

## PHOTOSYNTHESIS AND RESPIRATION GAME QUESTIONNAIRE

Answer the following questions as you play the photosynthesis and respiration game.

1. What reactants did the human need to collect for respiration?

2. What byproducts were produced after the human collected the reactants?

3. What's the main purpose of respiration?

4. In the example given, was the human the only living organism in the diagram that was capable of respiration? If not, what else was?

5. Write the equation for respiration. Be sure to label the reactants and products.

6. What reactants did the tree collect for photosynthesis?

7. What byproducts were produced after the tree collected the reactants?



**8.** Write the equation for photosynthesis. Be sure to label the reactants and products.

**9.** Were the human and the tree essential to each other? Explain your reasoning.

**10.** If you were to create a closed ecosystem, draw a model of what it would need to sustain life. Additionally, provide a brief summary that explains why you chose the components you did for your model. (Be sure to explain how certain elements are cycled.)