

Office of Assessments, Accountability, and Analytics

# LEAP Connect Achievement Level Descriptors for Mathematics Grades 3-8 and High School

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## **Achievement Level Definitions**

Achievement Level Definitions briefly describe the expectations for student performance at each of Louisiana's four achievement levels. The achievement levels are part of Louisiana's cohesive assessment system and indicate a student's ability to demonstrate proficiency on the Louisiana Connectors for Students with Significant Cognitive Disabilities.

Below Goal: A student who performs at below goal level demonstrates a minimal understanding of key academic knowledge and skills
in the Louisiana Connectors for Students with Significant Cognitive Disabilities when presented with low complexity texts or tasks and
will need substantial academic scaffolds and supports as the student transitions to the next grade/course and progresses toward
inclusive college, career, and community opportunities.

- Near Goal: A student who performs at near goal level demonstrates a partial understanding of key academic knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when presented with low and moderate complexity texts or tasks and will need moderate academic scaffolds and supports as the student transitions to the next grade/course and progresses toward inclusive college, career, and community opportunities.
- At Goal: A student who performs at goal level demonstrates a satisfactory understanding of key knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when presented with moderate and high complexity texts or tasks and may need minimal academic scaffolds and supports as the student transitions to the next grade/course and progresses toward inclusive college, career, and community opportunities.
- Above Goal: A student who performs at above goal level demonstrates a thorough understanding of key knowledge and skills in the Louisiana Connectors for Students with Significant Cognitive Disabilities when presented with high complexity texts or tasks and will need few academic scaffolds and supports as the student transitions to the next grade/course and progresses toward inclusive college, career, and community opportunities.

# **Scale Score Ranges for LEAP Connect Math**

Level	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	High School
Above Goal	1290 – 1276	1290 – 1252	1290 – 1257	1290 – 1248	1290 – 1257	1290 – 1255	1290 - 1249
At Goal	1275 – 1240	1251 – 1240	1256 – 1240	1247 – 1240	1256 – 1240	1254 – 1240	1248 – 1240
Near Goal	1239 – 1232						
Below Goal	1231 – 1200						

# **LEAP Connect Math Achievement Level Descriptors (ALDs)**

LEAP Connect scale scores are used to assign a student's achievement in science in one of four levels. Achievement Level Descriptors (ALDs) for science further describe the knowledge, skills, and abilities that students generally demonstrate at each performance level. ALDs for math grades 3-8 and high school are provided in the following tables.

#### **Task Complexity Descriptions**

- Low task complexity: Simple problems using common mathematical terms and symbols
- Moderate task complexity: Common problems presented in mathematical context using various mathematical terms and symbols
- **High task complexity**: Multiple mathematical ideas presented in problems using various mathematical terms and symbolic representations of numbers, variables, and other item elements

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
<ul> <li>The student is able to:         <ul> <li>solve addition and subtraction word problems</li> <li>check the correctness of an answer in the context of a scenario</li> <li>solve multiplication equations in which both numbers are equal to or less than five</li> <li>identify multiplication patterns</li> <li>match fraction models to unitary fractions</li> <li>compare fractions with different numerators and the same denominator</li> <li>transfer data from an organized list to a bar graph</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>solve addition and subtraction word problems</li> <li>check the correctness of an answer in the context of a scenario</li> <li>solve multiplication equations in which both numbers are equal to or less than five</li> <li>identify multiplication patterns</li> <li>match fraction models to unitary fractions</li> <li>compare fractions with different numerators and the same denominator</li> <li>transfer data from an organized list to a bar graph</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>solve addition and subtraction word problems</li> <li>identify an arrangement of objects which represents factors in a problem</li> <li>solve multiplication equations in which both numbers are equal to or less than five</li> <li>identify multiplication patterns</li> <li>identify a set of objects as nearer to 1 or 10</li> <li>identify a representation of the area of a rectangle</li> </ul> </li> </ul>	<ul> <li>The student is able to:</li> <li>solve addition problems</li> <li>identify growing number patterns</li> <li>identify an object showing a specified number of parts shaded</li> <li>identify which object has the greater number of parts shaded</li> <li>identify an object equally divided into two parts</li> <li>identify the number of objects to be represented in a pictograph</li> </ul>
	High task complexity:	Moderate task complexity:	
	identify geometric figures which are divided into equal parts	<ul> <li>identify geometric figures which are divided into equal parts</li> <li>count unit squares to compute the area of a rectangle</li> </ul>	

