

THE SEPUP SCORING GUIDES

The nine SEPUP Scoring Guides are designed to support the range of science and engineering practices that students learn and use in *Issues and Science*:

- Analyzing and Interpreting Data (AID) page 387
- Communicating Concepts and Ideas (COM) page 388
- Constructing Explanations (EXP) page 389
- Developing and Using Models (MOD) page 390
- Engaging in Argument from Evidence (ARG) page 391
- Engineering Design Solutions (ENG) page 392
- Evidence and Trade-Offs (E&T) page 393
- Organizing Data for Analysis (ODA) page 394
- Planning and Carrying Out Investigations (PCI) page 395

The Analyzing and Interpreting Data (AID) SEPUP Scoring Guide is shown on the following page as an example of the above.

ANALYZING AND INTERPRETING DATA (AID)

When to use this Scoring Guide:

This Scoring Guide is used when students analyze and interpret data that they have collected or that has been provided to them.

What to look for:

- Response describes patterns and trends in data.
- Response interprets patterns and trends, using relevant crosscutting concepts and disciplinary core ideas, to describe possible causal, relationships.

Level	Description
Level 4 Complete and correct	The student analyzes the data with appropriate tools, techniques, and reasoning. The student identifies and describes patterns in the data, and interprets them completely and correctly to identify and describe relationships. When appropriate, the student <ul style="list-style-type: none"> • makes distinctions between causation and correlation. • states how biases and errors may affect interpretation of the data.
Level 3 Almost there	The student analyzes the data with appropriate tools, techniques, and reasoning. The student identifies and describes patterns in the data BUT incorrectly and/or incompletely interprets them to identify and describe relationships.
Level 2 On the way	The student analyzes the data with appropriate tools, techniques, and reasoning. The student identifies and describes, BUT does not interpret, patterns and relationships.
Level 1 Getting started	The student attempts to analyze the data BUT does not use appropriate tools, techniques and/or reasoning to identify and describe patterns and relationships.
Level 0	The student's analysis is missing, illegible, or irrelevant to the goal of the investigation.
x	The student had no opportunity to respond.