

Resources

Possible grade 8 TEKS associated with planning, organization, working with others, and following directions.

(12) Reading/Comprehension of Informational Text/Procedural Texts. Students understand how to glean and use information in procedural texts and documents. Students are expected to:

(A) follow multi-tasked instructions to complete a task, solve a problem, or perform procedures; and

(13) Reading/Media Literacy. Students use comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. Students will continue to apply earlier standards with greater depth in increasingly more complex texts. Students are expected to:

(B) recognize how various techniques influence viewers' emotions;

(C) critique persuasive techniques (e.g., testimonials, bandwagon appeal) used in media messages; and

(14) Writing/Writing Process. Students use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. Students are expected to:

(A) plan a first draft by selecting a genre appropriate for conveying the intended meaning to an audience, determining appropriate topics through a range of strategies (e.g., discussion, background reading, personal interests, interviews), and developing a thesis or controlling idea;

(22) Research/Research Plan. Students ask open-ended research questions and develop a plan for answering them. Students are expected to:

(A) brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic; and

(26) Listening and Speaking/Listening. Students will use comprehension skills to listen attentively to others in formal and informal settings. Students will continue to apply earlier standards with greater complexity. Students are expected to:

(A) listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose and perspective;

(B) follow and give oral instructions that include multiple action steps;
and

(27) Listening and Speaking/Speaking. Students speak clearly and to the point, using the conventions of language. Students will continue to apply earlier standards with greater complexity. Students are expected to give an organized presentation with a specific point of view, employing eye contact, speaking rate, volume, enunciation, natural gestures, and conventions of language to communicate ideas effectively.

(28) Listening and Speaking/Teamwork. Students work productively with others in teams. Students will continue to apply earlier standards with greater complexity. Students are expected to participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement.

TAKS Objective 1: The student will describe functional relationships in a variety of ways.

TEKS Knowledge and Skills Statement/ TAKS-Tested Student Expectations	Essence of TEKS Knowledge and Skills Statement/ TAKS-Tested Student Expectations
<p>(A.1) Foundations for functions. The student understands that a function represents a dependence of one quantity on another and can be described in a variety of ways. The student is expected to</p> <ul style="list-style-type: none"> (A) describe independent and dependent quantities in functional relationships; (B) gather and record data and use data sets to determine functional relationships between quantities; (C) describe functional relationships for given problem situations and write equations or inequalities to answer questions arising from the situations; (D) represent relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities; and (E) interpret and make decisions, predictions, and critical judgments from functional relationships. 	Shows a basic understanding of functions.

A.1 Prerequisite Skills/Links to TEKS Vertical Alignment

<p>▲</p> <p>▼</p>	<p>Patterns, relationships, and algebraic thinking</p> <ul style="list-style-type: none"> • compare and contrast proportional and non-proportional linear relationships • estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates • predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations* • find and evaluate an algebraic expression to determine any term in an arithmetic sequence (with a constant rate of change)* • generate a different representation of data given another representation of data (such as a table, graph, equation, or verbal description)* • estimate and find solutions to application problems involving percent • estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units • generate formulas involving unit conversions, perimeter, area, circumference, volume, and scaling • graph data to demonstrate relationships in familiar concepts such as conversions, perimeter, area, circumference, volume, and scaling
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A.1	Prerequisite Skills/Links to TEKS Vertical Alignment (cont.)
<p>▲</p> <p>▼</p>	<ul style="list-style-type: none"> • 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 • formulate problem situations when given a simple equation and formulate an equation when given a problem situation* • use concrete and pictorial models to solve equations and use symbols to record the actions* • use ratios to describe proportional situations • represent ratios and percents with concrete models, fractions, and decimals • use ratios to make predictions in proportional situations • use tables and symbols to represent and describe proportional and other relationships such as those involving conversions, arithmetic sequences (with a constant rate of change), perimeter and area • use tables of data to generate formulas representing relationships involving perimeter, area, volume of a rectangular prism, etc. • formulate equations from problem situations described by linear relationships • describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams • identify prime and composite numbers using concrete objects, pictorial models, and patterns in factor pairs • select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations • describe the relationship between two sets of related data such as ordered pairs in a table • generate a table of paired numbers based on a real-life situation such as insects and legs • identify and describe patterns in a table of related number pairs based on a meaningful problem and extend the table • identify patterns in related multiplication and division sentences (fact families) such as $2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$* • identify patterns in multiplication facts using concrete objects, pictorial models, or technology* • use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as $8 + 9 = 17$, $9 + 8 = 17$, $17 - 8 = 9$, and $17 - 9 = 8$* • use patterns to develop strategies to solve basic addition and basic subtraction problems* • identify patterns in related addition and subtraction sentences (fact families for sums to 18) such as $2 + 3 = 5$, $3 + 2 = 5$, $5 - 2 = 3$, and $5 - 3 = 2$* • use patterns to predict what comes next, including cause-and-effect relationships* <p>Number, operation, and quantitative reasoning</p> <ul style="list-style-type: none"> • select and use appropriate operations to solve problems and justify the selections* • use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio* • use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals* • use order of operations to simplify whole number expressions (without exponents) in problem solving situations* • use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates*