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
<ul> <li>The student is able to:         <ul> <li>solve multiplication word problems</li> <li>show division of objects into equal groups</li> <li>compare two fractions with different denominators</li> <li>sort a set of 2-dimensional shapes</li> <li>transfer data to a graph</li> <li>identify equivalent fractions</li> </ul> </li> </ul>	<ul> <li>The student is able to:</li> <li>solve multiplication word problems</li> <li>show division of objects into equal groups</li> <li>round numbers to nearest 10, 100, or 1000</li> <li>sort a set of 2-dimensional shapes</li> <li>compute the perimeter of a rectangle</li> <li>transfer data to a graph</li> </ul>	<ul> <li>The student is able to:         <ul> <li>match a model to a multiplication expression using two single-digit numbers</li> <li>identify a model of a multiplicative comparison</li> <li>show division of objects into equal groups</li> <li>round numbers to nearest 10, 100, or 1000</li> <li>differentiate parts and wholes</li> <li>compute the perimeter of a rectangle</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify an array with the same number of objects in each row</li> </ul> </li> <li>identify values rounded to nearest tens place</li> <li>identify equivalent representations of a fraction (e.g., shaded diagram)</li> <li>compare representations of a fraction (e.g., shaded diagram)</li> <li>identify a rectangle with the larger or smaller perimeter</li> <li>identify the data drawn in a bar</li> </ul>
	High task complexity:	Moderate task complexity:	graph that represents the
	<ul> <li>solve a multiplicative comparison word problem using up to two- digit numbers</li> <li>check the correctness of an answer in the context of a scenario</li> </ul>	<ul> <li>identify equivalent fractions using models</li> <li>select a 2-dimensional shape with a given attribute</li> </ul>	greatest value

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
<ul> <li>The student is able to:         <ul> <li>solve multiplication word problems</li> <li>perform operations with decimals</li> <li>solve word problems involving fractions</li> <li>locate a given point on a coordinate plane when given an ordered pair</li> <li>convert standard measurements</li> <li>convert between minutes and hours</li> <li>make quantitative comparisons between data sets shown as line graphs</li> <li>plot a given point on a coordinate plane when given an ordered pair</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>solve multiplication word problems</li> <li>perform operations with decimals</li> <li>solve word problems involving fractions</li> <li>identify place values to the hundredths place</li> <li>locate a given point on a coordinate plane when given an ordered pair</li> <li>convert standard measurements</li> <li>convert between minutes and hours</li> <li>make quantitative comparisons between data sets shown as line graphs</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify if the total will increase or decrease when combining sets</li> </ul> </li> <li>perform operations with decimals</li> <li>identify a symbolic representation of the addition of two fractions</li> <li>identify place values to the hundredths place</li> <li>convert standard measurements</li> </ul>	<ul> <li>The student is able to:</li> <li>solve one-step subtraction word problems</li> <li>divide sets (no greater than 6) into two equal parts</li> <li>identify values in the tenths place</li> <li>identify a number in the ones, tens, or hundreds place</li> <li>identify a given axis of a coordinate plane</li> <li>match the conversion of 3 feet to 1 yard to a model</li> <li>calculate elapsed time (i.e., hours)</li> </ul>
	High task complexity:	Moderate task complexity:	
	<ul> <li>compare the values of two products based upon multipliers</li> <li>round decimals to nearest whole number</li> </ul>	<ul> <li>compare the values of two products based upon multipliers</li> <li>round decimals to nearest whole number</li> </ul>	

Above Goal At Goal		Near Goal	Below Goal	
		Low task complexity:	Low task complexity:	
<ul> <li>The student is able to:         <ul> <li>solve real-world measurement problems involving unit rates and ratios</li> <li>identify positive and negative values on a number line</li> <li>solve word problems with expressions including variables</li> <li>compute the area of a parallelogram and a triangle</li> <li>use measures of central tendency to interpret data</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>perform operations using up to three-digit numbers</li> <li>solve real-world measurement problems involving unit rates</li> <li>identify positive and negative values on a number line</li> <li>determine the meaning of a value from a set of positive and negative integers</li> <li>solve word problems with expressions including variables</li> <li>compute the area of a parallelogram</li> <li>identify the median or the equation needed to determine the mean of a set of data</li> </ul> </li> </ul>	<ul> <li>The student is able to:</li> <li>match a given ratio to a model</li> <li>recognize a representation of the sum of two halves</li> <li>solve real-world measurement problems involving unit rates</li> <li>identify a representation of a value less than zero</li> <li>identify the median or the equation needed to determine the mean of a set of data</li> <li>compute the area of a rectangle</li> </ul>	<ul> <li>The student is able to:</li> <li>identify a model of a given percent</li> <li>match a given unit rate to a model</li> <li>identify a representation of two equal sets</li> <li>identify a number less than zero on a number line</li> <li>identify the meaning of an unknown in a modeled equation</li> <li>count the number of grids or tiles inside a rectangle to find the area of a rectangle</li> <li>identify the object that appears most frequently in a set of data (mode)</li> </ul>	
	<ul> <li>High task complexity:</li> <li>perform one-step operations with two decimal numbers</li> <li>solve word problems using a percent</li> <li>solve word problems using ratios and rates</li> </ul>	Moderate task complexity:	identify a representation of a set of data arranged into even groups (mean)	

