

Teaching Unit: ***Routines and Review***

Essential Understandings

Numbers are used in our everyday lives.

Math tools can be used in our everyday lives to solve problems.

Sub Topic: ***1***

Knowledge and Skills

Identify and use number pattern.

Count by 10s and 100s.

Apply and use place-value concepts to 4-digits.

Tell time to the nearest minute.

Practice counting money and use dollars cents notation (> (\$-.-))

Use equivalent names for numbers.

Practice basic addition and subtraction facts.

Teaching Unit: ***Adding and Subtracting Whole Numbers***

Essential Understandings

When you add numbers together you get a larger number.

When you subtract a number from a larger number you get a smaller number than what you started with.

Sub Topic: **2**

Knowledge and Skills

Practice Computation – basic addition facts through 9's.

Review fact families and number families and the inverse relationship between addition and subtraction.

Use basic facts to add and subtract multiples of 10 and 100 to solve fact extensions problems.

Identify missing factors on a fact triangle.

Practice daily – basic addition and subtraction facts using mad minutes.

Be introduced to different diagrams to help solve number problems. Use these diagrams to help solve addition and subtraction multi-digit number stories.

Add 2 and 3 digit numbers, discuss methods used to solve problems, and make ballpark estimations to check their results.

Know and understand the following words - sum, addends, finding difference, less than, more than,

Teaching Unit: ***Linear Measurement***

Essential Understandings

Objects can be measured using standard and non standard units.

Students need to know that there are two systems of measurement in the world.

Sub Topic: **3**

Knowledge and Skills

Discuss and realize the need for standard units of measurements.

Use rulers to measure line segments to the nearest inch, 1/2 inch, cm, and 1/2 cm.

Become familiar with the U. S. Customary and metric units of measurement for length.

Measure the perimeter of polygons using inches and centimeters.

Teaching Unit: ***Multiplication and Division I***

Essential Understandings

People use multiplication to solve problems involving equal groups.

People use division to solve problems involving equal sharing.

Sub Topic: **4**

Knowledge and Skills

Use multiplication to solve and write number stories.

Use arrays to help them solve a multiplication problem.

Know when to use division to solve problems.

Build equal groups with hands on materials.
(blocks, unifix cubes, popsicle sticks, etc.)

Use arrays, diagrams, and number models to represent and solve multiplication number stories.

Practice and learn basic multiplication facts through the 5s.

Experience the inverse relationship between multiplication and division.

Teaching Unit: ***Place Value in Whole Numbers***

Essential Understandings

People need to understand the placement and the value of digits in whole numbers and decimals in order to have a sense of the size and value of numbers.

Sub Topic: **5**

Knowledge and Skills

Read, write, compare, and order numbers up to 5 digits.

Identify the places in numbers through ten-thousands.

Compare large numbers and small numbers.

Read, write, and compare 3 digit decimals.

Practice writing numbers in expanded notation.

Use money and base 10 blocks to show knowledge of decimal notation.

Teaching Unit: **Geometry**

Essential Understandings

Our world is made up of points, lines and shapes.

Sub Topic: **6**

Knowledge and Skills

Experiment with points and then move onto line segments, rays, and lines.

Explore the relationships among segments, rays, and lines and exploring with angles, polygons, prisms, and pyramids.

Draw parallel and intersecting line segments, rays, and lines.

Identify right angles and tell whether an angle is greater than or less than a right angle.

Identify and name 2-D and 3-D shapes.

Identify symmetric figures and draw lines of symmetry.

Practice putting shapes together and taking them apart to form other shapes.

Experiences with symmetry, transformations, and congruency.

Continue working on multiplication facts through the 9's.

Teaching Unit: *Multiplication and Division II*

Essential Understandings

People need to understand that knowing the basic facts is essential for doing mental math, estimation, and paper-and-pencil computation.

Sub Topic: **7**

Knowledge and Skills

Explore and identify patterns in a sequence of square numbers and in the multiplication/division facts table.

Explore and compare the use of commas in word sentences to the use of parentheses in number stories.

Develop strategies for multiplying and dividing using 1 digit numbers and multiples of 10 and 100.

Discuss situations in which it is not necessary to find an exact answer. Estimate the cost of a number of the same item. Find and compare the exact cost with the estimated cost.

Develop strategies for multiplying multiples of 10 by 10.

Continue to work on mastery of multiplication facts through 9's.

Find patterns in multiplication and division fact tables and discover the turn around rule.

Teaching Unit: ***Fractions***

Essential Understandings

In their lives people sometimes need to deal with equal parts of a whole.

Sub Topic: **8**

Knowledge and Skills

Learn that fractions are meaningless unless they are referenced to a whole - called ONE.

Explore that fractions are part of a whole.

Explore fractions using food. (pizza, pie, etc.)

Discuss fractions in real-world contexts.

Explore and discuss the relationship of fractions and measurement.

Explore pictorial representations of equivalent fractions.

Explore fractions greater than ONE.

Be introduced to ordering and comparing fractions.

Work with fractions on a number line.

Teaching Unit: ***Multiplication and Division***

Essential Understandings

People need to understand that knowing the basic facts helps with fact extensions and finding products of two digit numbers.

Sub Topic: **9**

Knowledge and Skills

Multiply and divide using multiples of 10, 100, and 1,000.

Multiply multi-digit numbers by 1 or 2 digit numbers.

Use a variety of strategies to multiply 1 digit number by multi-digit numbers. Use mental math, multiplication algorithm, partial products algorithm, and the lattice method.

Be able to find factors of a whole number.

Solve division problems with remainders using manipulatives, and paper and pencil strategies.

Recognize positive and negative numbers using a thermometer.

Teaching Unit: ***Unit 10 Measurement and Data***

Essential Understandings

Measuring of weight, length, and capacity is found in many areas of our everyday life. People need to know how to use appropriate units of measurement.

Sub Topic: ***10***

Knowledge and Skills

Review units, tools, and measuring length in U.S. customary and metric systems.

Explore volume of rectangular prisms.

Know the difference between U. S. customary and metric systems of weight.

Be introduced to the mean of a set of data.

Make frequency tables, and find the median, mean, and mode of data sets.

Be introduced to plotting coordinates on coordinate grids.

Teaching Unit: ***Probability***

Essential Understandings

There are things in life that you are sure will happen, there are things in life that you think might happen, and there are things that you know won't happen.

Sub Topic: ***11***

Knowledge and Skills

Introduce the language of probability using the words: always, sometimes, might, probably, likely, not likely, etc.

Read, organize, and interpret line and bar graphs.

Draw conclusions based on data representations.

Be introduced to using fractions to record probability.

Be introduced to using random draws.
