

LISELL Academic Language of Science

1) The technical nature of scientific vocabulary
(lexical study)

How can the study of roots, prefixes and suffixes help students to decipher the meaning of these words?

Amorphous

Spectrometer

Cardiogram

Brainstorm some of the most common prefixes, suffixes and roots in technical scientific vocabulary

<http://academic.cuesta.edu/acasupp/as/506.HTM>

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2) Abstract and depersonalized nature of scientific language (two-way rewriting)

Rewrite the following sentences in active voice and including an appropriate subject for the action.

Trees are cut down resulting in loss of soil.

Pollution increases as this water flows past the refineries that line the river.

Rewrite the following sentence in passive voice using a nominalization:

Our class found that the same parents who exercise more also eat healthier food.

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3) Dense clauses (collapsing and expanding noun groups)

Identify the root noun, pre-modifiers & post-modifiers

...the two tropical rain forest hot spots in South America that have not yet been completely explored.

Add pre- and post-modifiers to expand the clause

Nerve cells

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4) Express science ideas in multiple ways to build meaning

Practice “saying it another way”

What is a hypothesis? (give 2 definitions)

What is the difference between potential and kinetic energy? (say it 2 ways)

What is another example of a concept that students often memorize without understanding?