



### Put on Your Thinking Caps! Worksheet

The song has information that may not be obvious.  
Review the lyrics and circle or answer the following questions  
(To be used with lyrics to RRR song "Photosynthesis")

#### TRUE OR FALSE

1. 'Light' reactions are dependent on light to happen. T F Not Sure
2. 'Dark' reactions can occur in the absence of light. T F Not Sure
3. The thylakoid membrane is inside the chloroplast. T F Not Sure
4. Glucose is a sugar T F Not Sure
5. G3P is a carbohydrate T F Not Sure
6. ATP and NADPH are produced inside the thylakoid membrane T F Not Sure
7. Plants make oxygen as a byproduct of photosynthesis T F Not Sure
8. The photosynthetic process is the same in trees as plants T F Not Sure
9. ATP (along with NADPH) is a product of chemical energy produced during the light reaction process of photosynthesis. T F Not Sure
10. The Calvin cycle uses only CO<sub>2</sub> as its primary energy source T F Not Sure

#### FILL IN THE ANSWER- BEST GUESS IS OK –ANSWERS REQUIRE THINKING!

11. What do plants produce to feed themselves?
12. In a 24-hour cycle when do you think each 'reaction' might take place?
13. If the Rubisco enzyme is used in the 'dark' reaction, does it capture oxygen or carbon dioxide to do its work?
14. The word photosystems, begins with 'photo'. Do you think their function might relate to the 'light' reaction activity or the 'dark' reaction activities of the plant?
15. What is the difference between 'energy' and 'synergy' in the song?