GRADE 3 – TIER 1 – EMERGING

A third grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ identifying the appropriate measurement tool for a given context,
✓ identifying time on a digital clock to the hour,
✓ identifying the concept of addition,
✓ identifying a simple polygon.

GRADE 3 – TIER 1 – NOVICE

A third grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
✓ identifying the denominator of a unit fraction that matches a representation (halves or fourths),
✓ identifying the area of a rectangle by counting squares or tiling,
✓ selecting an object that extends a simple pattern,
✓ identifying the concept of subtraction,
✓ selecting a set of pictures to be added to a pictograph based on given information.

GRADE 3 – TIER 1 – PROFICIENT

A third grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
✓ identifying which number is closer when given support and a quantity greater than 10,
✓ counting up to five pennies or one-dollar bills,
✓ identifying numbers ordered from smallest to largest with support,
✓ identifying the perimeter of a rectangle as distance around the outside,
✓ identifying the solution to a one step, real-world addition problem using quantities and visual support,
✓ selecting a visual representation that models a simple addition or subtraction problem with small quantities and support,
✓ identifying similar, simply polygons based on the number of sides with support.

GRADE 3 – TIER 1 – ADVANCED

A third grade Tier 1 student performing at the Advanced Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
✓ identifying the length/width of an item with an affixed ruler with one-inch markings up to five inches.

As approved by the State Board of Education on July 11, 2019
✓ identifying a simple pattern,
✓ identifying a unit fraction that matches a representation,
✓ identifying equivalent fractions using simple visual representations with support,
✓ identifying the solution to a one step, real world subtraction problem using quantities and support,
✓ identifying the representation that matches a simple multiplication situation with small quantities and support.
GRADE 4 – TIER 1 – EMERGING
A fourth grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- ✓ selecting a two-dimensional shape with the same number of sides as a given shape,
- ✓ identify the solution to a two-step, real-world addition problem with small quantities and visual support,
- ✓ identifying the line that divides a two-dimensional shape into two parts that are the same size and shape.

GRADE 4 – TIER 1 – NOVICE
A fourth grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
- ✓ selecting a pictograph that shows data displayed in a table with small quantities and support,
- ✓ identifying the solution to a two-step, real-world subtraction problem with small quantities and visual support,
- ✓ adding or subtracting quantities.

GRADE 4 – TIER 1 – PROFICIENT
A fourth grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
- ✓ identifying the solution to a real-world multiplication problem using a multiplication model and support,
- ✓ identifying the area of a shape as what covers when given a model,
- ✓ identifying the perimeter of a rectangle by demonstrating the distance around the outside,
- ✓ identifying equivalent fractions,
- ✓ identifying multiples of 10 to 100,
- ✓ comparing small quantities to determine greater than, less than, or equal,
- ✓ identifying an appropriate unit of measure in a real-world problem using visual supports.

GRADE 4 – TIER 1 – ADVANCED
A fourth grade Tier 1 student performing at the Advanced Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
- ✓ selecting a representation of a multiplication or division problem using small quantities,
- ✓ identifying the small set of objects that extends a simple pattern when given a rule.

As approved by the State Board of Education on July 11, 2019
✓ identifying the solution for adding fractions in representational form using small common denominators and visual support,
✓ determining the reasonableness of the results of an addition problem with visual support,
✓ identifying the decimal that is equivalent to a fraction with a denominator up to 10 with a visual model.
GRADE 5 – TIER 1 – EMERGING
A fifth grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ selecting a two-dimensional shape when given a specific attribute,
✓ counting objects representing two single-digit whole numbers less than 10 to determine a product.

GRADE 5 – TIER 1 – NOVICE
A fifth grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
✓ identifying the sum of two fractions with simple, common denominators and visual model,
✓ identifying the place value in a three-digit number using a visual model,
✓ identifying the volume of a simple shape using manipulatives.

