

Variations on a Leaf

PUPPET SHOW

Characters: Henry, Goldie Goldenrod, Chlorophyll (green circle with pipe cleaner arms)

Props: CO₂ (blob with CO₂ label), Water Drop (blue drop), Sun

Henry

[examining Goldenrod puppet] Nope, not here.
[examines Goldenrod from the other side]
Not here either.

Goldie Goldenrod

Have you lost something?

Henry

Huh! Who said that?

Goldenrod

I did. You seem to be looking for something.

Henry

Well, I was, but I...I didn't lose anything. I was just...well, oh dear, I uh, I was just looking for your mouth.

Goldenrod

For my mouth! But why?

Henry

Well, I wanted to know how you eat. I mean, you're a living thing, right?

Goldenrod

Right.

Henry

Well, I know living things have to get energy from food to live and grow, but I just can't figure out how **you** eat your food.

Goldenrod

We plants don't **eat** food. We **make** food.
We're the Producers.

Henry

Producers? You make food? Well, what do you use to make it?

Goldenrod

Oh, it takes a little sunshine and a little water.
And I couldn't make food without the air around me and the chlorophyll inside me.

Henry

The **what** inside you?

Goldenrod

Chlorophyll. Why, chlorophyll is the most important thing we green plants have. It's what colors my leaves this gorgeous green. And, it's the secret to our food-making success.

Henry

Well, I wondered what your secret was. But I'm still not sure I understand.

Goldenrod

Well then, maybe this little song and dance I wrote with a friend of mine will help. You ready, Chlorophyll?

Chlorophyll

[offstage] I'm ready!

Goldenrod

A one, and a two, and hit it.
[Chlorophyll appears. Goldenrod exits]

Chlorophyll

Chlorophyll's the name, and making food's the game.

[To the tune of "Oh My Darling, Clementine"]

First I take some
carbon dioxide
which I get
straight from the air.

[CO₂ pops up]

And I mix it
with some water
for the food I
will prepare.

[Water pops up]

Then I capture
me some sunshine

[Sun pops up]

and I mix
the whole thing up.

And Presto,
there is plant food
good for breakfast,
lunch, or sup.

So remember
how important
these three friends
all are to me.

With their help I
find I'm able
to make plant food easily.

Henry

Bravo, bravo! I'd like to hear that again.

Chlorophyll

Sure. But this time I'd like to have everyone join in. How about it?

Henry

Great. I'll get us started. With a one and a two, and hit it. *[Repeat song; display words on a large poster]*

Chlorophyll

[following song] Now I'd better get back in Goldie's leaves where I belong.

Henry

Thanks for the show.

Chlorophyll

Anytime, anytime. Hollywood, here I come!
[Chlorophyll exits; Goldenrod re-enters]

Henry

That was great, Goldie. But now that I know **how** you green plants make food, tell me **where** you make it. Where is this food factory?

Goldenrod

Food factory? I like that! I guess you could say my leaves are the food factories. I gather water through my roots and bring it to my leaves. My leaves are specially designed to gather the sunlight and air I need to make my food, and that's where most of my chlorophyll is, too. I couldn't do it without my leaves and my chlorophyll.

Henry

So, I guess if you have chlorophyll, you can get your "fill" without even eating.

Goldenrod

Right! And now I'd better get back to producing food before I get hungry.

Henry

And since I'm not a producer, I need to get home for lunch! Thanks for everything, Goldie. Bye. *[both exit]*

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