Designing Effective Projects: Examining Rubrics
Analytic Rubric Example

Sample Analytic Rubric

This sample analytic rubric is from the Unit Plan, The Great Bean Race.

Analytic Rubric from The Great Bean Race

Arizona Grade 3 Content Standards	4	3	2	1
Understand Process of Plant Growth ▪ Understand the features and processes of plant growth	▪ Accurately identifies and explains in detail all necessary conditions for plant growth ▪ Describes the complete life cycle of plants ▪ Makes several informed inferences about the role of plants in the environment	▪ Identifies and explains the necessary conditions for plant growth ▪ Describes the life cycle of plants ▪ Makes informed inferences about the role of plants in the environment	▪ Explains the necessary conditions for plant growth with some errors ▪ Describes the life cycle of plants but leaves out some important information ▪ Makes some informed inferences and some incorrect ones about the role of plants in the environment	▪ Explains the necessary conditions for plant growth with many errors ▪ Describes the life cycle of plants inaccurately, leaving out important information ▪ Makes incorrect inferences about the role of plants in the environment
Design and Conduct an Experiment ▪ Hypothesize, plan, and carry out experiments ▪ Organize evidence of change over time	▪ Develops a testable hypothesis ▪ Plans an experiment that can prove or disprove the hypothesis ▪ Successfully carries out an experiment that controls all variables ▪ Always observes, measures, and records change over time with accuracy	▪ Develops a hypothesis ▪ Plans an experiment that tests the hypothesis ▪ Carries out an experiment that controls some variables ▪ Usually observes, measures, and records change over time with accuracy	▪ Develops a hypothesis with some assistance ▪ Plans an experiment that tests the hypothesis with some assistance ▪ Carries out an experiment that controls variables with some assistance ▪ Observes, measures, and records change over time with some errors	▪ Develops a hypothesis with a great deal of assistance ▪ Plans an experiment that tests the hypothesis with a great deal of assistance ▪ Carries out an experiment that controls variables with a great deal of assistance ▪ Observes, measures, and records change over time with lots of errors

Analyze Results and Draw Conclusion ▪ Analyze and report conclusions of experiments. ▪ Compare prior knowledge to the results of a scientific investigation ▪ Develop models (illustrations and charts) to explain how objects, events, and/or processes work.	▪ Successfully draws several conclusions based on evidence ▪ Communicates ideas clearly and concisely ▪ Considers additional variables when comparing findings with others to determine the best conditions for growing plants ▪ Compares previous knowledge about plants to the results of the experiment and describes new learning in detail ▪ Develops detailed models (illustrations and charts) with correct labeling to explain how plants grow.	▪ Draws some conclusions based on evidence ▪ Communicates ideas clearly ▪ Compares findings with those of others to determine the best conditions for growing plants ▪ Compares previous knowledge about plants to the results of the experiment and describes new learning ▪ Develops models (illustrations and charts) with correct labeling to explain how plants grow	▪ Draws some conclusions that are not based on evidence ▪ Communicates ideas but may be unclear ▪ Compares findings with those of others but has difficulty determining the best conditions for growing plants ▪ Compares previous knowledge about plants to the results of the experiment , but the comparison is confusing or inaccurate ▪ Develops models (illustrations and charts) with labeling to explain how plants grow, but some elements are missing or incorrect	▪ Does not draw conclusions ▪ Does not communicate ideas clearly ▪ Does not compare findings or cannot determine the best conditions for growing plants ▪ Does not compare previous knowledge about plants to the results of the experiment ▪ Develops models (illustrations and charts) with labeling to explain how plants grow, but most elements are missing or incorrect

Manage Project ▪ Complete all components of the project ▪ Choose effective processes that lead to the successful completion of a project ▪ Work cooperatively with others in a group	▪ Independently and successfully completes all parts of the project ▪ Chooses helpful processes: uses timelines, asks for feedback, develops and follows a plan, monitors and adjusts as needed ▪ Works cooperatively and provides leadership in a group	▪ Independently completes all parts of the project ▪ Chooses some helpful processes: uses timelines, asks for feedback, develops and follows a plan, monitors and adjusts as needed ▪ Works cooperatively in a group	▪ Completes all of the parts of the project with assistance or independently completes some of the project ▪ Chooses some helpful processes with assistance: uses timelines, asks for feedback, develops and follows a plan, monitors and adjusts as needed ▪ Works cooperatively in a group some of the time	▪ Completes some of the parts of the project with assistance ▪ Does not choose helpful processes ▪ Fails to work cooperatively in a group