Mathematics

Number Sense

Read, write, and compare whole numbers to 1,000 and identify the place value of each digit.				
1.1 Count, read, and write whole numbers to 1,000 and identify the place value for each digit. 1.3 Order and compare whole numbers to 1,000 by using the symbols <, =, >.				
5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often **exceeds** the grade level standards and produces work that demonstrates a **thorough** knowledge of grade level standards. Student consistently demonstrates the ability to: • count, read, and write whole numbers above 100, • identify the place value of each number in a two or three digit number, • order and compare whole numbers above 100 using <, =, and >, • count to 100 by 2s, 3s, 5s, and 10s, • represent numbers in different forms, • identify even and odd numbers, • round numbers to the nearest 10.	Student regularly demonstrates **proficient** performance of the grade level standards and produces work that demonstrates **adequate** knowledge of grade level standards. Student demonstrates the ability to: • count, read, and write whole numbers to 100, • identify the place value of each number in a two digit number, • order and compare whole numbers to 100 using <, =, and >, • count to 100 by 2s, 3s, 5s, and 10s, • represent numbers in different forms, • round numbers to the nearest 10.	Student often demonstrates **basic** performance on grade level standards and produces work that demonstrates **partial** knowledge of grade level standards. **With direct instruction and teacher support,** student often demonstrates the ability to: • count whole numbers to 100, • read and write most numbers to 100, • identify the place value of each number in a two digit number, • order and compare whole numbers to 100 using <, =, and >, • count to 100 by 2s, 5s, and 10s, • represent some numbers in different forms.	Student often demonstrates **below basic** performance on grade level standards and produces work that demonstrates a **limited** knowledge of grade level standards. **With direct instruction and teacher support,** student may demonstrate **limited** ability to: • count whole numbers to 50, • read and write most numbers to 50, • identify the place value of each number in a two digit number, • order and compare whole numbers to 50 using <, =, and >, • count to 50 by 2s, 5s, and 10s, • represent some numbers in different forms.	Student is **not meeting grade level** standards and produces work that demonstrates **little** knowledge of grade level standards. **With direct instruction and teacher support,** student **may be unable** to: • count whole numbers to 50, • read and write most numbers to 50, • identify the place value of each number in a two digit number, • order and compare whole numbers to 50 using <, =, and >, • count to 50 by 2s, 5s, and 10s, • represent some numbers in different forms.

Use the relationship between addition and subtraction (8+6=14, 14-8=6) to solve problems and check solutions.				
2.1 Understand and use the inverse relationship between addition and subtraction (e.g., an opposite number sentence for 8 + 6 = 14 is 14 – 6 = 8) to solve problems and check solutions.				
5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often **exceeds** the grade level standards and produces work that demonstrates a **thorough** knowledge of grade level standards. Student consistently demonstrates the ability to: • understand and use the inverse relationship between addition and subtraction to solve problems and check solutions above 20, • subtract from numbers to 20 and above using addition (inverse relationship).	Student regularly demonstrates **proficient** performance of the grade level standards and produces work that demonstrates **adequate** knowledge of grade level standards. Student demonstrates the ability to: • understand and use the inverse relationship between addition and subtraction to solve problems and check solutions to 20, • subtract from numbers to 20 using addition (inverse relationship).	Student often demonstrates **basic** performance on grade level standards and produces work that demonstrates **partial** knowledge of grade level standards. **With direct instruction and teacher support**, student often demonstrates the ability to: • use the inverse relationship between addition and subtraction to solve problems and check solutions 15, • subtract from numbers to 15 using addition (inverse relationship).	Student often demonstrates **below basic** performance on grade level standards and produces work that demonstrates a **limited** knowledge of grade level standards. **With direct instruction and teacher support**, student may demonstrate **limited** ability to: • use the inverse relationship between addition and subtraction to solve problems and check solutions to 10, • subtract from numbers to 10 using addition (inverse relationship).	Student is **not meeting grade level** standards and produces work that demonstrates **little** knowledge of grade level standards. **With direct instruction and teacher support**, student **may be unable** to: • use the inverse relationship between addition and subtraction to solve problems and check solutions to 10, • subtract from numbers to 10 using addition (inverse relationship).

Add and subtract two whole numbers up to three digits long.

