

Master 8.1

Unit Rubric: Multiplication and Division

	Beginning	Acceptable	Proficient	Mastery
Conceptual Understanding				
Shows understanding by demonstrating and explaining: – multiplication using equal grouping and arrays – relating multiplication to repeated addition and to division – division using equal grouping and equal sharing – relating division to repeated subtraction and to multiplication	shows very limited understanding; unable to show/explain: – multiplication using equal grouping and arrays – relating multiplication to repeated addition and to division – division using equal grouping and equal sharing – relating division to repeated subtraction and to multiplication	shows limited understanding; is partially able to show/explain: – multiplication using equal grouping and arrays – relating multiplication to repeated addition and to division – division using equal grouping and equal sharing – relating division to repeated subtraction and to multiplication	shows understanding; is able to show/explain: – multiplication using equal grouping and arrays – relating multiplication to repeated addition and to division – division using equal grouping and equal sharing – relating division to repeated subtraction and to multiplication	shows thorough understanding; fully able to show/explain: – multiplication using equal grouping and arrays – relating multiplication to repeated addition and to division – division using equal grouping and equal sharing – relating division to repeated subtraction and to multiplication
Procedural Knowledge				
Models multiplication Models equal sharing and equal grouping Records multiplication and division symbolically	limited accuracy; major errors/omissions in: – multiplying – dividing – recording symbolically	somewhat accurate; several minor errors in: – multiplying – dividing – recording symbolically	generally accurate; few errors or omissions in: – multiplying – dividing – recording symbolically	accurate; very few or no errors in: – multiplying – dividing – recording symbolically
Problem-Solving Skills				
Uses appropriate strategies to create and solve story problems involving multiplication and division	does not successfully create and solve story problems that involve – multiplication – division	partially successful in creating and solving story problems (problems may be very basic or have some flaws) that involve: – multiplication – division	uses appropriate and successful strategies to create and solve story problems that involve: – multiplication – division	uses effective, and sometimes innovative, strategies to create and solve relatively complex or challenging story problems that involve: – multiplication – division
Communication				
Presents work and explanations clearly, using appropriate mathematical terminology	does not present work and explanations clearly, uses few appropriate mathematical terms	presents work and explanations with some clarity, using some appropriate mathematical terms	presents work and explanations clearly, using appropriate mathematical terms	presents work and explanations precisely, using a range of appropriate mathematical terms