Transition to Technical Math Unit Rubrics
Health Sciences

Standard	4 - Mastery	3 - Proficient	2 - Basic	1- Below Basic	0 - No Evidence
TM-NS1.A. Analyze proportional relationships and use them to solve contextualized and mathematical problems.	A. Create equivalent proportions for quantities with an authentic task.	A. Set-up and solve a proportion as part of an authentic task. Including units when applicable. AND A. Describe the proportional relationship between quantities within an authentic task.	A. Set up a proportion and solve.	A. Set up a single ratio using units.	A. Not yet able to setup a ratio or proportion.
TM-NS1-B. Compute unit rates associated with ratios of fractions, decimals, and percents and including ratios of lengths, areas and other quantities measured in like or different units.	B. Find and correct calculation errors within an authentic task.	B. Calculate unit rates from like and unlike units of quantities given within an authentic task.	B. Calculate unit rates from like and unlike units of quantities.	B. Calculate unit rates of like units of quantities.	B. Not yet able to calculate rates.
TM-NS1-D. Convert between forms as appropriate.	D. Convert between decimal, common fractions, and percentages using mental math.	D. Convert between decimal, common fractions, and percentages within an authentic task.	D. Convert between decimal, common fractions, and percentages	D. Convert between two forms. (ie fraction to decimal only)	D. Not yet able to convert between decimal, common fractions, and percentages
TM-NS2.A. Convert like measurement units within a given measurement system and between systems.	A. Accurately convert units among and between systems and determine which system is more applicable to the given scenario.	A. Convert units within a measurement system and between systems within an authentic task.	A. Convert units between measurement systems.	A. Convert units within the same measurement system. (i.e. converting inches to feet, centimeters to meters).	A. Not yet able to convert units between like or unlike systems.
TM-NS2.B. Convert among different sized standard and/or metric measurement units and use these conversions in solving authentic multi-step problems.	B. Accurately convert units among and between systems and determine which system and/or unit is more applicable to the given scenario.	B. Convert different sized units within a measurement system and between systems within an authentic task.	B. Convert different sized units between like systems from an authentic task.	B. Recognize measurement system and measurement units are appropriate to use within an authentic task and can develop a plan for solving.	B. Not yet able to convert different sized units between like or unlike systems within an authentic task.
TM-NS2.C. Use ratio reasoning (dimensional analysis) to convert measurement units including, but not limited to, distances and rates.	C. Find and correct an error within an authentic task. C. Apply multiple ratios to solve an authentic task.	C. Apply dimensional analysis to convert units, including distance and rates, within an authentic task.	C. Apply dimensional analysis to convert a measurement.	C. Recognize which ratio must be used to convert to measurement.	C. Not yet able to convert measurement units within a ratio.
TM-NS3-A. Evaluate expressions at specific values for their variables. Include expressions that arise from formulas in authentic problems.	A. Explain how the values of the variable(s) effect with each other and how changes can affect the final value in an authentic task.	A. Evaluate variable expressions containing common integer, decimal, and fractional values found in authentic task. (with and without technology)	A. Evaluate variable expressions with integers, decimals, and fraction values.	A. Evaluate variable expressions with integer values.	A. Not yet able to accurately evaluate an expression for a given value.

Transition to Technical Math Unit Rubrics

TM-NS4.A. Draw conclusions and justify those conclusions from graphics such as order forms, bar charts, pie charts, diagrams, flow charts, maps, and dashboards.	A. Justify a different conclusion, based on the same data sets, within an authentic task.	A. Make and justify conclusions made from different types of visual representations of data within an authentic task.	A. Can estimate values to make conclusions from a variety of visual representations.	A. Can identify what the parts of the graph represent of various representations. (such as horizontal and vertical axis)	A. Not yet able to make conclusions from different types of visual representation of data.
TM-NS4-B. Identify and interpret trends, patterns, and relationships from graphs and charts.	B. Use trends to make predictions based on the identification and interpretation of trends and patterns in an authentic task.	B. Identify and interpret trends, patterns, and relationships from graphs and charts in an authentic situation.	B. Can compare and state differences, general characteristics, or trends of graphs.	B. Identify differences, general characteristics, or trends of graphs. (ie such as size of value or increasing vs. decreasing)	B. Not yet able to interpret trends, patterns or relationships from graphs and charts.
TM-NS4-D. Make and justify decisions based on data.	D. Critique another person's decision and process used.	D. Explain and justify, using data and information as support, a decision made while solving an authentic task.	D. Make a decision and recite the process used to make a decision when solving an authentic task.	D. Make a decision while solving an authentic task, may be a correct or incorrect decision.	D. Not yet able to make a decision without guided support or examples.
TM-G2.D. Represent applied problems by graphing points in the coordinate plane and interpret coordinate values of points in the context of the situation.	D. Create the graph and label axis, scale, coordinates from an authentic task.	D. Graph and interpret meanings of coordinate points from an authentic task with given origin and scale	D. Graph contextual situation on a coordinate plane with a given labeled axis.	D. Can graph points and give coordinates of points on a graph.	D. Not yet able to recognize coordinates of points or graph points.
TM-BA3-C. Choose and interpret units consistently in formulas.	C. Justify final unit measure selection.	C. Interpret units of measure in a formula within an authentic task.	C. Recognize different unit measures within a problem and convert correctly.	C. Determine appropriate units for final answers.	C. Not yet able to choose units of measure in formulas.
TM-BA3-D. Apply appropriate formulas to solve applications.	D. Apply and explain formulas used to solve problems in an authentic task.	D. Select and apply appropriate formulas to solve problems in an authentic task.	D. Select the appropriate formula to solve an authentic task.	D. Determine correct formula for an authentic task when given options.	D. Not yet able to apply formulas within an authentic task.