

Science Toolkit: Grade 8 Objective 1.A.1.c

Student Handout: Science: Grade 8 Objective 1.A.1.c

Standard 1.0 Skills and Processes

Topic A. Constructing Knowledge

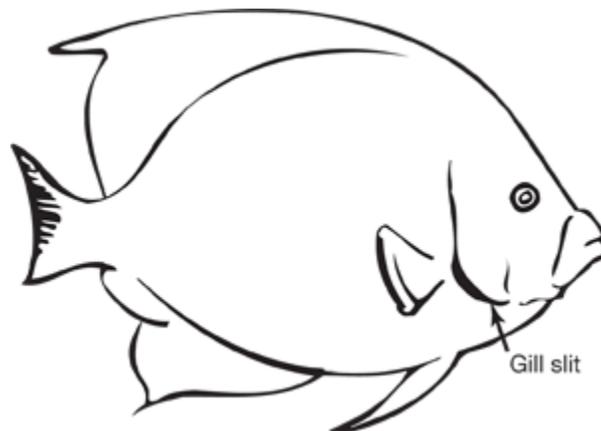
Indicator 1. Design, analyze, or carry out simple investigations and formulate appropriate conclusions based on data obtained or provided.

Objective c. Explain and provide examples that all hypotheses are valuable, even if they turn out not to be true, if they lead to fruitful investigations.

Selected Response (SR) Item

Question

Students observed that fish in an aquarium opened and closed their gill slits faster on Thursday than on the previous Monday. Some students hypothesized that warmer water caused the change in gill slit movement. Other students hypothesized that dirtier water caused the change in gill slit movement.



Both hypotheses are valuable because they

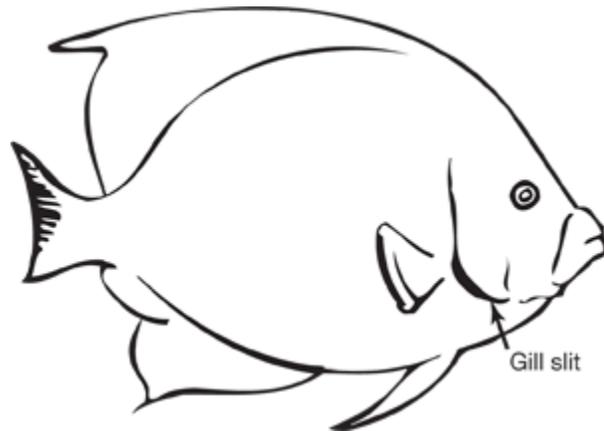
- A. are reasonable and testable
- B. compare independent variables
- C. are the only explanations possible
- D. link temperature with water quality

Correct Answer

A. are reasonable and testable

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