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**Using paired science vocabulary words as a fun grammar activity.**

I used this activity as a bridge between science and grammar. I have illustrated the activity using a lesson on photosynthesis which Meghan McNamara and I developed several years ago. But this activity can be adapted by using vocabulary from other subjects in science:  cell biology, ecosystems, plate tectonics etc.

This activity works best when students understand the concepts and vocabulary in the lesson. I usually begin each science unit by giving students a list of important vocabulary words

After, or soon after the lesson/unit, I presented a list of paired words from the lesson. I then asked students to choose two or three of the pairs, and for each pair to write one sentence using both words in the sentence.

For example, from the lesson on photosynthesis, I would write a list of words like this on the board:

|  |  |
| --- | --- |
| photosynthesis | oxygen |
| green plants | carbon dioxide |
| animals | oxygen |
| chlorophyll | light |
| glucose | photosynthesis |
| animals | carbon dioxide |
| green plants | oxygen |
| plant cell | animal cell |

After students had time to write, I asked for volunteers to write one of their sentences on the board – telling them it didn’t matter if another student had already used the same word pair. Then we would examine each sentence for accuracy, correctness, originality, possible other ways of writing the sentence etc.

For example, using the word pair for #2, a student might write the following sentence on the board:

***Green plants remove carbon dioxide from the air.***

As a class, we might talk about whether the sentence is true and whether it is a correct sentence (and if not, we would discuss how to correct it.)

Another possible example using the following word pair:

green plants  |  oxygen

***Green plants produce oxygen.***

In addition to examining the sentence as mentioned above, I might begin a lesson on sentence combining by asking students to work in pairs to try to combine the above two sentences.

***Green plants remove carbon dioxide from the air and produce oxygen.***

I always like to tell students that there are a variety of ways to write an idea. For example, a student might combine the same two sentences in this way:

**Green plants remove carbon dioxide from the air, and they also produce oxygen.**

This way of writing the sentence could lead to a lesson on the use of coordinating conjunctions.

Another possible lesson would be to add ‘because’ to a sentence:

***Because green plants remove carbon dioxide from the atmosphere….***

In this case, I would ask students how they would finish the thought/sentence.

This can lead to a discussion of dependent/independent clauses. We might look at other conjunctions like:

*before, after, while, when, since, although, unless*

**Unless green plants remove carbon dioxide from the atmosphere….**

Another idea is to write two terms on the board (**plant cell/animal cell** for example) and ask students to work in small groups to write sentences that combine the terms.  Each group decides on a best sentence which is then written on the board.  After examining the sentences, the class can decide (or not) which sentence they like best.

I was pleased by students’ positive response to the activity.  Using grammar in connection with the science content provided students with a meaningful way to practice grammar while reinforcing science concepts at the same time.

Also, this lesson can be adapted most other topics in science: cell biology, plate tectonics/earth science, heredity etc.

For example, here is a list of vocabulary words from a unit on Natural Selection:

|  |  |
| --- | --- |
| species | Population |
| environment | Habitat |
| mutation | variation |
| population | species |
| Habitat | species |
| Natural Selection | Charles Darwin |
| adapt | environment |