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
<ul> <li>The student is able to:         <ul> <li>solve division problems with positive/negative integers</li> <li>solve word problems involving ratios</li> <li>identify proportional relationships between quantities represented in a table</li> <li>compute the area of a circle</li> <li>find the surface area of a three-dimensional right prism</li> <li>interpret graphs to qualitatively contrast data sets</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>solve division problems with positive/negative integers</li> <li>solve word problems involving ratios</li> <li>use a proportional relationship to solve a percentage problem</li> <li>identify proportional relationships between quantities represented in a table</li> <li>identify unit rate (constant of proportionality) in tables and graphs of proportional relationships</li> <li>compute the area of a circle</li> <li>find the surface area of a three-dimensional right prism</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify the meaning of an unknown in a modeled equation</li> </ul> </li> <li>describe a directly proportional relationship (i.e., increases or decreases)</li> <li>find the surface area of a three-dimensional right prism</li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify representations of area and circumference of a circle</li> <li>identify representations of surface area</li> </ul> </li> <li>make qualitative comparisons when interpreting a data set presented on a bar graph or in a table</li> <li>match a given ratio to a model</li> </ul>
	High task complexity:	Moderate task complexity:	
	<ul> <li>solve multiplication problems with positive/negative integers</li> <li>evaluate variable expressions that represent word problems</li> </ul>	<ul> <li>solve multiplication problems with positive/negative integers</li> <li>interpret graphs to qualitatively contrast data sets</li> <li>identify a representation which represents a negative number and its multiplication or division by a positive number</li> </ul>	

Above Goal	At Goal	Near Goal	Below Goal
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:
<ul> <li>The student is able to:         <ul> <li>locate approximate placement of an irrational number on a number line</li> <li>solve a linear equation which contains a variable</li> <li>identify the relationship shown on a linear graph</li> <li>compute the change in area of a figure when its dimensions are changed</li> <li>plot provided data on a graph</li> <li>interpret data presented in graphs to identify associations between variables</li> </ul> </li> </ul>	an irrational number on a number line solve a linear equation which contains a variable dentify the relationship shown on a linear graph compute the change in area of a figure when its dimensions are changed olot provided data on a graph nterpret data presented in graphs to identify associations  an irrational number on a number line solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph compute the change in area of a figure when its dimensions are changed solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph solve a linear equation which contains a variable identify the relationship shown on a linear graph calculate slope of a positive linear graph compute the change in area of a figure when its dimensions are changed		<ul> <li>The student is able to:</li> <li>locate a given decimal number on a number line</li> <li>identify the relatively larger data set when given two data sets presented in a graph</li> <li>identify congruent rectangles</li> <li>identify similar rectangles</li> <li>identify a rectangle with the larger or smaller area as compared to another rectangle</li> <li>identify an ordered pair and its point on a graph</li> </ul>
	High task complexity:	Moderate task complexity:	
	<ul> <li>interpret data tables to identify the relationship between variables</li> <li>use properties of similarity to identify similar figures</li> <li>identify congruent figures</li> </ul>	<ul> <li>identify congruent figures</li> <li>use properties of similarity to identify similar figures</li> <li>interpret data tables to identify the relationship between variables</li> </ul>	

# **High School**

Above Goal At Goal		Near Goal	Below Goal	
High task complexity:	Moderate task complexity:	Low task complexity:	Low task complexity:	
<ul> <li>The student is able to:         <ul> <li>identify variable expressions which represent word problems</li> <li>solve real-world measurement problems that require unit conversions</li> <li>determine two similar right triangles when a scale factor is given</li> <li>select the graphical representation of a linear model using a data table</li> <li>calculate the mean, median, and range of a set of data</li> <li>select the graphical representation of a linear model</li> </ul> </li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify variable expressions which represent word problems</li> </ul> </li> <li>solve real-world measurement problems that require unit conversions</li> <li>find the missing attribute of a three-dimensional figure</li> <li>determine two similar right triangles when a scale factor is given</li> <li>calculate the mean and median of a set of data</li> <li>solve an equation for a specific variable</li> </ul>	<ul> <li>The student is able to:         <ul> <li>identify variable expressions which represent word problems</li> </ul> </li> <li>identify the hypotenuse of a right triangle</li> <li>identify the greatest or least value in a set of data shown on a number line</li> <li>calculate the mean and median of a set of data</li> <li>describe the rate of change qualitatively</li> </ul>	<ul> <li>The student is able to:         <ul> <li>arrange a given number of objects into two sets in multiple combinations</li> <li>match an equation with a variable to a provided real-world situation</li> <li>determine whether a given point is or is not part of a data set shown on a graph</li> <li>use a table to match a unit conversion</li> <li>complete the formula for area of a figure</li> <li>identify the greatest or least value in a set of data shown on a</li> </ul> </li> </ul>	
given a scenario	High task complexity:	Moderate task complexity:	number line	
	<ul> <li>identify the linear representation of a provided real-world situation</li> <li>use an equation or a linear graphical representation to solve a word problem</li> </ul>	<ul> <li>identify the linear representation of a provided real-world situation</li> <li>use an equation or a linear graphical representation to solve a word problem</li> <li>solve equations with two variables using a graph</li> <li>solve for the volume of a cube</li> </ul>		