realize is a result of all the radiation she's subjecting herself to.

CURIE

Dear, could you hand me another spoon?

COPERNICUS (*Arranging dishes*)

Sure.

(*Hands her spoon*)

Where do you think the serving tray ought to go? On the side or in the center?

CURIE

I don't know, you pick.

COPERNICUS

Center. I'd say the center.

CURIE

Why does it matter?

COPERNICUS

We want everyone to be able to reach it. If people can't reach it, they can't eat. Everyone will die.

CURIE

No one's dying, Hon. Relax. Help me with the napkins. (*Tick*)

COPERNICUS

You're nervous.

CURIE

I am not (*tick*)

COPERNICUS

No use hiding it, Sweets, it's palpable. It's like electricity through the air when you're nervous.

ARCHIMEDES (*Enter*)

The cornish game hen will be prepared presently, Madame.

CURIE

Fantastic, thanks, Arch.

COPERNICUS

Hey, Arch, what do you think: Serving tray in the center or on the side?

ARCHIMEDES (*Considers*)

On the side, I would suggest, Sir.

COPERNICUS

Why?

ARCHIMEDES

Sir, as the serving tray is not the most important part of the meal, it would seem erroneous to treat it as such.

COPERNICUS

Sure it's the most important part of the meal! The serving tray is our source of sustenance!

ARCHIMEDES

The most important part of the meal, in my humble, uneducated opinion, Sir, are the *people attending* the meal.

EINSTEIN *(Enter*)

Hello everyone!

CURIE

Oh!

COPERNICUS

Al! Didn't Archimedes show you in?

EINSTEIN

No, I let myself in. I hope it is all right.

CURIE

Of course! Sorry there was no one around to show you in (*gives ARCH a look*)

ARCHIMEDES

Madame, I was attending to proper slicing of cantaloupe cubes.

EINSTEIN

It was no trouble.

COPERNICUS

Albert Einstein, meet Archimedes, Archimedes, meet Albert Einstein. Al's an old buddy of mine from law school.

ARCH

Law school, Sir?

CURIE

Dear, you never went to law school.

COPERNICUS

Sure we did. We crashed the law school cafeteria every morning, on our way to the observatory. They never once asked to see our student ID's. Best bacon and eggs in Manhattan.

EINSTEIN (*Shrugs*)

I prefer McDonald's.

ARCH

(*To EINSTEIN, with a slight bow*)

It is an unprecedented and delightful honor to make your acquaintance, Sir.

EINSTEIN

Thank you. (*Amused*) Why do you talk so funny? You sound like you're from the olden days!

COPERNICUS (*Agreeing*)

In more ways than one.

(*Enter NEWTON*)

Say, Al, what do you think about this serving tray here, huh? Should it go in the center or on the side?

NEWTON

Hello everyone.

CURIE\

Isaac!

NEWTON

The door was wide open. I hope it's okay, I just walked on in.

CURIE

Of course! Isaac Newton, Albert Einstein, and Archimedes.

COPERNICUS

Newt, great. You can help us out here. Serving tray in the center or on the side?

CURIE

(*Aside, to EINSTEIN*)

He's been fussing over these table settings all afternoon.

COPERNICUS

I'm not fussing, I'm pondering deeply.

EINSTEIN

Center or side? Nick, it depends on your point of view. There is no real center or real side.

COPERNICUS

Come again?

EINSTEIN

It is all relative. To one person, it may seem as though the tray is at the center. To another it may seem that it is at the side. No one is any more correct than anyone else. That's what relativity means. (*Pause*)

COPERNICUS

That's screwy, Al.

ARCHIMEDES

That concept does ring as rather odd, Sir. The truth of the matter is, that if you were to carefully map out, in geometric figures, the layout of the table, it would be straightforward to find the serving tray in one of the two locations, rather than either at the same time. Allow me to demonstrate

(*whips out a ruler and starts measuring from edge of table to center.*)

NEWTON

Totally true, Arch. I don't get this relativity talk. And I'm with Nick. Stick the tray at the center.

ARCHIMEDES (*Finishes measuring*)

There we are – the center of the table is precisely three feet from the edge. But naturally the proper placement of the serving tray should be to the side, so as not to place undue emphasis on its importance to our meal.

(*EINSTEIN starts measuring table with his own ruler.*)

COPERNICUS

The serving tray is *central* to the meal, Archimedes. How can you argue with that? Marie, am I right?

CURIE (*Shrugs*)

I don't care. But when it comes to setting the table, I'll go with Arch. I mean, is he the butler or isn't he?

EINSTEIN (*Finishes measuring*)

Interesting. When I measure it, the center of the table is not three feet from the edge. It's two and a half feet.

COPERNICUS

What?

(*They compare rulers*)

Well, our rulers are different lengths, that's all.

CURIE

Whose is right? (*Pause*)

COPERNICUS (*Unsure*)

It's hard to say ...

EINSTEIN

Exactly. Each of us will measure differently, depending on our point of view. You cannot place that serving tray exactly at the center or exactly *anywhere*. The center is relative.

CURIE (*Tick*)

I think you're all missing the point here. If we were to study the tray from a microscopic point of view, we would realize that it is not *where* it's located, but what is *on it* that counts. We should all be wary of what we put into our bodies. (*Tick*)

NEWTON

(*Noting her ticks*)

Are you all right, Marie?

CURIE

Fine.

COPERNICUS

It's that weird ticking of hers, it always gets worse when she's nervous.

CURIE

I'm *fine*.

NEWTON

Ticks?

COPERNICUS

It's almost like she's radioactive.