2.2 Find the sum or difference of two whole numbers up to three digits long.

5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often **exceeds** the grade level standards and produces work that demonstrates a **thorough** knowledge of grade level standards. Student consistently demonstrates the ability to: • solve addition problems using a variety of strategies, for example; add in any order, count on to add, use doubles and doubles plus one, add 10 to 1-digit whole numbers, making 10 to add, fact families, • solve subtraction problems using a variety of strategies, for example: count back, inverse relationship between addition and subtraction to 20, fact families,	Student regularly demonstrates **proficient** performance of the grade level standards and produces work that demonstrates **adequate** knowledge of grade level standards. Student demonstrates the ability to: • solve addition problems using at least two strategies, for example; add in any order, count on to add, use doubles and doubles plus one, add 10 to 1-digit whole numbers, making 10 to add fact families, • solve subtraction problems, *count back* , inverse relationship between addition and subtraction to 20, fact families,	Student often demonstrates **basic** performance on grade level standards and produces work that demonstrates **partial** knowledge of grade level standards. **With direct instruction and teacher support**, student often demonstrates the ability to: • solve addition facts using at least two strategies, for example add in any order count on to add use doubles and doubles plus one add 10 to 1-digit whole numbers making 10 to add fact families • solve subtraction facts count back inverse relationship between addition and subtraction to 15 fact families,	Student often demonstrates **below basic** performance on grade level standards and produces work that demonstrates a **limited** knowledge of grade level standards. **With direct instruction and teacher support**, student may demonstrate **limited** ability to: • solve addition facts, using at least two strategies, for example; count on to add, use doubles and doubles plus one, making 10 to add, fact families, • solve subtraction facts, count back, fact families, • identify and write names for numbers,	Student is **not meeting grade level** standards and produces work that demonstrates **little** knowledge of grade level standards. **With direct instruction and teacher support**, student **may be unable** to: • solve addition and subtraction problems using more than one strategy, • identify and write names for numbers.

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Add and subtract two whole numbers up to three digits long.				
2.2 Find the sum or difference of two whole numbers up to three digits long.				
5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student consistently demonstrates the ability to: • identify and write names for numbers	Student demonstrates the ability to: • identify and write names for numbers	**With direct instruction and teacher support**, student often demonstrates the ability to: • identify and write names for numbers		

Use mental math to find solutions to addition and subtraction problems involving two-digit numbers.				
2.3 Use mental arithmetic to find the sum or difference of two two-digit numbers.				
Standard not taught this quarter.				

Model and solve simple problems involving multiplication and division.				
3.0 Students model and solve simple problems involving multiplication and division:				
3.1 Use repeated addition, arrays, and counting by multiples to do multiplication.				
3.2 Use repeated subtraction, equal sharing, and forming equal groups with remainders to do division.				
Standard not taught this quarter.				

Recognize fractions of a whole and parts of a group.				
4.2 Recognize fractions of a whole and parts of a group (e.g., one-fourth of a pie, two-thirds of 15 balls).				
Standard not taught this quarter.				

Represent and solve problems using combinations of coins and bills.				
5.0 Students model and solve problems by representing, adding, and subtracting amounts of money: 5.1 Solve problems using combinations of coins and bills.				
Standard not taught this quarter.				

Recognize and use the commutative and associative properties (11+18=18+11).				
1.1 Use the commutative and associative rules to simplify mental calculations and to check results.				
5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often **exceeds** the grade level standards and produces work that demonstrates a **thorough** knowledge of grade level standards. Student consistently demonstrates the ability to: • recognize and use the commutative and associative properties of addition to solve problems to 20 and above, • use the commutative and associative rules to check answers.	Student regularly demonstrates **proficient** performance of the grade level standards and produces work that demonstrates **adequate** knowledge of grade level standards. Student demonstrates the ability to: • recognize and use the commutative and associative properties of addition to solve problems to 20, • use the commutative and associative rules to check answers.	Student often demonstrates **basic** performance on grade level standards and produces work that demonstrates **partial** knowledge of grade level standards. **With direct instruction and teacher support**, student often demonstrates the ability to: • recognize and use the commutative and associative properties of addition to solve problems to 15, • use the commutative and associative rules to check answers.	Student often demonstrates **below basic** performance on grade level standards and produces work that demonstrates a **limited** knowledge of grade level standards. **With direct instruction and teacher support**, student may demonstrate **limited** ability to: • recognize and use the commutative and associative properties of addition to solve problems to 10, • use the commutative and associative rules to check answers.	Student is **not meeting grade level** standards and produces work that demonstrates **little** knowledge of grade level standards. **With direct instruction and teacher support**, student **may be unable** to: • recognize and use the commutative and associative properties of addition to solve problems to 10, • use the commutative and associative rules to check answers.

