

Photosynthesis and Cellular Respiration Jigsaw

We will be using the jigsaw method to learn about Photosynthesis and Cellular Respiration. Students will work in small groups to learn more about their assigned section before taking what they learned back to share with another group of students.

Home Groups

The class will be divided into four or five “home groups”. This is the group you will share your information with. It will be your job to make sure that the other students in your group get the correct information on your area from you.

Expert Groups

Each home group will divide their group up so that one member from their group is represented in each expert group. Students in the expert groups will work together to break down the material and determine what is the most important to share with the members of their home group.

Each expert group will need to determine what the key information for their section of material is. They will need to break it down into terminology that is understandable and filter out unimportant information. Each group will follow the guiding questions below to help narrow their field. Each group will prepare a handout to help their classmates understand the material – you will have to verbally present this information to your classmates as well. Your handout should contain at least one diagram/picture that is easy to understand and you must use three sources (your text can be one!) to gather your information. If you need photocopies of your handout, you must turn it into Ms. Sargent by the end of the day!!

Expert Groups:

Group 1: Color, Light and Pigments

Group 2: Dark Reactions

Group 3: Light Reactions

Group 4: Anaerobic Respiration

Group 5: Aerobic Respiration

Guiding Questions

1. What is the main idea that all students should be aware of in regards to your area? Is there more than one main idea?
2. What are the important supporting concepts? Why are these important?
3. What are the most important supporting details? Remember, you should have a limited number of supporting details.
4. Can this be explained better with a diagram or picture? Remember, simple is better!
5. Groups 2-5, what goes into your reactions? What comes out? Where does it take place? (These key concepts MUST be included!)
6. Group 1, how do your topics relate to photosynthesis? Make sure to tie them in!

Grading: You will reconvene in your expert groups and give yourselves a grade out of 20 points. We will create the rubric together in class. Remember, though the grade isn't a large number, you will be tested on this material you present to each other!