

W2.2 PLAYING PHOTOSYNTHESIS

Text

CAST OF CHARACTERS:

Narrator, Sun, Sunlight, Water (H₂O), Sugar (C₆H₁₂O₆), Carbon Dioxide (CO₂), Oxygen (O₂), Norman the Plant.

SETTING:

A garden (students may pick the specific location).

Narrator: There once was a handsome plant named Norman. He was green and lush. He was a happy plant with many other plant friends. But, one day he got really hungry. *(Sun and sunlight stand together on one side of the room and Norman the plant stands on the other side of the room.)*

Norman: I am starving! My friend Bob the Human and Vanessa the Cat eat with their mouth, but do you see a mouth on this face? Nope!

Narrator: Norman sure was hungry, so he lifted his leaves towards the sun.

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

Sunlight: Here I come! *(The sunlight moves quickly from the sun towards the plant)*.

Norman: Mmmmm, sunlight, yummy! *(Sunlight high fives Norman's leaf (his hand)).*

Narrator: The sunlight hits Norman's chloroplast and his lunch has begun.

Norman: I have begun to process the sunlight, but I am thirsty too. Water come here!

Water: I will travel through your roots and up your stem. *(Water comes towards Norman's roots)*

Norman: I have sunlight and water, now I need to suck in some carbon dioxide through my many stomata. *(Norman opens his mouth for the stomata).*

Carbon Dioxide: Here I come from the atmosphere! *(Carbon Dioxide flows towards Norman)*

Narrator: The process of photosynthesis is almost complete! Now, the sunlight, water, and carbon dioxide need to perform chemical reactions to produce Norman's lunch. *(Water, Sunlight and Carbon Dioxide link arms and walk in a circle around Norman)*

Norman: I am feeling a chemical reaction occurring. My lunch! My sugary lunch! *(Water, Sunlight and Carbon Dioxide sit down and out runs Sugar)*

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

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

Oxygen: Part of me stays in Norman to help him get energy in his cells. But most of me leaves Norman through his stomata. The good news is that I am then valuable to animals and humans. *(Oxygen walks away from Norman into the atmosphere)*

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

The End