GRADE 5 – TIER 1 – PROFICIENT
A fifth grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
✓ identifying and extending the set of objects that continues a simple pattern,
✓ identifying the sum or difference of two decimals with answers less than one and a visual model,
✓ identifying the numerator in subtraction problems of fractions with like denominators (halves, thirds, or fourths) and visual support,
✓ comparing two numbers up to the hundredths place using greater than, less than or equal with visual support,
✓ identifying the solution to a division problem using fair and equal shares and modeling.

GRADE 5 – TIER 1 – ADVANCED
A fifth grade Tier 1 student performing at the Advanced Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
✓ identifying a point in the first quadrant of a graph,
✓ using a conversion table to identify small, equivalent measures,
✓ rounding a decimal to the tenths place using visual support.
GRADE 6 – TIER 1 – EMERGING

A sixth grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- locating a positive number on a number line,
- selecting a multiple of ten using visual support.

GRADE 6 – TIER 1 – NOVICE

A sixth grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
- locating a negative number on a number line,
- identifying a mathematical expression using visual supports that matches a one-step, real-world addition problem with whole numbers,
- solving a problem using two, two-digit whole numbers and any four operations with support,
- identifying the volume of a simple shape by counting unit cubes in order to solve a real-world problem,
- identifying the ratio that matches a given representation using a small number set and visual model,
- identifying the mode in set of data presented with a visual model.

GRADE 6 – TIER 1 – PROFICIENT

A sixth grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
- identifying similarities or differences by making comparisons on a number line,
- identifying the product (up to 100) using single-digit whole numbers less than 10 and a visual model/supports,
- identifying the solution to a unit rate problem with a visual model,
- identifying a mathematical expression using visual supports that matches a one-step, real-world subtraction problem with whole numbers,
- identifying a percent as a portion out of 100.

GRADE 6 – TIER 1 – ADVANCED

A sixth grade Tier 1 student performing at the Advanced Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
- identifying the quotient of two single-digit whole numbers up to 10 with a visual model,

As approved by the State Board of Education on July 11, 2019
✓ locating the opposite of a given positive/negative number on a number line,
✓ identifying the median from a small data set presented with a visual support,
✓ identifying the solution of a three-digit whole number problem using addition,
✓ identifying relationships between variables in an equation using a visual model,
✓ identify a point in any of the four quadrants on a graph,
✓ matching three-dimensional shapes based on attributes.
GRADE 7 – TIER 1 – EMERGING
A seventh grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ identifying the product of two positive, small whole numbers using a visual model,
✓ comparing two simple, visually represented data sets to determine similarities or differences.

GRADE 7 – TIER 1 – NOVICE
A seventh grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
✓ identifying three-dimensional figures with a given attribute,
✓ identifying sums less than one when given two decimals to the tenths place,
✓ identifying the probability of a familiar event as possible/impossible or likely/unlikely when given visual supports,
✓ identifying what is the same or different between two sets of data given a pictograph,
✓ selecting a percentage to solve a real-world problem when given context and support,
✓ comparing figures to determine scaling when given a simple, familiar model.

GRADE 7 – TIER 1 – PROFICIENT
A seventh grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
✓ identifying a relationship on a line graph when given support,
✓ identify the meaning of a point on a graph given a specific context and support,
✓ identifying the difference (less than one) between two decimals to the tenths place when given a visual model,
✓ identifying the small sum of two fractions with visual support,
✓ identifying the expression used to find the volume of a two-dimensional shape using a formula and visual support,
✓ identifying the expression used to find the area of a two-dimensional shape using a formula and visual support,
✓ identifying the difference between two numbers using a number line,
✓ determining the reasonableness of a solution to a real-world problem using addition or subtraction and visual support.

GRADE 7 – TIER 1 – ADVANCED

As approved by the State Board of Education on July 11, 2019
A seventh grade Tier 1 student performing at the **Advanced** Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the **Proficient** level, students performing at this level demonstrate these abilities by

- ✓ identifying the equation that matches a one-step addition or subtraction problem with whole numbers using a visual model,
- ✓ identifying the quotient of two positive whole numbers up to 10 using a visual model,
- ✓ identifying unit rate in a real-world problem with visual support,
- ✓ identifying a characteristic of a right angle when given a model,
- ✓ finding the median within a set of data using visual representation.
GRADE 8 – TIER 1 – EMERGING
An eighth grade Tier 1 student performing at the Emerging Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ identifying the 2-dimensional figure that has been rotated, reflected, or translated when given a model,
✓ identifying an equation that matches a two-step, real-world addition problem with whole numbers and visual supports.

GRADE 8 – TIER 1 – NOVICE
An eighth grade Tier 1 student performing at the Novice Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
✓ identifying the completed equation used to calculate the volume of a 3-dimensional figure given dimensions and a formula,
✓ identifying the 3-dimensional figure that has been rotated, reflected, or translated,
✓ identifying a data element within a two-way table.

GRADE 8 – TIER 1 – PROFICIENT
An eighth grade Tier 1 student performing at the Proficient Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
✓ identifying the approximate location of a non-terminating decimal on a number line,
✓ identifying the meaning of a squared or cubed number with a visual model,
✓ identifying an equation that matches a two-step, real-world subtraction problem with visual support,
✓ identifying the length/distance of the longest side of a right triangle in a real-world problem given visual supports/model.

GRADE 8 – TIER 1 – ADVANCED
An eighth grade Tier 1 student performing at the Advanced Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
✓ identifying the solution to a two-step, real-world addition or subtraction problem with visual support,
✓ identifying the relationship between a fraction and a decimal to the hundredths place using visual supports,
✓ comparing two proportional relationships on a graph to determine similarities or differences,

As approved by the State Board of Education on July 11, 2019
✓ identifying the length/distance of the longest side of a right triangle in a real-world problem,
✓ identifying where the line crosses the y axis.
GRADE 11 – TIER 1 – EMERGING

An eleventh grade Tier 1 student performing at the *Emerging* Level demonstrates a preliminary academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- identifying the inter-relatedness of two and three-dimensional figures using models or visual supports,
- identifying the appropriate unit of measurement given a familiar, real-world context and visual support.

GRADE 11 – TIER 1 – NOVICE

An eleventh grade Tier 1 student performing at the *Novice* Level demonstrates a limited academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by
- identifying the unknown attribute for the area of a familiar shape when given one of the attributes and a visual model,
- identifying a missing coordinate given a table of ordered pairs, and teacher modeling,
- identifying the value of an unknown dimension in a simple shape given the formula for the volume of a two of the dimensions and a visual model.

GRADE 11 – TIER 1 – PROFICIENT

An eleventh grade Tier 1 student performing at the *Proficient* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by
- identifying the solution of addition/subtraction/multiplication/division expression using visual supports that corresponds to a real-world problem,
- identifying the one variable equation that represents a real-world problem using small numbers and visual support,
- answering a question about data presented in a 2-way table given visual support,
- identifying the scaling factor used in a familiar, real-world problem,
- comparing the area of two simple shapes with one equivalent attribute.

GRADE 11 – TIER 1 – ADVANCED

An eleventh grade Tier 1 student performing at the *Advanced* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by
- identifying the connection between a decimal and a fraction in a real-world problem given visual support,
- interpreting the mean or median of two simple datasets with visual supports,
✓ interpreting the effect of changing one variable on another when using a visual model,
✓ identifying the conditional probability of a familiar, real-word event given visual supports,
✓ identifying the relationship between 2 variables in a function.
PASA – MATH
TIER 2
PERFORMANCE LEVEL DESCRIPTORS
GRADE 3 – TIER 2 – EMERGING
A third grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ identifying the appropriate measurement tool for a given context,
✓ selecting the time shown on an analog clock to the hour with picture support.

GRADE 3 – TIER 2 – NOVICE
A third grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by
✓ determining the length or width of an object using a ruler with one-inch marking,
✓ identifying two similar, simple polygons with picture support,
✓ selecting the time shown on an analog clock to the half hour with picture support,
✓ selecting the representation that models an addition or subtraction problem using small numbers.

