

# Autotrophic or Heterotrophic?

## Summary

Students will compare the characteristics of autotrophic and heterotrophic cells to create a Venn diagram, identify pictures and write a creative paragraph.

## Time Frame

1 class periods of 60 minutes each

## Group Size

Small Groups

## Materials

- [Pictures](#)  
(attached)
- [student page](#)  
(attached)  
biology textbooks  
projector or copies of pictures (attached)

## Instructional Procedures

Write "autotrophic" and "heterotrophic" on the board. Explain to students that the root word "trophic" refers to food or feeding. Ask students to talk to another student and decide which term refers to plant cells and which refers to animal cells. Call on selected students to answer and explain their reasoning.

Ask students to open their biology textbooks to a discussion of cell types and read the information specifically addressing autotrophic cells and heterotrophic cells.

As students finish, direct them to the Venn diagram on the student sheet to summarize the similarities and differences between the two cell types.

For the next part of the lesson, project the images below or print a copy for each student group. The colors are important to include.

Answers:

Heterotropic  
Autotrophic  
Heterotrophic  
Heterotrophic  
Autotrophic  
Heterotropic  
Heterotropic  
Autotropic

Ask students to share their paragraphs with the class to conclude.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

## Authors

[Utah LessonPlans](#)