Scoring Your Student's Science Notebooks

Student science notebooks are meant to be a record of student learning and tool for students to redefine their thinking, ask questions and make claims without penalty, and by having a collection of their work students will build up prior learning and begin to demonstrate growth in their scientific understanding as the year progresses. Scientist never "get it" the first time, which is evident when looking at the notebooks of some of our greatest creators, such as Thomas Edison, Albert Einstein, and Marie Curie. Allow students to make changes to improve their grade; it will also improve their learning.

Rubric range: 3 points-12 points

Less than 3 points	F
3-6 points	С
7-9 points	В
10-12 points	Α

Science Notebooking Resources

Araceliruizprimo, M. "On the Use of Students' Science Notebooks as an Assessment Tool." *Studies In Educational Evaluation* 30.1 (2004): 61-85.

Butler, Malcolm B., and Catherine Nesbit. "Using Science Notebooks to Improve Writing Skills and Conceptual Understanding." *Science Activities: Classroom Projects and Curriculum Ideas* 44.4 (2008): 137-46.

Campbell, Brian, and Lori Fulton. *Science Notebooks Writing about Inquiry*. Portsmouth, NH: Heinemann, 2003.

Douglas, Rowena. Linking Science & Literacy in the K-8 Classroom. Arlington, VA: NSTA, 2006.

Klentschy, Michael P. Using Science Notebooks in Middle School. Arlington, VA: NSTA, 2010.

Marcarelli, Kellie. *Teaching Science with Interactive Notebooks*. Thousand Oaks, CA: Corwin, 2010.

Waldmen, Cheryl, and Kent J. Crippen. "Integrating Interactive Notebooks." *The Science Teacher* 76.1 (January 2009): 51-55.

There are many examples on <u>Slideshare</u> of how teachers at different grade levels instruct their students on how using science notebooks in the classroom.



Scoring Your Student's Science Notebooks



Student Name Teacher/Class

Date

Assignment Topic

UNDERSTANDING SCIENCE CONCEPT	Self Assessment	Teacher Assessment	Notebooking Reasoning
+ 1-Limited			The information given is incomplete and or inaccurate.
+2-Developing			Work shows partial understanding, but also has significant inaccuracies or misconceptions.
+3-Acceptable			Work shows evidence of understanding the main ideas of the topic, though some information is missing or inaccurate.
+4-Accomplished			Work shows mastery of the topic's concept(s). Supporting work, such as graphs and diagrams support understanding and there is evidence of links between new and old learning.

SCIENTIFIC THINKING	Self Assessment	Teacher Assessment	Notebooking Reasoning
+ 1-Limited			Work lacks connections between evidence and conclusions. Ideas seem random and disconnected. Reporting is inaccurate.
+2-Developing			There are limited inferences, little if any questioning and few connections between evidence and conclusions. Reporting is limited and contains many inaccuracies.
+3-Acceptable			Inferences are reasonable, though they may be incomplete or have inconsistencies. Reporting is honest, shows awareness of scientific process skills.
+4-Accomplished			Inferences are strongly supported through evidence that process skills are well understood and used appropriately.

EXPOSITORY WRITING	Self Assessment	Teacher Assessment	Notebooking Reasoning
+ 1-Limited			Ideas are unclear, information is absent or irrelevant. Organization is random or absent. Key vocabulary no incorporated.
+2-Developing			Ideas are incomplete, details minimal, Organization is weak or inconsistent. Key vocabulary used minimally sometimes inaccurately.
+3-Acceptable			Ideas are clear and include many details. Organization is mostly logical and uses transition words. Many key vocabulary words included accurately.
+4-Accomplished			Ideas are fully developed with relevant evidence and details. Organization is sequenced logically, transitions words are present. Accurate use of key vocabulary. Voice is confident and may include self reflection and on target sentence structure is used to develop work

Adapted from Shelia Gaquin, How to Score Science Notebooks

Total Points Earned: Point Grade Equivalent: Comments: