T(K)-13(S)13( )3(C)5(u)6(r)2(r)2(i)3(cu)6(l)3(u)6(m)-3( )3(F)-1(r)2(am)-3(e)3(w)-3(

Mathematics

Mathematics

6.5	Prerequisite Skills/Links to TEKS Vertical Alignment

¥ partition objects into equal scn q 1 0 0 1 435 0 9m ( )[(bj)6(erse)2(qu)]TJ 0 scnc [(1)-23. 0 (d13.9(1l)-5.4(-23.9(9scn q 1 0 157)]TJ 050c 0.542

Mathematics

STAAR Reporting Category 2 Ð Computations and Algebraic Relationships:	The student will demonstrate an understanding of

6.3	Prerequisite Skills/Links to TEKS Vertical Alignment

- determine products of a number and 10 or 100 using properties of operations and place value understandings
- describe a multiplicatio

6.3	Prerequisite Skills/Links to TEKS Vertical Alignment

- explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences
- solve word problems using objects and drawings to find sums up to 10 and differences within 10
- model the action of joining to represent addition and the action of separating to represent subtraction

Dividing Whole Numbers, Fractions, and Decimals

- divide whole numbers by unit fractions and unit fractions by whole numbers
- represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as 1/3 Ö 7 and 7Ö 1/3 using objects and pictorial models, including area models
- solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm
- represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models
- solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm
- use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor
- represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations
- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts
- determine a quotient using the relationship between multiplication and division
- determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally
- model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets

Adding to/taking away skills

- use informal strategies to separate up to 10 items into equal groups
- use concrete models or make a verbal word problem for subtracting 0–5 objects from a set
- use concrete objects, create pictorial models and share a verbal word problem for adding up to 5 objects

NOTE: Under each heading the prerequisite skills are arranged from the highest grade level to the lowest grade level.

6.4	Prerequisite Skills/Links to TEKS Vertical Alignment
	¥ understand that the equal sign represents a relatr7]d1>>l (q108 (at1T26(s)-12.3ffi)-14.6(8-14.70 Tr70..7l)-5.4( )[Tnd [(r4e8 Tc 3)-8.89s)-1.6(s)u

6.5	Prerequisite Skills/Links to TEKS Vertical Alignment

- understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s)
- represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and numbei.298[02 0 s(t)502 0]TJ2 [(6 b298[er)0 st6 ii02 0 20052 TcTc 257(d (d)Tj .0157 Tc3c 2.488 0u35838 0 3.2841.321 0 Td (sCld (a)7(st)
- ¥1e293 i1 /TT6 aom(t85a)7(n)0 d(t85U2 0 s)5 i(t85FTj 02)5actn(t85D2 0 525(ct)5i)7[mTT6 ao4(s)0(1(5 ,)8((t561 0 Td [(de)2( )69c 1.71 0Pe (nd)4(ng

STAAR Reporting Category 2 Ð

STAAR Reporting Category 2 Ð Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.

TEKS Knowledge and Skills Statement/
STAAR -Tested Student Expectations

(6.9) Expressions, equations, and relationships. The student applies mathematical process standards to use equations and inequalities to represent situations. The student is expected to

(A) write one -variable, one-step eq(i)6(e)2(sq)5(4Ae)27 Tc 0.339 0 Td [(st)2(e)-1(p)-4( )3(e)-1(q)-3i86[(va)9360iste[(st)2(eAe)27s1.409 (e)-1(pTD [(

6.10	Prerequisite Skills/Links to TEKS Vertical Alignment
	¥ understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s) represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences ¥ represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences ¥ generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20 Classification and patterns skills ¥ recognize and create patterns

NOTE: Under each heading the prerequisite skills are arranged from the highest grade level to the lowest grade level.

STAAR Reporting Category 3 Ð Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	
TEKS Knowledge and Skills Statement/ STAAR -Tested Student Expectations	Essence of TEKS Knowledge and Skills Statement/ STAAR-Tested Student Expectation
(6.4) Proportionality. The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. The student is expected to (H) convert units within a measurement system, including the use of proportions and unit rates. Readiness Standard	Uses conversions within a measurement system to solve problems.

6.4	Prerequisite Skills/Links to TEKS Vertical Alignment

- decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area
- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row
- use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit
- determine a solution to a problem involving length, including estimating lengths
- determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes
- describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object
- find the length of objects using concrete models for standard units of length
- describe a length to the nearest whole unit using a number and a unit
- measure the same object/distance with units of two different lengths and describe how and why the measurements differ
- illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other
- use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement
- compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference
- give an example of a measurable attribute of a given object, including length, capacity, and weight

Measuring Time

- determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes
- read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.
- tell time to the hour and half hour using analog and digital clocks

Measurement skills

- use language to describe concepts associated with the passing of time
- informally recognize and compare weights of objects or people
- recognize how much can be placed within an object
- recognize and compare heights or lengths of people or objects

NOTE: Under each heading the prerequisite skills are arranged from the highest grade level to the lowest grade level.

