Mathematics Research-based Project (Inquiry)

Categories & Expectations	Level 1	Level 2	Level 3	Level 4
Understanding of mathematical content	The student shows limited understanding of mathematical content (ideas, concepts, terminology).	The student shows some understanding of mathematical content (ideas, concepts, terminology).	The student shows good understanding of mathematical content (ideas, concepts, terminology).	The student shows insightful understanding of mathematical content (ideas, concepts, terminology).
Use of creative/critical thinking processes	The student uses creative/critical thinking processes to connect the final product to math concepts and reflects on their learning in math with limited effectiveness	The student uses creative/critical thinking processes to connect the final product to math concepts and to reflect on their learning in math with some effectiveness	The student uses creative/critical thinking processes to connect the final product to math concepts and to reflect on their learning in math with limited effectiveness	The student uses creative/critical thinking processes to connect the final product to math concepts and reflect on their learning in math with a high degree of effectiveness
Expression and organization of ideas and information in oral, written, and visual forms	The student organizes and presents ideas within their inquiry presentation with limited effectiveness	The student organizes and presents ideas within their inquiry presentation with some effectiveness	The student organizes and presents ideas within their inquiry project with considerable effectiveness	The student organizes and presents ideas within their inquiry project with a high degree of effectiveness
Use of conventions, vocabulary, and terminology	The student uses math conventions, algorithms, vocabulary, and terminology related to making and presenting products for inquiry with limited effectiveness	The student uses math conventions, algorithms, vocabulary, and terminology related to making and presenting products for inquiry with some effectiveness	The student uses math conventions, algorithms, vocabulary, and terminology related to making and presenting products for inquiry with considerable effectiveness	The student uses math conventions, algorithms, vocabulary, and terminology related to making and presenting products for inquiry with a high degree of effectiveness
Making connections within and between contexts	The student makes a limited number of connections between the project and the world outside the school.	The student makes some connections between the project and the world outside the school	The student makes a variety of connections between the project and the world outside the school	The student makes a wide variety of connections between the project work and the world outside the school