

Second Grade Enduring Understandings and Essential Questions

Tri.	Enduring Understandings	Essential Questions
1, 2, 3	<ol style="list-style-type: none"> 1. Addition should be used in problems about joining and subtraction should be used in problems about separating and comparing. 2. Addition and subtraction are related. 	<ol style="list-style-type: none"> 1. How do you know when to use addition and subtraction given a word problem? 2. How can we write related addition and subtraction facts?
1, 2, 3	<ol style="list-style-type: none"> 1. Strategies can be applied to solve addition problems. 	<ol style="list-style-type: none"> 1. What strategy to do you use when you add? Why?
1, 2, 3	<ol style="list-style-type: none"> 1. The placement of any number written in standard form has a meaning. 2. Numbers can be compared using greater than, less than, and equal to. 	<ol style="list-style-type: none"> 1. How do you know the value of a number? 2. How can you find the number that is one before or one after another number, or the number between two other numbers?
3	<ol style="list-style-type: none"> 1. Specific coins each have a unique value. 2. Money amounts can be counted in different ways. 3. Different combinations of coins can make the same amounts. 	<ol style="list-style-type: none"> 1. How is each coin counted? 2. What is the easiest way to count a group of coins? 3. Is there more than one way to make the same amount of money?
1,2	<ol style="list-style-type: none"> 1. Adding tens is like adding ones. 2. Two digit numbers can be broken apart using tens and ones and added in different ways. 3. Patterns on a hundred chart can be used to add numbers and to develop mental math strategies and number sense. 	<ol style="list-style-type: none"> 1. When tens are added to a two-digit number, how does the tens digit in the sum change? 2. What are two different ways of adding tens and ones mentally? 3. How can patterns on a hundred chart be used to think about adding two-digit numbers?
1, 2, 3	<ol style="list-style-type: none"> 1. Subtracting tens is like subtracting ones. 2. Patterns on a hundred chart can be used to subtract numbers and to develop mental math strategies and number sense. 3. The difference between two numbers can be found by adding up from the smaller number to the larger number. 	<ol style="list-style-type: none"> 1. Why does only the tens digit change when subtracting tens from a two-digit number? 2. How can a hundred chart be used to subtract two-digit numbers? 3. How can you add on to find the difference between 2 two-digit numbers mentally?
2, 3	<ol style="list-style-type: none"> 1. Adding tens is like adding ones. 2. At times regrouping is necessary. 3. Some problems can be solved by identifying elements that repeat. 4. Information in a problem can be showed using a diagram. 	<ol style="list-style-type: none"> 1. How is adding tens like adding ones? 2. When do you need to regroup? 3. Why is it easier to draw a picture when answering a word problem? 4. How can finding a pattern help you solve a problem?
1, 2, 3	<ol style="list-style-type: none"> 1. Subtracting tens is like subtracting ones. 2. Addition can be used to check subtraction. 3. Some word problems have missing data and some have extra information. 4. Information in a problem can be showed using a diagram. 	<ol style="list-style-type: none"> 1. How is subtracting tens like subtracting ones? 2. How can you use addition to check your subtraction? 3. How can you determine whether there is extra information in a word problem? Or missing information? 4. Why is it easier to draw a picture when answering a two-step word problem?
1, 2	<ol style="list-style-type: none"> 1. Estimating can be used when an exact number is not needed. 2. Different strategies can be used to add/subtract two more numbers. 3. The guess and check strategy can be used to problem solve. 	<ol style="list-style-type: none"> 1. Why do we need to estimate? 2. How can you estimate a two-digit sum? 3. How does guessing and checking help you solve a problem?
3	<ol style="list-style-type: none"> 1. Two and three-dimensional objects can be described, classified and analyzed by their attributes. 2. Objects in space can be transformed in an infinite number of ways, and those transformations can be described and analyzed mathematically. 	<ol style="list-style-type: none"> 1. How are attributes used to describe and classify three-dimensional figures? 2. How can translations, reflections and rotations be used to change an object's orientation in space?
2, 3	<ol style="list-style-type: none"> 1. There are a variety of situations when you need to divide something into equal parts. 2. A fraction describes the division of a whole into equal parts. 3. To subtract fractions with like denominators, subtract the numerators and write the difference over the same denominator. 	<ol style="list-style-type: none"> 1. Why would you want to divide something into equal parts? 2. How would you divide something into equal parts?

3	<ol style="list-style-type: none"> Attributes are measurable. The length of objects is measurable in different units. Measurements need the same unit of measure in order to be compared. 	<ol style="list-style-type: none"> How can you tell which attributes of an object can be measured? Which classroom objects can be used to approximate standard units of inches, feet, yards, centimeters and meters? How can you compare measurements?
3	<ol style="list-style-type: none"> Time can be given in more than one way. A calendar shows days, weeks and months. 	<ol style="list-style-type: none"> Which clock do you prefer to tell time on, analog or digital? How can a calendar help you plan events in the future?
3	<ol style="list-style-type: none"> Data can be organized in different ways. Each type of graph is most appropriate for certain types of data. 	<ol style="list-style-type: none"> What are some ways data can be organized? How can you decide what type of graph to use once you have collected data?
1, 2, 3	<ol style="list-style-type: none"> Our number system is based on groups of ten. 	<ol style="list-style-type: none"> How does understanding place value help you compare three digit numbers?
2, 3	<ol style="list-style-type: none"> There is more than one way to estimate a sum/difference. There is more than one way to do a mental calculation. Solving three-digit add/subtraction problems can be broken down using place value starting with the ones, tens, then hundreds. Some problems can be solved by making, reading and analyzing a graph. 	<ol style="list-style-type: none"> How can you estimate sums/differences of three-digit numbers? How can you use mental math to add multiples of 100? How can you count on or count back to find a missing part? How can you use data from a table to create a bar graph?
3	<ol style="list-style-type: none"> Repeated addition involves joining equal groups and is one way to think about multiplication. An array involves joining equal groups and is one way to think about multiplication. Some real world situations involve repeated addition and/or arrays and can be solved using multiplication. 	<ol style="list-style-type: none"> How can repeated addition help you to understand multiplication? How can an array be used to help write a number sentence? How can you use a picture to write a story problem?