

What's in the Soils? – Assessment Rubric

Level	1	2	3	4
Initiating and Planning	Asks questions that demonstrate curiosity about the world around him or her.	Asks questions that could lead to investigations, and chooses one that will be the basis for an investigation related to a soil experiment.	Asks questions that could lead to investigations, and formulates a specific question that will be the basis for an investigation related to a soil experiment.	Asks questions that arise from practical problems and issues, and formulates a specific question that will be the basis for an investigation related to a soil experiment.
	With support, uses print and multimedia resources provided by the teacher for his/her research.	With support, selects print and multimedia resources from those provided by the teacher for his/her research.	Independently selects print, multimedia, and electronic resources from those provided by the teacher for his/her research.	Independently selects print, multimedia, and electronic resources for his/her research.
	With support from the teacher, makes a simple plan with few details to create a simplistic soil experiment.	Makes a simple plan (individually or in small groups), including simple drawings and/or diagrams, to create a soil experiment.	Outlines (individually or in small groups) the steps of a plan, including labelled drawings and/or diagrams, to create a soil experiment.	Outlines in detail, including technical drawings and/or diagrams, each step of a plan to create a soil experiment.
Performing and Recording	With support, designs, builds, and tests (on the basis of predetermined criteria) a soil experiment.	With support, designs, builds, and tests (on the basis of predetermined criteria) a soil experiment.	Designs, builds, and tests (on the basis of predetermined criteria) a soil experiment.	Designs, builds, and tests (on the basis of predetermined criteria) a soil experiment and makes adjustments or changes necessary based on his/her research.

	Records results using pictures and/or tally charts.	Records results in a variety of ways, such as sentences, simple drawings, diagrams, and/or charts.	Records results in a variety of ways, such as sentences, drawings, labelled diagrams, graphs, and/or charts.	Records results in a variety of ways, such as sentences, technical drawings, labelled diagrams, graphs, and/or charts.
Analyzing and Interpreting	With support, identifies the effectiveness of the soil experiment, using the predetermined procedure.	Identifies the effectiveness of the soil experiment, using the predetermined procedure.	Explains the effectiveness of the soil experiment, and suggests possible changes to the procedure and identifies different solutions.	Explains the effectiveness of the soil experiment using qualitative and/or quantitative data, and suggests possible changes to the procedure and identifies different solutions.
	With support, suggests something that might be changed about the soil experiment designed and created.	Identifies some things that could be done differently to improve the soil experiment designed and created.	Identifies and explains what changes could be made to the plan and how to improve the soil experiment, and gives reasons for the changes.	Identifies and explains what changes could be made to the plan and the testing process, and how to improve the soil experiment, and gives reasons for the changes.
Communicating (Artifact)	Describes orally, and/or using drawings, pictures, and/or simple sentences, the soil experiment and their results; using grade-appropriate science and technology vocabulary correctly.	Describes orally, and/or using drawings, pictures, and/or simple sentences, the process of designing and creating a soil experiment and their results; using grade-appropriate science and technology vocabulary correctly.	Describes orally, and using labelled drawings and diagrams, charts, graphs, and/or written descriptions, the process of designing and creating a soil experiment and their results; using grade-appropriate science and technology vocabulary correctly.	Describes orally, and using labelled drawings and diagrams, charts, graphs, and/or written descriptions, the process of designing and creating a soil experiment and their results; using grade-appropriate science and technology vocabulary correctly.