Science Halloween Spooktacular

IACT Fall Meeting 2009

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(adapted from a similar demo show by Beth Wolfe)

As I walked into the lab on Halloween night

I spied a chemistry teacher, such an eerie sight.

But when she turned around, I was shocked to see

A mutant creature staring back at me.

TONIC WATER

*Hello,* she cackled, *welcome to my lair.*

*Now sit right down and don’t have a care.*

*I hope you can keep up with my poetic vernacular*

*As you join me in this Science Halloween Spooktacular.*

FLASH PAPER

My eyes grew large, my mouth flew open.

Could she do something cool, I sure was hopin’.

*I’d like to get to know you,* she said with a smile.

*So I hope you can stay for awhile.*

She stirred the potion that bubbled and foamed

CAULDRON

And around the room she started to roam.

CO2 BUBBLES

This night in the lab was going so well,

I wondered what would happen in the next spell.

The eerie teacher asked for a volunteer

To challenge her once again this year

A dish with a liquid on which a cup we must float

And see whose cup lasts, who will have the rights to gloat.

STYROFOAM/ACETONE POLYMER DEMO

*Haaaahaaa* she cackled as she won using magic!

*Not knowing the science would be very tragic.*

Then I saw a staircase of light

As she poured the ghosts out, I got quite a fright.

CANDLE DENSITY DEMO

All this magic had caused quite a thirst.

My throat grew dry, I was felling quite cursed.

So I turned to the teacher and asked “Do you think

It would be possible for you to get me a drink?”

*A drink?* She smiled and rummaged around.

*I think you will enjoy the drink I have found*.

WATER 🡪 GRAPE JUICE 🡪 MILK

*How about some water?*

*Or some grape juice?*

*Maybe some lemonade?*

*Or some Mountain Dew?*

*Would you like some melted butter?*

*No? That is not all. I can get some some Pepto Bismol!*

“I think I would like something else,” I said

“Can we go back to the lemonade?”

LEMONADE DEMO

So she poured some water into a flask

Where a very faint yellow tone was cast.

*That’s not right, it must be stronger.*

*Give me some time – just a moment longer.*

* *Orange solution*

*No, no, no, this just won’t do.*

So she poured out the content of beaker number two.

When she poured it again it rushed like a flood,

And the beaker looked like it was filled with blood!

* Red solution

“Oh gross” I yelled, “I am not drinking that!

What do you think, I’m a vampire bat?”

*Hold on,* she said, *I know how to fix it.*

*I just need some time to pour and mix it.*

This lemonade thing had been a disaster thus far

And on her fourth try it looked like tar!

* Black Solution

*There’s just one more step, now don’t be afraid…*

* Pause for Yellow Solution

And the fifth beaker appeared to be lemonade.

“Thanks,” I said, “it’s been quite a treat.

Your science tricks are really neat.

I’m sure glad I came; I had lots of fun,

But it’s getting late, so I’d better run.”

*Oh no,* she said, *You can’t leave*

*I’ve got things to show you that you won’t believe*

With that she started with more of her potions

And stirred and shook with furious motions

I became amazed and filled with fright

When a rainbow appeared through a cloud of white

UNIVERSAL INDICATOR / CO2 RAINBOW FLASK DEMO

She pointed to a cylinder

That contained knotted strings

When she pulled them out

I saw the most amazing things

*Ghost crystals* she said *are the secret distraction*

*You can’t see them in the water because they have the same index of refraction*

*Finished with your homework?*

*Don’t tell me you’re not!*

*If you don’t get it done,*

*I will send you where it’s hot!*

LYCOPODIUM PUMPKIN

And then I realized her horrible plot,

To take over the world and I said, “I think not!”

“I have learned some science magic of my own,

That wasn’t water in that dish, that was acetone!

I know how you won,

You really just cheated.”

And she melted away

Sad and defeated

This Halloween rhyme is getting quite long

Thank you for listening, I hope we didn’t do you wrong.

Keep studying hard,

Make sure you’re doing your best

Or Dr. Eve L. Genius will be the one to write your next test!

The End (HAPPY HALLOWEEN SIGN & ELEPHANT TOOTHPASTE)