A.1	Prerequisite Skills/Links to TEKS Vertical Alignment (cont.)
▲	<ul style="list-style-type: none"> • use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology)* • use multiplication to solve problems (no more than two digits times two digits without technology)* • use addition and subtraction to solve problems involving whole numbers* • solve and record multiplication problems (up to two digits times one digit)* • select addition or subtraction and use the operation to solve problems involving whole numbers through 999* • select addition or subtraction to solve problems using two-digit numbers, whether or not regrouping is necessary* • recall and apply basic addition and subtraction facts (to 18)* • use concrete and pictorial models to apply basic addition and subtraction facts (up to $9 + 9 = 18$ and $18 - 9 = 9$)* <p>Probability and statistics</p> <ul style="list-style-type: none"> • select and use an appropriate representation for presenting and displaying different graphical representations of the same data including line plot, line graph, bar graph, and stem and leaf plot* • graph a given set of data using an appropriate graphical representation such as a picture or line graph* • interpret bar graphs* • interpret information from pictographs and bar graphs* • collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data* • draw conclusions and answer questions based on picture graphs and bar-type graphs* • construct picture graphs and bar-type graphs* • draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs* • use organized data to construct real-object graphs, picture graphs, and bar-type graphs* • collect and sort data* • use information from a graph of real objects or pictures in order to answer questions* • construct graphs using real objects or pictures in order to answer questions* <p>Patterns</p> <ul style="list-style-type: none"> • begin to predict what comes next when patterns are extended* <p>Classification and data collection</p> <ul style="list-style-type: none"> • participate in creating and using real and pictorial graphs*
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*Similar prerequisite skills were grouped together under the same subject headings but different knowledge and skills statements due to similarities in content.

NOTE: Under each heading the student expectations are arranged from the highest grade level to the lowest grade level.

Present Levels of Academic Achievement and Functional Performance Organizer

Student's Name: _____

Grade: _____

Date: _____

Creating an Appropriate PLAAFP			
General Need	Critical Need (foundation for annual goal)	Measurable/Observable (baseline for annual goal)	Enrolled grade-level Standard (TEKS)
Identified by FIE (i.e. Reading comprehension, basic reading, fluency, math computation, math reasoning, etc.)	Suggested by FIE and identified by teacher (i.e. Inference, main idea, summarization, measurement, mathematical word problems, etc.)	FIE data and teacher data that confirms the critical need	Identified TEKS should be very similar to the critical need.
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STUDENT RUBRIC, GRADES 3-5

Part a) I arrived at a correct solution YES NO

Check List	4	3	2	1
<p>Part b) Concept</p> <p>I understand the problem.</p>	I selected the important facts and understood what to do.	I selected the important facts and showed that I understood some of the problem.	I selected some of the important facts and showed that I understood some of the problem.	I did not show that I understood the problem.
<p>Part c) Procedure</p> <p>I know what to do.</p>	I selected a strategy and used an orderly plan to solve the problem correctly. I did not have any careless mistakes in my math work.	I selected a strategy and used an orderly plan to solve the problem correctly. I made some careless mistakes in my math work.	I selected a strategy, but I did not use an orderly plan to solve the problem correctly. I made some careless mistakes in my math work, or I did not finish because my plan did not work.	I selected an inappropriate strategy for this problem, and my solution was incorrect. I showed little to no work, or my work had lots of mistakes.
<p>Part d) Communication</p> <p>I will tell you what I understood and what I did.</p>	I explained my strategy selection and my procedure. I showed that my solution is reasonable. I used accurate math vocabulary.	I explained my strategy selection and my procedure. I showed that my solution is reasonable. I used some accurate math vocabulary.	I partially explained my strategy selection and my procedure. I used some accurate math vocabulary.	I gave very little or no explanation of what I did. I used the wrong or little math vocabulary.



