

# Comparing Photosynthesis and Respiration

## Summary

Students will compare photosynthesis and respiration using a Venn diagram, riddles and analogies.

## Time Frame

1 class periods of 60 minutes each

## Group Size

Small Groups

## Materials

- [Venn diagram](#)  
(attached) for transparency
- [student worksheet](#)  
(attached)  
overhead projector  
transparencies  
markers  
textbooks

## Instructional Procedures

Students should have had some opportunity to learn about these concepts through reading, video or class discussion before beginning.

Explain to students that a Venn diagram compares and contracts two related concepts. The ways that they are the same are written where the circles overlap, the ways they are different are outside the overlap.

Provide transparencies for the student to write their riddles and analogies on to share with the class.

Discuss their work, watching especially for accuracy of science information.

### Activity 1:

Write a riddle based about photosynthesis or respiration. The answer to the riddle should be photosynthesis or respiration.

You must use factual information from their text to support the riddle. Ex. What is invisible, but all around us? Answer: atoms

Share their work in a group and then read the riddles with the class.

### Activity 2:

Write an analogies that illustrate how respiration and photosynthesis are related. An analogy is a way to compare two processes by using a format "A \_\_\_\_\_ is to \_\_\_\_\_ as a \_\_\_\_\_ is to \_\_\_\_\_".

Ex. An atom is to a molecule as a cell is to an organ.

Work in pairs to review the analogies and then write one on an overhead to share with the class.

Read the analogies from the overhead and make sure that they are all accurate.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

## Authors