STAAR Reporting Category 3 Ð Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	
TEKS Knowledge and Skills Statement/ STAAR -Tested Student Expectations	Essence of TEKS Knowledge and Skills Statement/ STAAR -Tested Student Expectations
(6.8) Expressions, equations, and relationships. The student applies mathematical process standards to use geometry to represent relationships and solve problems. The student is expected to (A) extend previous knowledge of triangles and their properties to include the sum of angles of a triangle, the relationship between the lengths of sides and measures of angles in a triangle, and determining when three lengths form a triangle; Supporting Standard (B) model area formulas for parallelograms, trapezoids, and triangles by decomposing and rearranging parts of these shapes; Supporting Standard (C) write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers; Supporting Standard (D) determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers. Readiness Standard	Models or uses geometric relationships to solve problems.

6.8	Prerequisite Skills/Links to TEKS Vertical Alignment
	Measuring Angles and Using Angle Relationships ¥ determine the measure of an unknown angle formed by two non -overlapping adjacent angles given one or both angle measures ¥ draw an angle with a given measure ¥ determine the approximate measures of angles in degrees to the nearest whole number using a protractor ¥ illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that Òcuts outÓ 360 out of any circle whose center is at the angleÕs vertex has a measure of 360 degrees. Angle measures are limited to whole numbers) ¥ illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is Òcut outÓ by the rays of the angle. Angle measures are limited to whole numbers

Continued

6.8	Prerequisite Skills/Links to TEKS Vertical Alignment

- measure the same object/distance with units of two different lengths and describe how and why the measurements differ
- illustrate that the length of an object is the number of same-size units of length that, when laid end -to-end with no gaps or overlaps, reach from one end of the object to the other
- use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement
- compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference
- give an example of a measurable attribute of a given object, including length, capacity, and weight

Measurement skills

- informally recognize and compare weights of objects or people
- recognize how much can be placed within an object
- recognild [(ze)5181 Tc 12

STAAR Reporting Category 3 Ð Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.

TEKS Knowledge and Skills Statement/ STAAR -Tested Student Expectation
(6.11)Measurement and data. The student applies mathematical process standards to use coordinate geometry to identify locations on a plane. The student is expected to

6.11	Prerequisite Skills/Links to TEKS Vertical Alignment
	Geometry and spatial sense skills ¥ demonstrate use of location words (such as Òover,Ó Òunder,Ó Òabove,Ó Òon,Ó Òbeside,Ó Ònext to,Ó Òbetween,Ó Òin front of,Ó Ònear,Ó Òfar,Ó etc*)

*These prerequisite skills were borrowed from different knowledge and skills statement(s) due to similar content.

NOTE: Under each heading the prerequisite skills are arranged from the highest grade level to the lowest grade level.

STAAR Reporting Category 4 Ð Data Analysis and Personal Financial Literacy: The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts.

TEKS Knowledge and Skills Statement/
STAAR -Tested Student Expectations

(6.12) Measurement and data. The student applies mathematical process standards to use numerical or graphical representations to analyze problems. The student is expected to

(A) represent numeric data graphically, including dot plots, stem - and-leaf plots, histograms, and box plots; Supporting Standard

S u p 4 T 5 9 7 a n d o r t

6.13	Prerequisite Skills/Links to TEKS Vertical Alignment
	¥ use data to create picture and bar-type graphs ¥ collect, sort, and organize data in up to three categories using models/ representations such as tally marks or T-charts ¥ use data to create real-object and picture graphs ¥ collect, sort, and organize data into two or three categories Classification and patterns skills ¥ collect data and organize it in a graphic representation ¥ sort objects that are the same and different into groups and use language to describe how the groups are similar and different

NOTE: Under each heading the prerequisite skills are arranged from the highest grade level to the lowest grade level.

6.14	Prerequisite Skills/Links to TEKS Vertical Alignment

- describe how to allocate a weekly allowance among spending; saving, including for college; and sharing
- compare the advantages and disadvantages of various savings options
- calculate profit in a given situation
- identify decisions involving income, spending, saving, credit, and charitable giving
- list reasons to save and explain the benefit of a savings plan, including for college
- explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest
- identify the costs and benefits of planned and unplanned spending decisions
- describe the relationship between the availability or scarcity of resources and how that impacts cost
- differentiate between producers and consumers and calculate the cost to produce a simple item
- identify examples of lending and use concepts of benefits and costs to evaluate lending decisions
- identify examples of borrowing and distinguish between responsible and irresponsible borrowing
- distinguish between a deposit and a withdrawal
- explain that saving is an alternative to spending
- calculate how money saved can accumulate into a larger amount over time
- consider charitable giving
- distinguish between spending and saving

Understanding the Connections Among Income, Expenses, and Careers

- explain the difference between gross income and net income
- define income tax, payroll tax, sales tax, and property tax
- distinguish between fixed and variable expenses
- explain the connection between human capital/labor and income
- identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs
- define money earned as income
- distinguish between wants and needs and identify income as a source to meet one's wants and needs
- list simple skills required for jobs
- differentiate between money received as income and money received as gifts
- identify ways to earn income

Determining Values of Coins and Bills

- determine the value of a collection of coins and bills
- use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins
- determine the value of a collection of coins up to one dollar
- use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes

Continued

6.14	Prerequisite Skills/Links to TEKS Vertical Alignment
	¥ wr it e a number with t he cent sym bol to describe the valu e of a coin ¥ id

Mathematical Process Standards Ð Mathematical process standards will not be listed under a separate reporting category. Instead, they will be incorporated into test questions across reporting categories since the application of mathematical process 2(a)5(ti)1(o)-5(n)-440.4 8(2(a)5
