

Rubric for Science Experiments

	Score = 4	Score = 3	Score = 2	Score = 1
Experimental design	Design shows student has analyzed the problem and has independently designed and conducted a thoughtful experiment.	Design shows student grasps the basic idea of the scientific process by conducting experiment that controlled obvious variables.	Design shows student grasps basic idea of scientific process but needs some help in controlling obvious variables.	Design shows student can conduct an experiment when given considerable help by the teacher.
Scientific results	Pamphlet explained with convincing clarity the solution to the problem. Information from other sources or other experiments was used in explaining.	Pamphlet showed that student understands the results and knows how to explain them.	Pamphlet showed results of experiment. Conclusions reached were incomplete or were explained only after questioning.	Pamphlet showed results of the experiment. Conclusions drawn were lacking, incomplete, or confused.
Data collection	Data was collected and recorded in an orderly manner that accurately reflects the results of the experiment.	Data was recorded in a manner that probably represents the results of the experiment.	Data was recorded in a disorganized manner or only with teacher assistance.	Data was recorded in an incomplete, haphazard manner or only after considerable teacher assistance.
Verbal expression	Speech presented a clearly defined point of view that can be supported by research. Audience interest was considered as were gestures, voice and eye contact.	Speech was prepared with some instructor help but uses experiment's result. Speech was logical and used gestures, voice and eye contact to clarify meaning.	Speech was given after active instruction. Some consideration was given to gestures, voice and eye contact.	Speech was given only after active instruction.

Reference:

Wiggins, G. (1998). Educative Assessment. San Francisco, CA: Jossey-Bass Publishers.