



# Sunshine Sally



**Instructions: Read through the story and correct each underlined phrase. Write your correction in your notebook on the right side.**

Sunshine Sally was so excited to learn everything she could about how the cells of living things get the energy they need to function. She knew that all the energy had to come from somewhere, so she asked a friend. She replied, “Almost all the Earth’s energy originally comes from the (1) air we breathe. Sunshine Sally was so grateful to know where the story started.

One day Sally was eating a picnic lunch in a park and was staring at the grass. She thought, “How do they get energy, how does the sun get to them?” She remembered about a word called photosynthesis. Sunshine Sally knows that the process of photosynthesis starts with (2) glucose and oxygen, also called the reactants. She also knows it requires sunlight, which must be a (3) product.

Sunshine Sally starts to really examine the grass and Polly Plant comes to join the picnic. “Do you know where in my cells photosynthesis occurs,” asks Polly? “Yes, it happens in the (4) nucleus! “Do you know what that green pigment inside my cells is called that traps the sunlight,” asks Polly? “Yes, its called (5) melanin. Now Sunshine Sally wants to quiz Polly. “Do you know what the products of photosynthesis are?” “Yes, they are (6) carbon monoxide and phosphorus.” After all of this, Sally has figured out that photosynthesis is a series of reactions where the sun’s energy is used to make a sugar called (7) sucrose.

Sunshine Sally is now more curious than before. What happens to the sugar? She went to school the next day and her teacher was able to clear up her confusions. Sally, lets imagine you just ate a salad and breadsticks at Olive Garden for lunch. Your cells now use the sugar from the food and oxygen you breathe in to start a process called (8) cellular transport. “O, ya this lesson from middle school is starting to come back to me now,” states Sally. “I remember this process occurs in the (9) ribosomes.”

Sally continues her conversation with her teacher and comes to the conclusion that the products of cellular respiration are carbon dioxide, water, and (10) sunlight. “So now my body has energy, but what is this energy for my cells?” She decided to do some research on the Internet and discovered it was called (11) Thyamine Disulfate or TDS. My cells have to be able to build proteins and go through active transport, so they must get energy out of this molecule somehow. After reading further down it explains that you must break the bond between the second and third (12) sodium.

Ok, Sally has been through it all. The final question on her mind is why do we need both photosynthesis and cellular respiration? She goes back to the park to ponder. Sunshine Sally sees Polly the Plant and asks her the final question. Well, even though photosynthesis can give us glucose our bodies need ATP. Without cellular respiration, all cells ( both animal and (13) bacteria) would not get ATP. Thanks Polly! You really helped me understand.

Now list two statements that explain how photosynthesis and cellular respiration are interconnected.

- 1.
- 2.

**Explain why your life depends on plants...**