STUDENT RUBRIC, GRADES 6 - 8

Part a) I arrived at a correct solution YES NO

Check List	4	3	2	1
<p>Part b) Concept</p> <p>Understand the problem.</p>	<p>I understood how all of the parts of the problem fit together, so I could make sense of the problem.</p>	<p>I understood all of the parts of the problem, and I made partial sense of the problem.</p>	<p>I understood some of the parts of the problem.</p>	<p>I showed little to no understanding of the important facts of the problem that would help me find the answer.</p>
<p>Part c) Procedure</p> <p>Work the problem.</p>	<p>I used an appropriate strategy. I connected how I needed to do the problem with what I understood about the problem and my selected strategy. I did all of my math steps correctly.</p>	<p>I used an appropriate strategy. I connected how I needed to do the problem with what I understood about the problem and my selected strategy. I did some of my math steps correctly. I did not arrive at a correct solution.</p>	<p>I used an appropriate strategy. I showed little connection between how I needed to do the problem and my selected strategy. I did some of my math steps correctly, but reached an incorrect or correct solution. (See Part a.)</p>	<p>I used an inappropriate strategy. My work had lots of mistakes.</p>
<p>Part d) Communicate what you understand.</p> <p>Communicate how you worked the problem.</p>	<p>I explained why I did what I did and supported my explanation with information from the problem. I used correct math vocabulary and notation.</p>	<p>I explained why I did what I did and supported my explanation with information from the problem. I used some correct math vocabulary and notation.</p>	<p>I gave little explanation of why I did what I did. I only explained what I did. I used some correct math vocabulary and notation.</p>	<p>I gave very little or no explanation of what I did. I used little or incorrect math vocabulary and/or notation.</p>



Mathematics Performance Assessment Rubric

Part a) Correct Solution YES NO

Criteria	4	3	2	1
Part b) Conceptual Knowledge	Attribute(s) of concept(s) Correctly identifies attributes of the problem, which leads to correct inferences. Inferences Combines the critical attributes of the problem in order to correctly describe the mathematical relationship(s) inherent in the problem.	Attribute(s) of concept(s) Correctly identifies attributes of the problem, which leads to correct inferences. Inferences Combines the critical attributes of the problem, which leads to a partial identification of the mathematical relationship(s) inherent in the problem.	Attribute(s) of concept(s) Identifies some of the attributes of the problem, which leads to partially correct inferences. Inferences Combines the identified attributes of the problem, which leads to a partial identification of the mathematical relationship(s) inherent in the problem.	Attribute(s) of concept(s) Lacks identification of any of the critical attributes of the problem. Inferences Combines few of the attributes of the problem which leads to an incomplete identification of the mathematical relationship(s) inherent in the problem.
Part c) Procedural Knowledge	Appropriate strategy Selects and implements an appropriate strategy. Representational form Uses appropriate representation to connect the procedure to the concept of the problem. Algorithmic competency Correctly implements procedure to arrive at a correct solution.	Appropriate strategy Selects and implements an appropriate strategy. Representational form Uses appropriate representation to connect the procedure to the concept of the problem. Algorithmic competency Implements selected procedure but arrives at an incorrect solution.	Appropriate strategy Selects and implements an appropriate strategy. Representational form Uses inconsistent or insufficient representation for the selected solution strategy. Algorithmic competency Implements selected procedure but arrives at an incorrect or correct solution. (See Part a above)	Appropriate strategy Selects and implements an inappropriate strategy. Representational form Uses incorrect representations. Algorithmic competency Makes significant errors.
Part d) Communication	Justification Fully answers the question of “why” for the strategy selection; explains procedure; and/or evaluates reasonableness of solution. Terminology Uses appropriate terminology and notation.	Justification Fully answers the question of “why” for the strategy selection; explains procedure; and/or evaluates reasonableness of solution. Terminology Uses some appropriate terminology or notation.	Justification Incompletely answers the question of “why” for the strategy selection; explains procedure; and/or evaluates reasonableness of solution. Terminology Uses some appropriate terminology or notation.	Justification Provides very little or no explanation of what was done and why. Terminology Uses limited or inappropriate terminology or notation.

