

History and the Equation for Photosynthesis

Summary

Students use descriptions of several of the famous experiments to lead them to the equation for photosynthesis.

Main Core Tie

Science - Biology

[Standard 2 Objective 2](#)

Time Frame

1 class periods of 60 minutes each

Group Size

Small Groups

Materials

- [experiment descriptions](#)
(attached) printed separately on cardstock and laminated
butcher paper
- [student pages](#)
(attached)
markers

Student Prior Knowledge

None, this is an introductory activity. A reminder about what reactants and products in a chemical reaction may be necessary.

Instructional Procedures

Show students an acorn and a piece of a tree branch. Ask them they will be finding out where the "matter" came from to make the wood or tree from the seed. Have them make a prediction. Students will work in groups of four and need a copy of all the experiments. Have students write in large letters on their butcher paper:

Tell students that they need to read about a historic experiment or two and then share it with their group. A student with a pencil can start to pencil in the equation on the butcher paper. Give students time to work.

Have a student from each group present their findings.

Ask students to identify where the bulk of the matter in wood comes from. The correct answer is air.

Allow students time to answer analysis questions.

Assessment Plan

Scoring guide:

1. Student contributes to group work 10 pts
2. Student accurately completes worksheet. 10 pts

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)