



Photosynthesis Play

Cast of Characters:

Narrator, Sun/Sunlight, Water (H₂O), Sugar, Carbon Dioxide (CO₂), Oxygen (O₂), Chloroplasts in the Leaf of the Plant

Setting: A field on a summer day

Narrator: There once was stunning looking plant named PLANTY. It was oh so green and so full of life. It was a happy plant, spending his days with its many other plant friends. ...But, one day, Planty got REALLY hungry.

(Sun and sunlight stand together on one side of the room and Planty the plant stands on the other side of the room.)

Planty: I am starving! I know my friend Eric the Human and Vanessa the Cat eat with their mouth,.... but do you see a mouth on this face?

Nope!

Narrator: Planty sure was hungry, so it lifted its leaves towards the sun.

Sun/Sunlight: What a beautiful day! Let me shoot my rays of sunlight down upon the Earth.

Here I come! *(The sunlight points in the direction of the plant)*

Planty: Mmmmm, mmmmh good!!! Sunlight, is so yummy!
(Sunlight high fives Planty's leaf hand).

Narrator: The sunlight hits Planty's chloroplast and lunch is now being made!

Planty: I have begun to process of making lunch with the sunlight, but I am thirsty, too!

Water...Where are you? Can you come here please?

Water: Sure thing. I'm on my way. I will travel through your roots.
(*Water rises from the ground up.*)

Planty: Hmm... I have sunlight and water, but something is still missing...now, what could it be? (*point finger to forehead and tap 3 times*)

Aaaah...some carbon dioxide! Come on CO₂. My leaves need CO₂.
(*Planty waves his arms & fingers like branches & leaves*).

Carbon Dioxide: Here I..... Cooooommmme!! from the atmosphere!
(*Carbon Dioxide flows towards Planty.*)

Narrator: The process of photosynthesis is almost complete! Now, the sunlight, water, and carbon dioxide need to perform chemical reactions to produce Planty's lunch.

(*Water, Sunlight and Carbon Dioxide link arms and walk in a circle around Planty.*)

Planty: I am feeling a chemical reaction happening! That must be my lunch! My sugary lunch!
(*Water, Sunlight and Carbon Dioxide sit down*)

(*Sugar stands...*)

Sugar: I am lunch! I can feed Planty's cells. Don't I look delicious?
(*Planty pretends to eat Sugar.*)

Planty: That was delicious, but now I have to take care of the oxygen I created. (*Oxygen molecule comes and stands next to Planty.*)

Oxygen(O₂): Part of me stays in Planty to help him get energy in his cells. But most of me exits Planty through the leaves. The good news is that I am then valuable to animals and humans.

(*Oxygen walks away from Planty into the atmosphere.*)

Narrator: As you can see, plants can make their own food through the process of photosynthesis. Thank you, Planty for demonstrating!

The End!