

Public Schools of the Tarrytowns

Grade 3 Math Curriculum

First Trimester

September

Exploring Mathematics

Week 1, 4 Weeks

Essential Questions:

What are the different ways numbers are used in everyday contexts?
Can I describe, extend, and make generalizations about geometric and numeric growing patterns?

Skills:

Recognize equivalent representations of the same number.
Recognize and apply mathematics to contexts that occur in everyday living.
Recognize that numbers are used to count, to measure, to label, or to describe location.
Use coordinate systems to specify locations.
Describe, extend, and make generalizations about geometric and numeric growing patterns.
Represent and analyze patterns and functions, using words, tables, and graphs.
Make a table to describe numeric relationships.
Compare different representations of the same data.
Represent data using tally tables and graphs such as picture graphs and bar graphs.

Working with Addition and Subtraction

Essential Questions:

How are addition and subtraction related?
What is a fact family?
How can doubling help me add and subtract?

Skills:

Develop fluency in adding and subtracting whole numbers.
Identify and use relationships between the operations of addition and subtraction.
Apply and adapt computation strategies to new problems.
Select the appropriate operation for a given situation.
Select the appropriate operations for solving problems that require more than one step.
Develop and carry out a plan to write and solve problems.

Investigating Numbers to 1,000

Essential Questions:

Do I understand the structure of the 3-digit numbers?

Skills:

Understand the place-value structure of 3-digit numbers.
Compare and order 3-digit numbers.
Solve logical reasoning problems.

October

Investigating Numbers to 1,000

Week 5, 5 Weeks

Essential Questions:

Can I compare, order, sequence, regroup, rename, and adjust 3-digit numbers?

Do I know different ways to regroup a 3-digit number?

Skills:

Develop fluency in adding/subtracting 1, 10, 100 to or from a 3-digit number.
Recognize equivalent representations for the same number.
Generate equivalent representations for a number by decomposing and composing (regrouping) numbers.
Develop strategies for estimating quantities of 1,000.
Recognize equivalent representations for 1,000.

Investigating Length

Essential Questions:

Can I explain the relationship between a meter and a centimeter?
What is perimeter and how is it measured?

Skills:

Measure in meters and centimeters.
Develop strategies for estimating lengths.
Carry out simple unit conversions.
Collect data from an experiment, make comparisons, and justify conclusions.
Measure with metric units.
Develop the concept of perimeter.
Make figures with a given perimeter.
Recognize and use connections between distance and time.
Know and use standard units of measurement.
Make reasonable predictions based on collected data.
Select appropriate reasoning strategies and use them to solve problems.

Adding 2- and 3-Digit Numbers

Essential Questions:

Do I know how to use different mental computational strategies to add and estimate 2- and 3-digit numbers?

Skills:

Develop and use methods and strategies for mental computation with 1- and 2-digit numbers.
Write addition and subtraction problems for given situations.
Know when to find an estimate of an exact answer.
Develop strategies to estimate the sums of 3-digit numbers.
Use base-ten blocks to add 3-digit numbers.
Model and solve addition problems that require regrouping.
Use estimation, mental math, and modeling to solve addition problems with 3-digit numbers.

November

Adding 2- and 3-Digit Numbers

Week 10, 4 Weeks

Essential Questions:

Can I add 2- and 3-digit numbers with fluency?

Skills:

Use base-ten blocks to model the addition algorithm.
Develop fluency in adding whole numbers with regrouping.

Analyzing Shapes

Essential Questions:

Can I identify, describe, compare, contrast, and draw 2-dimensional shapes?
Where is a line of symmetry drawn and can there be more than one line of symmetry?

Skills:

Identify and describe 2- and 3-dimensional shapes in the environment.
Compare and contrast the attributes of 2- and 3-dimensional shapes.
Sort polygons by a variety of attributes.
Use a square corner (right angle) as a benchmark for determining angles of various sizes.
Describe and classify 2-dimensional shapes according to their attributes.
Draw shapes based on attributes.
Identify and create 2-dimensional shapes that have line symmetry.
Draw lines of symmetry in 2-dimensional shapes.
Predict and describe the results of sliding 2-dimensional shapes on a grid.
Use transformations (slides, flips, and turns) to move or repeat a shape.

Understanding Fractions

Essential Questions:

Do I understand that a fraction represents one or more equal parts of a whole?
Can I construct models, name in words, and record fractions in symbolic form?

Skills:

Recognize that a fraction represents a part of a unit whole that has been divided into equal parts of a fair share.

Divide models into equal parts.

Compare fractional parts of an area model using concrete materials.

Recognize fractions equivalent to one whole.

Read and write fractions using mathematical notation.

Use concrete materials to understand and compare fractions.

Recognize and generate equivalent fractions.

Understand that different models can show one whole.