Solve addition and subtraction problems by using data from simple charts, picture graphs, and number sentences.				
1.3 Solve addition and subtraction problems by using data from simple charts, picture graphs, and number sentences.				
5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards. Student consistently demonstrates the ability to: • solve addition and subtraction problems using data from simple charts, picture graphs, bar graphs, and number sentences, • compare data using simple charts, picture graphs, bar graphs, and number sentences, • create table from story clues, • transfer information from one graph to a different type of graph, for example: pictograph to tally chart.	Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards. Student demonstrates the ability to: • solve addition and subtraction problems using data from simple charts, picture graphs, bar graphs, and number sentences, • compare data using simple charts, picture graphs, • complete simple charts from story problems.	Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards. **With direct instruction and teacher support**, student often demonstrates the ability to: • solve addition and subtraction problems using data from simple charts and picture graphs, • compare data using simple charts, • complete simple charts from short story problems.	Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards. **With direct instruction and teacher support**, student may demonstrate **limited** ability to: • solve simple addition and subtraction problems using data from simple charts and picture graphs, • compare data using simple charts, • complete simple charts from short story problems.	Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards. With direct instruction and teacher support, student **may be unable** to: • solve simple addition and subtraction problems using data from simple charts and picture graphs, • compare data using simple charts, • complete simple charts from short story problems.

Measure the length of an object to the nearest inch and/or centimeter.				
1.3 Measure the length of an object to the nearest inch and/or centimeter.				
Standard not taught this quarter.				

Know relationships of measurements of time (Example: minutes in an hour, days in a week), and tell time to nearest quarter hour.				
1.4 Tell time to the nearest quarter hour and know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year).				
Standard not taught this quarter.				

Identify, describe, and classify shapes and solid objects.				
2.0 Students identify and describe the attributes of common figures in the plane and of common objects in space: 2.1 Describe and classify plane and solid geometric shapes (e.g., circle, triangle, square, rectangle, sphere, pyramid, cube, rectangular prism) according to the number and shape of faces, edges, and vertices.				
Standard not taught this quarter.				

Analyze, record, and interpret data from charts and graphs.

1.0 Students collect numerical data and record, organize, display, and interpret the data on bar graphs and other representations.
1.1 Record numerical data in systematic ways, keeping track of what has been counted.
1.2 Represent the same data set in more than one way.
1.3 Identify features of data sets (range and mode).
1.4 Ask and answer simple questions related to data representations.

5 – Advanced	4 – Proficient	3 – Basic	2 – Below Basic	1 – Far Below Basic
Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards. Student consistently demonstrates the ability to: • collect, record, and compare data using tally marks, • record and compare data using a variety of tables, • read a pictograph • interpret data on a bar graph, • represent and compare data from a bar graph and tally chart, • find range and mode • use a bar graph to solve a problem, • create a chart and write problems from chart.	Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards. Student regularly demonstrates the ability to: • record data using tally marks, • compare data using tables, • read a pictograph, • interpret data on a bar graph, • represent and compare data from a bar graph and tally chart, • find range and mode, • use a bar graph to solve most problems.	Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards. **With direct instruction and teacher support**, student often demonstrates the ability to: • record data using tally marks, • read a pictograph, • interpret data on a bar graph, • compare data from a bar graph and tally chart, • find range and mode, • use a bar graph to solve some problems.	Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards. **With direct instruction and teacher support**, student may demonstrate **limited** ability to: • record data using tally marks, • read a pictograph, • interpret some data on a bar graph, • represent and compare data from a bar graph and tally chart, • find range and mode, • use a bar graph to solve a few problems. Student may be able to record data with teacher support.	Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards. **With direct instruction and teacher support**, student **may be unable** to: • read a pictograph, • interpret data on a bar graph, • represent and compare data from a bar graph and tally chart, • find range and mode, • use a bar graph to solve a problem. Student may be able to record data using tally marks with teacher support.

Recognize, describe, and extend number patterns.				
2.1 Recognize, describe, and extend patterns and determine a next term in linear patterns (e.g., 4, 8, 12, . . .; the number of ears on one horse, two horses, three horses, four horses).				
Standard not taught this quarter.				