GRADE 3 – TIER 2 – PROFICIENT
A third grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by
✓ selecting the set of data to be added to a graphical representation based on information presented in a table,
✓ identifying the area of a rectangle by counting squares, tiling, or adding,
✓ counting coins/one-dollar bills,
✓ rounding to the nearest 10,
✓ identifying the denominator of a unit or a proper fraction that matches a representation,
✓ identifying the solution to a one step, real-world addition problem with small numbers,
✓ selecting a representation that models a multiplication problem using small numbers.
✓ ordering numbers smallest to largest or largest to smallest.

GRADE 3 – TIER 2 – ADVANCED
A third grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by
✓ identifying the number that extends a numeric pattern,
✓ identifying equivalent fractions using representations,
✓ identifying the perimeter of a rectangle by counting or adding,

As approved by the State Board of Education on July 11, 2019
✓ identifying the solution to a one-step, real-world subtraction problem with small numbers.
GRADE 4 – TIER 2 – EMERGING

A fourth grade Tier 2 student performing at the **Emerging** Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- ✓ identifying the solution to two-step, real-world addition problem using small numbers,
- ✓ identifying area of a shape as what covers the shape.

GRADE 4 – TIER 2 – NOVICE

A fourth grade Tier 2 student performing at the **Novice** Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the **Emerging** level, students performing at this level demonstrate these abilities by
- ✓ selecting the bar graph or line plot that corresponds to data in a table supported with pictures,
- ✓ identifying the solution to two-step, real-world subtraction problem using small numbers,
- ✓ identifying multiples of 5 to 100,
- ✓ comparing small numbers to determine greater than, less than, or equal,
- ✓ identifying equivalent fractions with denominators of 3, 4, or 8.

GRADE 4 – TIER 2 – PROFICIENT

A fourth grade Tier 2 student performing at the **Proficient** Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the **Novice** level, students performing at this level demonstrate these abilities by
- ✓ identifying the differences between two whole numbers with numbers up to 20,
- ✓ identifying the appropriate unit of measurement in a real-world problem,
- ✓ sorting three shapes into groups based on the number of sides with picture support,
- ✓ identifying the sums of or differences between two whole numbers,
- ✓ comparing two fractions with like denominators using greater than, less than or equal and visual support,
- ✓ identifying the number that extends a pattern when given a rule,
- ✓ identifying the perimeter of a rectangle when provided with model and small numbers,
- ✓ identifying the solution for adding or subtracting fractions with common denominators given picture support,
- ✓ selecting the representation that matches a multiplication or division problem,
- ✓ determining the reasonableness of an addition or subtraction problem.

GRADE 4 – TIER 2 – ADVANCED

A fourth grade Tier 2 student performing at the **Advanced** Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

As approved by the State Board of Education on July 11, 2019
In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by

✓ identifying a decimal that is equivalent to a fraction (tenths),
✓ decomposing a fraction into multiple copies of a unit fraction (denominators 3, 4, or 8),
✓ identifying the line of symmetry in a 2-dimensional figure,
✓ determining the reasonableness of the results of an addition or subtraction problem,
✓ organizing data into a graph or chart for the given information.
**GRADE 5 – TIER 2 – EMERGING**

A fifth grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- ✓ identifying the product of two single-digit whole numbers less than 10,
- ✓ identifying the sum of two fractions with common denominators and visual support.

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**GRADE 5 – TIER 2 – NOVICE**

A fifth grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by
- ✓ identifying two different graphs representing the same information,
- ✓ selecting a 2-dimensional shape based upon one or more given attributes,
- ✓ identifying the solution to a division problem using fair and equal shares, and
- ✓ finding the volume using a formula and supports.

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**GRADE 5 – TIER 2 – PROFICIENT**

A fifth grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by
- ✓ converting units to an equivalent unit given a conversion table,
- ✓ identifying the point in the first quadrant of graph that matches a given ordered pair,
- ✓ identifying the place value in a three-digit number,
- ✓ comparing two numbers up to the hundredths place using greater than, less than, or equal,
- ✓ rounding a decimal from the tenths place to the nearest whole number.

