

### Summative Unit Rubric of Student Journals

Rubric criteria	1	2	3
Student predicted correlations between soil type and extent of plant growth	Students' written predictions were vague and indicated little understanding of connection between soil fertility and plant growth	Student predictions indicated a degree of understanding between soil fertility and plant growth, but not extensive or complete	Students formulated predictions in the "I think... because" format and included clear cause and effect connections between soil properties and plant growth
Student science journal diagrams of soil water retention device	Diagrams were poorly made with few or no labels indicating how they were made and how they functioned	Diagrams portrayed minimal information but enough to determine format and function of device	Diagrams carefully and completely drawn and labeled showing device, the various parts and materials, and how it functions
Journal diagram of garden beds, soil treatments and planting plans	Garden beds poorly sketched with little or no information about soil treatments or planting plans	Garden beds indicated with some information about soil treatment and planting but not extensive or complete	Garden beds carefully drawn, approximately to scale, with complete notes as to soil treatments and complete planting plans
Reflections of fourth grade pair and share	Reflections incomplete and not informative about content of interactions	One or two sentences relevant to interactions with student partner	Reflections of at least one complete paragraph describing their sharing with their fourth grade partner and what they predicted in terms of which beds will show most growth