

Mercer County Schools



**PRIORITIZED
CURRICULUM**

Mathematics

Content Maps

First Grade

Mercer County Schools



PRIORITIZED CURRICULUM

The Mercer County Schools *Prioritized Curriculum* is composed of West Virginia Content Standards and Objectives that have been identified as "Essential, Important, and Nice to Know." The Essential and Important objectives, which are aligned to the WESTEST, must be learned by the student in order to ensure his/her success. Therefore, the majority of instructional time (90% - 95%) must be devoted to the mastery of these objectives. To assist you with your instructional planning, the *Prioritized Curriculum* is divided into learning units (Content Maps) creating an instructional sequence and estimated time for delivering the intended/learned curriculum.

CONCEPT MAP

MATH - Grade 1

Suggested Sequence:

1. Number Operations - Facts to 10
2. Patterns
3. Number Operations to 12
4. Number Order
5. Place Value
6. Money
7. Time
8. Two-Digit Addition/Subtraction without Regrouping
9. Geometry
10. Number Operations to 18
11. Fractions
12. Graphing
13. Measurement

MATH (1) CONCEPT MAP

Estimated days to Complete: 25

Key Concepts:

Addition facts to ten

Subtraction facts to ten

Fact memorization

Three addends with sums to 10

Topic:

Number Operations

CSO's: MA 1.1.10(E); 1.1.11(E); 1.1.12(E);
1.1.14(E); 1.1.15(I); 1.2.6(I)

Enduring Understanding:

Addition and subtraction are processes in which groups are joined and separated.

Essential Question(s)

What is addition?

What is subtraction?

Examples:

Use objects to model basic addition and subtraction.

Play "Traveling Around the World" for fact memorization.

Key Vocabulary:

Addition

Subtraction

Sums

Differences

Plus

Minus

In all

Equals

Are left

Vertical/horizontal

Order

Count on

MATH (1) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Repeating patterns

Label or name of patterns, i.e., words, AB form

Number patterns for 2s, 5s, 10s

Odd and even numbers

Topic:
Patterns
CSO's: MA 1.1.3(I); 1.2.2(I)

Enduring Understanding:
Students will understand that patterns exist in the world and can be represented numerically and graphically.

Essential Question(s):
What is a pattern?
How do we find patterns?
How do we show patterns?

Examples:

Use cubes to make patterns.

Use a hundreds chart to show number patterns.

Key Vocabulary:

Pattern

AB form

ABB form

Repeating

Extending

Odd

Even

MATH (1) CONCEPT MAP

Estimated days to Complete: 15

Key Concepts:

Number sentence

Doubles
Doubles -1
Doubles +1

Three addends associative property

Problem solving

Fact families
Commutative Property

Topic:

Number Operations to 12

CSO's: MA 11.10(E); 1.1.11(E); 1.1.15(I); 1.2.6(I)

Enduring Understanding:

Students will understand thinking strategies can relate known facts to unknown facts.

Essential Question(s):

How do we use basic facts to add and subtract?
What is a fact family?

Examples:

Use number cubes to model addition and subtraction sentences.

Use number balance to model commutative property.

Key Vocabulary:

Greater

Count on

Doubles

Sum

Number sentence

Doubles +1

Doubles -1

Difference

Order

MATH (1) CONCEPT MAP

Estimated days to Complete: 15

Key Concepts:

Ordinals

Greater than

Less than

Before, after, between

Order to 100

Topic:

Number Order

CSO's: MA 1.1.7(E); 1.1.2(E); 1.1.7(E)

Enduring Understanding:

Numbers can be used to count and order things.
Numbers can be compared and ordered.

Essential Question(s):

How can we put numbers in order?

Examples:

Use ordinal word cards
and put them in order.

Use hundreds board.

Dice game for greater
than/ less than.

Key Vocabulary:

Order

Greater than

Less than

Before

After

Between

Least

Greatest

MATH (1) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Items by 1s – 10s to 100

Model of place value using standard and expanded

Topic:
Place Value
CSO's: MA 1.1.4(E/I); 1.1.5(E/I)

Enduring Understanding:

The student will understand the value of a number is determined by its position.

Essential Question(s):

What is place value?
Why is place value important?

Examples:

Place value holders

Page numbers daily using expanded form

Number days of school with Popsicle sticks.

Key Vocabulary:

Tens

Ones

Value

Digits

MATH (1) CONCEPT MAP

Estimated days to Complete: 15

Key Concepts:

Type of money: penny, nickel, dime, quarter, dollar

Value of money: penny, nickel, dime, quarter, dollar

Combination of coins to 100 cents

Equal values

Topic:

Money

CSO's: MA 1.4.8(E); 1.4.9(I); 1.4.10(I)

Enduring Understanding:

Each coin has a value and equal quantities can be represented in a variety of ways

Essential Question(s):

Why do we need to know how to count money?
How do we count money?