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**GRADE 5 – TIER 2 – ADVANCED**

A fifth grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by
- ✓ identifying and extend the numbers that extend a pattern,
- ✓ identifying the volume of a given shape using multiplication,
- ✓ finding the sum or difference of two decimals with answers less than one.

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As approved by the State Board of Education on July 11, 2019
GRADE 6 – TIER 2 – EMERGING

A sixth grade Tier 2 student performing at the Emerging Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
✓ identifying multiples of 5, 10, 25, or 100,
x✓ solving a problem using two, three-digit whole numbers and any four operations with support.

GRADE 6 – TIER 2 – NOVICE

A sixth grade Tier 2 student performing at the Novice Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
✓ sorting three-dimensional shapes based on attributes,
x✓ identifying similarities or differences by making comparisons on a graph,
x✓ locating a given positive/negative integer, or its opposite, on a number line,
x✓ identifying the median or mode with visual support,
x✓ identifying the mathematical expression that matches a one-step, real-world addition problem with whole numbers.

GRADE 6 – TIER 2 – PROFICIENT

A sixth grade Tier 2 student performing at the Proficient Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
✓ identifying the mathematical expression that matches a one-step, real-world subtraction problem with whole numbers,
x✓ identify specific points within the four quadrants on a graph,
x✓ identifying the product (up to 100) using single-digit whole numbers less than 10,
x✓ identifying the ratio that matches a given representation,
x✓ identifying the volume of a shape to solve a real-world problem using a formula and visual model,
x✓ identify the solution to a unit rate problem,
x✓ identifying a percent given a number out of 100,
x✓ identifying relationships between variables in an equation using a visual model,
x✓ identifying the area given the formulas and a visual representation.

GRADE 6 – TIER 2 – ADVANCED

A sixth grade Tier 2 student performing at the Advanced Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

As approved by the State Board of Education on July 11, 2019
In addition to the skills demonstrated by students performing at the *Proficient* level, students performing at this level demonstrate these abilities by
- ✓ identifying the solution to a real-world problem presented as a one-step addition or subtraction expression with whole numbers, support and small numbers,
- ✓ identifying the median in a small data set,
- ✓ identifying the quotient of two numbers with two-digit dividends and one-digit divisors when provided visual.
GRADE 7 – TIER 2 – EMERGING
A seventh grade Tier 2 student performing at the *Emerging* Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- ✓ identifying a three-dimensional figure with a given attribute,
- ✓ identifying the small sum of two decimals to the tenths place,
- ✓ identifying what is the same or different between two sets of data given a visual representation,
- ✓ comparing two data sets to determine similarities or differences.

GRADE 7 – TIER 2 – NOVICE
A seventh grade Tier 2 student performing at the *Novice* Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Emerging* level, students performing at this level demonstrate these abilities by
- ✓ identifying the meaning of a point on a graph given a specific context,
- ✓ identifying the area of a two-dimensional figure given a formula,
- ✓ identifying an equation that matches a one-step addition problem with positive/negative whole numbers.

GRADE 7 – TIER 2 – PROFICIENT
A seventh grade Tier 2 student performing at the *Proficient* Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the *Novice* level, students performing at this level demonstrate these abilities by
- ✓ identifying a small sum (up to 1) of two fractions (halves, thirds, fourths, or eighths),
- ✓ identifying the solution to a real-world problem using percentages,
- ✓ identifying a line graph that matches a proportional relationship,
- ✓ identifying a mathematical equation that matches a one-step subtraction problem with positive/negative whole numbers,
- ✓ identifying the volume of a three-dimensional figure given three dimensions and a formula,
- ✓ identifying the probability of an event as possible/impossible or likely/unlikely,
- ✓ identifying the difference between two decimals to the tenths place,
- ✓ identifying the product of two small positive/negative whole numbers with visual support,
- ✓ identifying the unit rate in a real-world problem,
- ✓ identifying a right angle,
- ✓ finding the median within a set of data containing an odd number of elements.

