

Rptg Cat	STAAR	STAAR Modified	Readiness Standards	Supporting Standards
<b>1</b> Numbers, Operations, and Quantitative Reasoning	<b>13</b>	<b>11</b>	7.1.B convert between fractions, decimals, whole numbers, and percents mentally, on paper, or with a calculator 7.2.B use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals 7.2.F select and use appropriate operations to solve problems and justify the selections	7.1.A compare and order integers and positive rational numbers 7.1.C represent squares and square roots using geometric models 7.2.A represent multiplication and division situations involving fractions and decimals with models, including concrete objects, pictures, words, and numbers 7.2.C use models, such as concrete objects, pictorial models, and number lines, to add, subtract, multiply, and divide integers and connect the actions to algorithms 7.2.D use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio 7.2.E simplify numerical expressions involving order of operations and exponents 7.2.G determine the reasonableness of a solution to a problem
<b>2</b> Patterns, Relationships, Algebraic Reasoning	<b>13</b>	<b>10</b>	7.3.A estimate and find solutions to application problems involving percent 7.3.B estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units 7.5.B formulate problem situations when given a simple equation and formulate an equation when given a problem situation	7.4.A generate formulas involving unit conversions within the same system (customary and metric), perimeter, area, circumference, volume, and scaling 7.4.B graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling 7.4.C use words and symbols to describe the relationship between the terms in an arithmetic sequence (with a constant rate of change) and their positions in the sequence 7.5.A use concrete and pictorial models to solve equations and use symbols to record the actions
<b>3</b> Geometry and Spatial Reasoning	<b>10</b>	<b>8</b>	7.6.D use critical attributes to define similarity 7.7.B graph reflections across the horizontal or vertical axis and graph translations on a coordinate plane	7.6.A use angle measurements to classify pairs of angles as complementary or supplementary 7.6.B use properties to classify triangles and quadrilaterals 7.6.C use properties to classify three-dimensional figures, including pyramids, cones, prisms, and cylinders 7.7.A locate and name points on a coordinate plane using ordered pairs of integers 7.8.A sketch three-dimensional figures when given the top, side, and front views 7.8.B make a net (two-dimensional model) of the surface area of a three-dimensional figure 7.8.C use geometric concepts and properties to solve problems in fields such as art and architecture
<b>4</b> Measurement	<b>8</b>	<b>6</b>	7.9.A estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes 7.9.C estimate measurements and solve application problems involving volume of prisms (rectangular and triangular) and cylinders	7.9.B connect models for volume of prisms (triangular and rectangular) and cylinders to formulas of prisms (triangular and rectangular) and cylinders
<b>5</b> Probability and Statistics	<b>10</b>	<b>8</b>	7.11.B make inferences and convincing arguments based on an analysis of given or collected data 7.12.B choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular situation	7.10.A construct sample spaces for simple or composite experiments 7.10.B find the probability of independent events 7.11.A select and use an appropriate representation for presenting and displaying relationships among collected data, including line plot, line graph, bar graph, stem and leaf plot, circle graph, and Venn diagrams, and justify the selection 7.12.A describe a set of data using mean, median, mode, and range
<b>STAAR</b>	<b>54</b> (4 Grid)		<b>32-35 questions from Readiness Standards</b>	<b>19-22 questions from Supporting Standards</b>
<b>STAAR Modified</b>		<b>43</b> (1 Grid)	<b>26-28 questions from Readiness Standards</b>	<b>15-17 questions from Supporting Standards</b>

## Process Standards (Underlying Processes and Mathematical Tools)

STAAR	STAAR Modified	
≥ 75% of items will be dual coded	≥ 60% of items will be dual coded	7.13.A identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics 7.13.B use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness 7.13.C select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem 7.13.D select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems 7.14.A communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models 7.15.A make conjectures from patterns or sets of examples and nonexamples 7.15.B validate his/her conclusions using mathematical properties and relationships
≈ 41 items will be dual coded	≈ 26 items will be dual coded	