Examples:

Counting coins in small groups

Role playing – counting and exchanging coins

Key Vocabulary:

Penny

Dime

Cents

Nickel

Amount/value

Tens/Fives

Quarter

Count on – reverse

Trade

Dollar

MATH (1) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Time to the hour

Time to half hour

Analog and digital clock

Months of the year

Day/date on a calendar

Topic:
Time

CSO's: MA 1.4.4(E); 1.4.6(E)

Enduring Understanding:

Measuring time can be used to impose order and events.

Essential Question(s):

Why do we measure time?
How do we measure time?

Examples:

Draw and identify parts
of a clock

Read/write time to the
hour, half hour

Construct a paper plate
clock

Role play various
activities that are
more/less than a minute

Key Vocabulary:

Clock

Hour

Half hour

Minute

Time

O'clock

Calendar

Week

Date

Days

Month

MATH (1) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Two-digit addition without regrouping

Two-digit subtraction without regrouping

Problem solving

Topic:
Two-Digit Addition/Subtraction Without Regrouping
CSO's: MA 1.1.5(I); 1.1.13(I)

Enduring Understanding:

Efficient computation involves understanding the connection among basic facts, properties, and place value.

Essential Question(s):

How does knowing place value help us solve two-digit problems?

Examples:

Use place value workmat, dice (cube) to roll and make 2-digit numbers.

Place value holders to show numbers teacher says.

Use board or overhead for students to perform some addition or subtraction problems explaining their work.

Vol. board or overhead perform problem solving explaining to class what they are doing.

Key Vocabulary:

In all

Sum

Ones

Tens

Are left

MATH (1) CONCEPT MAP

Estimated days to Complete: 10

Key

Key Concepts: Vocabulary:

Basic shapes (plane and solid)

Symmetry

Congruency

Spatial relationships

Attributes

Topic:

Geometry

CSO's: MA 1.2.1(I); 1.3.1(E); 1.3.2(I);
1.3.3(I) 1.3.5(E); 1.3.6(E); 1.3.7(E)

Enduring Understanding:

The student will understand geometric figures in 2 & 3 dimensions can be described, identified, compared, classified, transformed, constructed, and measured.

Essential Question(s):

What are some names of shapes?
How can we sort shapes?

Examples:

Cut and fold paper shapes

Identify shapes in
classroom.

Sphere

Cone

Cylinder

Pyramid

Cube

Rectangular prism

Stack

Role

Side

Face

Over/under

Left/right

MATH (1) CONCEPT MAP

Estimated days to Complete: 20

Key Concepts:

Number sentence

Doubles
Doubles -1
Doubles +1

Three addends (associative property)

Problem solving

Fact families

Topic:
Number Operations to 18
CSO's: MA 1.1.10(E); 1.1.11(E); 1.1.14(E);
1.1.15(I); 1.2.6(I)

Enduring Understanding:
Students will understand thinking strategies can relate known facts to unknown facts.

Essential Question(s):
How do we use basic facts to add and subtract?
What is a fact family?

Examples:

Use number cubes to model addition and subtraction sentences.

Key Vocabulary:

Greater

Count on

Doubles

Sum

Number sentence

Doubles +1

Doubles -1

Difference

MATH (1) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Equal/unequal parts of a whole

Halves

Fourths

Thirds

$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ of a group

Topic:

Fractions

CSO's: MA 1.1.9(I)

Enduring Understanding:

Parts of a whole can be represented with fractions

Essential Question(s):

What is a fraction?

Examples:

Cutting paper into fractions: hearts, circles, etc.

Key Vocabulary:

Equal parts

Unequal parts

Halves

One-half

Whole

Thirds

Fourths

Fraction

One-third

One-fourth

MATH (1) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Tally marks

Pictograph
Bar graphs
Charts
Tables

Data in relation to students' experiences

Analyzation of data on a graph

Topic:

Graphing

CSO's: MA 1.5.1(E); 1.5.2(E); 1.5.4(E);
1.5.5(E); 1.5.6(E)

Enduring Understanding:

Students will understand information can be collected and displayed as objects on pictures, graphs and tables

Essential Question(s):

How can we show and use information we have collected?

Examples:

Analyze data on a graph

Class vote using tally marks

M&M graphing activity

Key Vocabulary:

Tally

Tally graph

Table or chart

Pictograph

Bar graph

More

Less

Title

Horizontal

Vertical

MATH (1) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Length

Mass

Capacity

Temperature

Topic:

Measurement

CSO's: MA 1.4.1(E); 1.4.3(I)

Enduring Understanding:

Measurement helps us understand and describe our world.

Essential Question(s):

Why do we measure?

How do we measure?

Examples:

Measure objects in the room.

Key Vocabulary:

Estimate

Measure

Compare

Scale

Balance

Thermometer

Inch

Centimeter

Foot

Cup

Quart

Pint