GRADE 7 – TIER 2 – ADVANCED
A seventh grade Tier 2 student performing at the *Advanced* Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

As approved by the State Board of Education on July 11, 2019
In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by

✓ identifying the difference between two negative numbers on a number line,
✓ identifying the quotient of two positive/negative whole numbers up to 10.
GRADE 8 – TIER 2 – EMERGING

An eighth grade Tier 2 student performing at the Emerging Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by

✓ identifying a 2-dimensional figure that has been rotated, reflected, or translated,
✓ identifying an equation that matches a two-step, real-world addition problem with whole numbers.

GRADE 8 – TIER 2 – NOVICE

An eighth grade Tier 2 student performing at the Novice Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by

✓ identifying the 3-dimensional figure that has been rotated, reflected, or translated,
✓ identifying data by reading a two-way table,
✓ identifying an equation that matches a two-step, real-world problem subtraction with whole numbers.

GRADE 8 – TIER 2 – PROFICIENT

An eighth grade Tier 2 student performing at the Proficient Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by

✓ identifying the solution to two-step, real-world addition or subtraction problems with visual support,
✓ identifying where the line crosses the y axis,
✓ identifying the meaning of a squared or cubed number in exponential form,
✓ identifying the length/distance of the longest side of a right triangle in a real-world problem,
✓ identifying the approximate location of a non-terminating decimal on a number line,
✓ comparing two proportional relationships on a graph to determine similarities or differences,
✓ identifying the volume of a three-dimensional shape given a formula and visual model.

GRADE 8 – TIER 2 – ADVANCED

An eighth grade Tier 2 student performing at the Advanced Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by

✓ identifying a decimal to the hundredths place and the equivalent fraction,
✓ identifying a statement that describes the relationship between variables displayed on a scatterplot,
✓ identifying data that represents a cross-section of a two-way table.

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GRADE 11 – TIER 2 – EMERGING
An eleventh grade Tier 2 student performing at the Emerging Level demonstrates a progressing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

Students performing at this level demonstrate these abilities by
- ✓ identifying a missing coordinate given a table of ordered pairs, and teacher modeling,
- ✓ identifying the solution of addition/subtraction expression using visual supports that corresponds to a real-world problem,
- ✓ identifying the appropriate units of measure given a real-world context.

GRADE 11 – TIER 2 – NOVICE
An eleventh grade Tier 2 student performing at the Novice Level demonstrates a developing academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Emerging level, students performing at this level demonstrate these abilities by
- ✓ identifying the solution of multiplication/division expression using visual supports that corresponds to a real-world problem,
- ✓ identifying the inter-relatedness of two and three-dimensional figures,
- ✓ identifying the conditional probability of a familiar, real-world event,
- ✓ answering an inferential question about data presented in a 2-way table,
- ✓ identifying the scaling factor used in a real-world problem,
- ✓ comparing the area of two simple shapes with one equivalent attribute.

GRADE 11 – TIER 2 – PROFICIENT
An eleventh grade Tier 2 student performing at the Proficient Level demonstrates a fundamental academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Novice level, students performing at this level demonstrate these abilities by
- ✓ identifying equivalency between a decimal and a fraction in a real-world problem,
- ✓ identifying the one variable equation that represents a real-world problem,
- ✓ identifying the effect of a change in one variable on another variable in a linear equation,
- ✓ identifying the value of an unknown attribute of a rectangle when given a formula for area and one attribute,
- ✓ identifying the value of an unknown dimension in a shape given a formula for volume and two dimensions.

GRADE 11 – TIER 2 – ADVANCED
An eleventh grade Tier 2 student performing at the Advanced Level demonstrates a consistent academic awareness of the knowledge, skills, and processes outlined by the Pennsylvania Alternate Eligible Content.

In addition to the skills demonstrated by students performing at the Proficient level, students performing at this level demonstrate these abilities by
- ✓ identifying the missing coordinate in an ordered pair given a linear equation and a table,

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✓ solving an equation by identifying the step that completes the sequence,
✓ selecting the algebraic equation representing any of the four operations that will solve a real-world problem.