

Master 7.1

Unit Rubric: Data Analysis

	Beginning	Acceptable	Proficient	Mastery
Conceptual Understanding				
Shows understanding by explaining and/or demonstrating: – ways to collect and organize data to answer questions – common attributes of line plots and bar graphs – drawing conclusions based on a bar graph	may be unable to explain or demonstrate: – ways to collect data – methods of organizing data – common attributes of line plots – common attributes of bar graphs – conclusions based on a bar graph	partially able to explain or demonstrate: – ways to collect data – methods of organizing data – common attributes of line plots – common attributes of bar graphs – conclusions based on a bar graph	able to explain and demonstrate: – ways to collect data – methods of organizing data – common attributes of line plots – common attributes of bar graphs – conclusions based on a bar graph	in various contexts, appropriately explains and demonstrates: – ways to collect data – methods of organizing data – common attributes of line plots – common attributes of bar graphs – conclusions based on a bar graph
Procedural Knowledge				
Accurately: – records and organizes data using tally marks, charts, lists – creates and interprets line plots – creates and interprets bar graphs including labels (title and axes) – answers questions using data	limited accuracy; often makes major errors or omissions in: – recording and organizing data – creating line plots – interpreting line plots – creating bar graphs – interpreting bar graphs – answering questions using data	partially accurate; makes frequent minor errors or omissions in: – recording and organizing data – creating line plots – interpreting line plots – creating bar graphs – interpreting bar graphs – answering questions using data	generally accurate; makes few errors or omissions in: – recording and organizing data – creating line plots – interpreting line plots – creating bar graphs – interpreting bar graphs – answering questions using data	accurate; rarely makes errors or omissions in: – recording and organizing data – creating line plots – interpreting line plots – creating bar graphs – interpreting bar graphs – answering questions using data
Problem-Solving Skills				
Selects and uses appropriate strategies to solve problems involving bar graphs	does not select and use appropriate strategies to solve problems using bar graphs successfully	with limited help, selects and uses some strategies to solve problems using bar graphs with partial success	selects and uses appropriate strategies to solve problems using bar graphs successfully	selects and uses appropriate strategies to solve problems using bar graphs with a high degree of success
Communication				
Records procedures and explains reasoning clearly and completely using mathematical language (e.g., data, axes)	does not record procedures or explain reasoning clearly and completely	records procedures and explains reasoning with partial clarity; may be incomplete	records procedures and explains reasoning clearly and completely	records procedures and explains reasoning with precision and thoroughness