

Reef Words at Work

Use context, word parts, and audience to make precise meaning.

12.L.V.2 "Word Analysis: Use word knowledge and word analysis skills to determine the meaning of unfamiliar words and phrases and to communicate effectively for a variety of purposes."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each word or phrase whose meaning is explained by nearby context, then circle the clue words that help you infer it. Number three examples in which a prefix, suffix, root, or compound word also helps reveal meaning.

Restoring a Reef

- ① On a reef nursery off the Florida Keys, divers fasten small coral fragments to underwater frames. The frames serve as a substrate, a surface that gives young corals a place to attach and grow. Because storms and warming water can damage reefs, scientists choose fragments from colonies that have survived stressful conditions. This does not make the corals invincible. Instead, it helps researchers test which traits may support resilience, the ability to recover after disturbance. After several months, divers measure growth, photograph the fragments, and remove algae that could block sunlight.
- ② Before transplantation, crews inspect each frame for loose ties and diseased tissue. The prefix trans- in transplantation suggests movement across or from one place to another, matching the shift from a nursery frame to a damaged reef. Crews also avoid overhandling the fragments. Repeated touching is counterproductive, meaning it works against the intended result, because it can injure delicate tissue. A field report uses these terms precisely: it records survival rates, water temperature, and the location of each fragment. Such specificity lets another team compare results without guessing what happened.
- ③ Public descriptions serve a different purpose. A sign for visitors might say, "These corals are growing in a protected nursery before divers move them to the reef." The familiar wording informs people who may not know scientific vocabulary. By contrast, a research proposal might describe "post-transplant monitoring of fragment survival." The compound post-transplant means after the move to a new site, and monitoring means systematic observation over time. Neither version is less accurate. Each selects words that fit its audience, while preserving the central idea that restoration requires careful follow-up.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What does substrate mean in paragraph 1? Name the context clue that supports your meaning.

2 Use the prefix trans- and the context in paragraph 2 to determine the meaning of transplantation.

3 What does counterproductive mean in paragraph 2, and why is overhandling counterproductive?

4 Why does paragraph 3 use familiar wording on a visitor sign but use post-transplant monitoring in a research proposal?

3 YOUR TURN _____ Your own words

Choose a technical process not discussed in the passage. Write two sentences, 25 to 35 words total: one for newcomers and one for specialists. In the specialist sentence, use a word with a prefix, suffix, root, or compound and make its meaning clear through context.

PART 1 • READ AND MARK

Underline each word or phrase whose meaning is explained by nearby context, then circle the clue words that help you infer it. Number three examples in which a prefix, suffix, root, or compound word also helps reveal meaning. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What does substrate mean in paragraph 1? Name the context clue that supports your meaning.	Substrate means a surface on which young corals can attach and grow. The clue is "a surface that gives young corals a place to attach and grow."
2	Use the prefix trans- and the context in paragraph 2 to determine the meaning of transplantation.	Transplantation means moving coral fragments from the nursery frame to a damaged reef or other new location.
3	What does counterproductive mean in paragraph 2, and why is overhandling counterproductive?	Counterproductive means working against the intended result. Overhandling can injure delicate coral tissue, which works against successful restoration.
4	Why does paragraph 3 use familiar wording on a visitor sign but use post-transplant monitoring in a research proposal?	The sign uses familiar wording for visitors who may not know scientific vocabulary. The proposal uses precise technical language for a research audience tracking coral survival after relocation.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Newcomers: Solar panels turn sunlight into electricity for a building. Specialists: Technicians conduct photovoltaic monitoring, a systematic check of light-to-electricity conversion, to identify panels producing less power.

Accept reasonable meanings supported by the passage's context and word parts. For the open response, accept varied topics if both sentences fit distinct audiences, meet the word limit, and clarify the technical word through context.