

Science Notebooks

Grades K-2

Pamela M. Pelletier
Senior Program Director

Science notebooks are an integral part of the science curriculum for all K-12 students. The form of the notebook itself may vary from teacher to teacher and from grade level to grade level but the overall intent of the notebook is the same – to help students document their work, make sense of it and use the notebook as a resource to revisit and apply their knowledge and insights in new learning situations.

Notebooks should be used nearly every session and be essential to the student’s work. The notebook provides a record of classroom activities, laboratory experiences, and student reflections. The Science Department recommends that teachers assess science notebooks based on the quality of student work, its organization, and its completeness.

No matter what form the notebook takes – whether it is a permanently-bound, chronologically-sequenced notebook with handouts taped in, a 3-ring binder organized by type of assignment, or something of your own design – there are some essential features that we recommend that all science notebooks include.

Essential Notebook Features:

- The science notebook is a record of the student’s experiences, ideas, and understandings about science.
- The materials and entries are organized appropriately (as determined by teacher).
- All entries are dated and titled/labeled.
- **There are four main assessment criteria for science notebooks:** The two **Quality Criteria** involve classroom **artifacts** and student-generated entries for **making sense** of each lesson. (Explained further in the chart below.) The two **Structural Criteria** involve the notebook’s **organization** and **completeness**.

Artifacts of a lesson: <i>Evidence of what the student is engaged in during class</i>	Making-sense of a lesson: <i>Evidence that the student is developing scientific understandings</i>
<p>Artifacts can be in a variety of forms – there should be something written/included in the notebook for each class session</p> <p>Written observations Descriptions Sketches Data Charts Graphs Labeled drawings/diagrams Graphic organizers Vocabulary Worksheets/handouts Projects</p>	<p>Evidence of student “sense-making” should be seen in the notebook for each investigation.</p> <p>What I think... Quick writes I am surprised... I wonder... I now understand... I rediscovered... The important thing about... Additional questions that remain or can be investigated Venn diagrams Metaphors and Analogies Plan of work Models Claims and supporting evidence</p>

Science Notebook Rubric

Grades K-2

	Notebook Component	Assessment Criteria	Score	Comments
Quality Criteria	Artifacts 0 to 30 points	Data is recorded using words and pictures. Observations are labeled and/or descriptive. Drawings are included wherever appropriate.		
	Making sense 0 to 30 points	Science vocabulary is used correctly. Drawings and statements are supported by evidence.		
Structural Criteria	Organization & Structure 0 to 20 points	Notes are written chronologically. Each entry begins with the date. Entries are labeled/titled. Entries are easy to understand. Classroom artifacts are included/attached as part of the notebook.		
	Completeness 0 to 20 points	Entries are complete.		