CURIE

I've started getting little buzzing sensations, after working in my lab all day long. No big deal, I'm fine.

NEWTON

Maybe your lab materials are seeping into your body, kinda like the food we're about to put on the serving tray.

ARCHIMEDES

That's an odd idea, if you don't mind my saying so, Sir. It is a well-known fact that our bodies are *separate* from our environment.

COPERNICUS

It may have been well known in the second century BC, Arch, but not anymore. (*Sudden thought*) Hey wait a second, how did you get hold of a ruler? Calibrated rulers hadn't been invented yet in 250BC.

ARCHIMEDES

I took the liberty of borrowing it from the desk in your home office, Sir.

COPERNICUS

Oh. (*To EVERYONE*) Well, the point is whether measurements agree. We all want to agree on where the center of the table is.

ARCHIMEDES

May I be so bold as to offer a suggestion. Instead of measuring, why shall we not simply think about it logically? In theory, we can all imagine the concept of the center of a table, can't we? The center of a

ARCHIMEDES (Cont'd)
table is the most important point on the table. Agreed? (*Everyone agrees*.) So why don't we each indicate the most important point on the table?

(*ARCHIMEDES watches as COP points to center of table, CURIE point somewhere else, NEWTON point to a leg, EINSTEIN refrains from pointing anywhere*.)

How interesting. No one agrees.

EINSTEIN
Exactly my point. Everyone has a different idea of what's most important. No one's more correct than anyone else.

ARCHIMEDES
Sir Newton, you are pointing nowhere near the table's center. Why?

NEWTON
You asked about the most important part of the table. The leg is the most important part, not the tabletop. Without the leg, the tabletop falls, under the pull of gravity, onto the floor – no more table. Gravity governs the movement of all things.

ARCHIMEDES
Interesting. Madame, where are you pointing?

CURIE
Anywhere on the table's surface, doesn't really matter. Really, I'm pointing *inside* it. It's the individual little electrons and protons that make up the table, that give it its table-ness. Sub-atomic particles define the nature of *everything*.

ARCHIMEDES
I mean no disrespect, again, Madame, but I must insist that that is nonsense. How do you know that electrons exist when you cannot *see* them?

CURIE (*Rolls eyes*)
Oh, here we go with Mister Logic. Hon, you haven't even heard of a microscope yet, all right? Or radioactivity.

EINSTEIN
He hasn't?

CURIE (*Tick*)
Seriously, he's practically from the stone age. (*Tick*)

ARCHIMEDES
What's radioactivity?

COPERINCUS
It's the reason she's doing that involuntary buzzing all the time.

CURIE
I'm *fine!!*

COPERNICUS
That radiation is seeping into you, Marie. I'm worried about you.

CURIE
Well I'm worried about your eyes. Always staring at the Sun, your eyesight is getting worse by the day.

COPERNICUS
It's important work! (*Proudly*) Yesterday I timed the precise rotation period of the Earth on its axis.

ARCHIMEDES
Axis?

COPERNICUS
Yes! The Earth rotates once per day on its axis – that is the reason we get night and day!

ARCHIMEDES
That is absurd, Sir. The Earth is the center of all things. It does not rotate, it does not revolve – it does not move. It is a perfect stationary sphere.

CURIE
(*Bracing for an argument*)
Uh-oh, here we go.

COPERNICUS (*To ARCHIMEDES*)
I didn't say Earth wasn't perfect, Arch. There's nothing perfect or imperfect about it.

ARCHIMEDES
Sir, I beg your pardon, but in order for the Earth to be perfect, it must be stationary.

EINSTEIN
Here we go again. Everything is relative. To one person these things are perfect, to another they are not.

NEWTON
Why are you harping on little details? Don't you all see the bigger picture – that we go around and around the Sun for the same reason that that serving tray stays on the table you place it on? Gravity is responsible for all of it. All of it!

ARCHIMEDES
Wait a minute – *who* did you say is revolving around *who*?

NEWTON
We. Revolving around the Sun.

ARCHIMEDES
(*Argument is getting heated*)
My dear young man, you have that backwards. The Sun revolves around Us. (*Sudden thought. Gasp.)* Goodness! The cornish game hen! (*Hastily exits.*)

NEWTON

What is he talking about? That's insane. I've gone over the data again and again, and I come back to the same conclusion: everything can be explained if we stick the Sun at the center.

(*Enter ARCHIMEDES, who motions to CURIE, indicating dinner is ready. Takes serving tray and piles it with food.*)

EINSTEIN

You can look at it both ways. It's all –

NEWTON (*Sarcastic*)

Relative. Relative, relative, relative. Isn't there any other word you know?

CURIE

Um, everyone, maybe we'd like to take our seats now.

COPERNICUS

Wait a second, how did we get off the subject? We were talking about a serving tray on the table, not the Sun in the Universe.

ARCHIMEDES

(*While busy with tray*)

The Sun is NOT the center of the Universe!

COPERNICUS

I'm not talking about the Sun, Arch, I'm talking about a serving tray!

CURIE

Everyone, dinner is ready.

COPERNICUS

Where should we put the serving tray?!

CURIE

Who cares?!

COPERNICUS

I want this meal to go well!

CURIE

Then everybody *sit down*!!!

(*Someone jostles ARCHIMEDES' elbow and the serving tray, plus whatever's on it, tumbles to the floor. Long pause as everyone stares at tray.*)

NEWTON

What'd I tell you. Gravity governs all. (*Pause*)

CURIE (*Sigh*)

Well, we still have wine ... ?

NEWTON
No thanks, Marie. Gravity governs all ... and wine stains.

BLACKOUT