CARD SORT

Card Sort instructions: Match each Oklahoma Mathematics Academic Standard card with the card(s) that describe the necessary prior knowledge students would need before learning the skills outlined in the standard.

Compare and order positive rational numbers or integers using the symbols <, >, and =.

Generate equivalent expressions and evaluate expressions involving positive rational numbers by applying the commutative, associative, and distributive properties and the order of operations to solve mathematical problems.

Represent relationships between two varying positive quantities involving no more than two operations with rules, graphs, and tables and translate between any two of these representations.

Compare and order rational numbers expressed in various forms using the symbols <, >, and =.

Use the associative, commutative, and distributive properties of operations to generate equivalent numerical and algebraic expressions containing rational numbers, grouping symbols, and whole number exponents.

Represent proportional relationships with tables, verbal descriptions, symbols, and graphs and translate from one representation to another. Determine and compare the unit rate (constant of proportionality, slope, or rate of change) given any of these representations.

Demonstrate an understanding of the proportional relationship between the diameter and circumference of a circle. Understand that the unit rate (constant of proportionality) is pi (π) and can be approximated by rational numbers such as 22/7 and 3.14.

Understand the concept that the surface area of a rectangular prism can be found by wrapping the figure with same-sized square units without gaps or overlap. Determine surface area using a variety of tools, different strategies, and appropriate measurements (e.g., cm^3).

Design simple experiments, collect data, and calculate measures of center (mean, median, and mode) and spread (range and interquartile range). Use these quantities to draw conclusions about the data collected and make predictions.

Compare and order real numbers and locate real numbers on a number line.

Justify steps in generating equivalent expressions by combining like terms and using order of operations (to include grouping symbols). Identify the properties used, including the properties of operations (associative, commutative, and distributive).

Identify, describe, and analyze linear relationships between two variables.

Calculate the surface area of a cylinder, in terms of pi (π) and using approximations for pi (π), using decomposition or nets. Use appropriate units (e.g., cm²).

Calculate the surface area of a rectangular prism using decomposition or nets. Use appropriate units (e.g. cm²).

Display, describe, and compare data sets using summary statistics (central tendency and spread (range)). Utilize technology (e.g., spreadsheets, calculators) to display data and calculate summary statistics.