

# Field notebook badge information and scoring rubric

## Content, skills, and behavioral attributes of the badge:

- Components: location, weather, field partner, date
- Readability: neatness, organization, clarity
- Annotated sketches with scale
- Data: thorough, systematic, support their hypotheses
- Interpretations
- Accuracy: important but not of paramount importance
- Understandable by the user, whether it's the author or someone else

## Overarching badge goals

1. Behavioral: Students will create a thorough archive of their field observations, measurements, and interpretations using a systematic procedure.
2. Cognitive: Students will produce field notes whose organization, clarity, and scientific content allows the accurate recall and further advancement of the field work completed work by the author and/or others.

# Rubric

## Data

Exceeds the standard	Meets the standard	Does not meet the standard
More than 95% of the recorded field data are recorded correctly (true to what student measured) <b>AND</b> More than 95% of the recorded field data recorded is accurate (correct measurement) <b>AND</b> More than 95% of the recorded field data are complete	More than 50% of the recorded field data are recorded correctly (true to what student measured) <b>AND</b> More than 50% of the recorded field data recorded is accurate (correct measurement) <b>AND</b> More than 50% of the recorded field data are complete	Less than 50% of the recorded field data are recorded correctly (true to what student measured) <b>AND/OR</b> Less than 50% of the recorded field data recorded is not accurate (correct measurement) <b>AND/OR</b> Less than 50% of the recorded field data are complete

## Interpretation

Exceeds the standard	Meets the standard	Does not meet the standard
Interpretations by student recorded in the field book are aligned with or supported by the data recorded <b>AND</b> Interpretations are plausible based on prior scientific results.	Regardless of plausibility, interpretations made by student and recorded in the field book are aligned with and supported by the data recorded.	Interpretations made by student and recorded in the field book are not aligned with or supported by the data recorded.

### Systematic nature of field notes: thoroughness

Exceeds the standard	Meets the standard	Does not meet the standard
Field notes include more than 95% of important site-specific information. AND Field notes include some notes on any known errors/assumptions, if applicable. AND Field notes include useful information beyond the data and observations required for the immediate field site.	Field notes include more than 75% of important site-specific information. AND Field notes include some notes on any known errors/assumptions, if applicable.	Field notes are missing more than 25% of information specific to the field sites/activities.

### Systematic nature of field notes: organization and clarity

Meets the standard	Does not meet the standard
Entries are linked to a completed table of contents; AND Field notes display a regular pattern of location of components; AND Organization such that information is easily found by the reader.	Entries are not linked to a table of contents. AND/OR Field notes are disorganized with respect to finding information. AND/OR Field notes much extraneous information in an unorganized way to muddle the important data/observations

### Systematic nature of field notes: inclusion of components

Exceeds the standard	Meets the standard	Does not meet the standard
Field note entry includes all of the following components: --date --location --field partner (if applicable) AND Field notebook entry includes additional site information such as weather, objectives, working hypotheses, field plan, etc.	Field note entry includes all of the following components: --date --location --field partner (if applicable)	Field notes are missing one or more of the following components: --date --location --field partner (if applicable)

### Systematic nature of field notes: figures

Exceeds the standard	Meets the standard	Does not meet the standard
Figures are neat and legible. AND Figures include scale and/or north arrow if applicable. AND Figures include labels and/or key if applicable. AND Accompanying notes explicitly reflect whether the figure represents data or an interpretation. AND Figures include a caption that explains its significance.	Figures are neat and legible. AND Figures include scale and/or north arrow if applicable. AND Figures include labels and/or key if applicable. AND Accompanying notes explicitly reflect whether the figure represents data or an interpretation.	Figures are not neat or legible. AND/OR Figures do not include scale and/or north arrow if applicable. AND/OR Figures do not include labels and/or key if applicable. AND/OR Accompanying notes do not reflect whether the figure represents data or an interpretation. AND/OR Figures confuse data with interpretations.

### Systematic nature of field notes: tables

Meets the standard	Does not meet the standard
Tables are well labeled, organized, legible, and useful for organizing data.	Tables are not organized, labeled appropriately, legible, or are not useful for organizing data.

### Useful in recollection: self

Exceeds the standard	Meets the standard	Does not meet the standard
Student can use field notes to recall more than 95% of field observations completely and correctly.	Other than 1-2 minor errors or gaps, student can use field notes to recall the majority of field observations correctly and completely.	Student cannot use notes to recall the majority of field observations correctly or completely.

### Useful in recollection: others

Exceeds the standard	Meets the standard	Does not meet the standard
A colleague can use field notes to recall more than 95% of field observations completely and correctly.	Other than 1-2 minor errors or gaps, a colleague can use field notes to recall the majority of field observations correctly and completely.	A colleague cannot use notes to recall field observation correctly or completely.

### Useful for interpretation

Exceeds the standard	Meets the standard	Does not meet the standard
Student can use field notes to make a correct interpretation based on and aligned with their recorded field observations.	Regardless of the accuracy of the student's data, use of field notes results in an interpretation compatible with their recorded field data.	Regardless of the accuracy of the student's data, use of field notes results in an interpretation incompatible with their recorded field data. OR Student's data are correct, but due to poor/incomplete notes, student's use of field notes results in an incorrect interpretation.