

Mercer County Schools



**PRIORITIZED
CURRICULUM**

Mathematics

Content Maps

Kindergarten

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 - Kindergarten

1. Spatial Relationships
2. Sorting Classification
3. Geometric Shapes
4. Patterns
5. Number Recognition 0-10
6. Ordinals
7. Number Order/Rote Counting
8. Number Recognition 11-20
9. Place Value
10. Estimation
11. Counting by 5's and 10's
12. Seasons/Days of the week
13. Time
14. Money
15. Measurement/Fractions
16. Graphing/Data Analysis
17. Addition
18. Subtraction

MATH (K) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Words to describe our place in space

Use vocabulary of spatial relationships

Topic:

Spatial Relationships

CSO's: MA.K. 3.3

Enduring Understanding:

Geometric words can be used to describe position and movement.

Essential Question(s):

What is a position?

Examples:

Math – Harcourt Brace
Chapter 2
Activities

Finding objects on a shelf
(top, bottom, middle)

Walk or follow the leader
that calls out left/right

Key Vocabulary:

Inside

Outside

Top

Middle

Bottom

Before

After

Left

Right

Path

MATH (K) CONCEPT MAP

Estimated days to Complete: 9

Key Concepts:

Size

Shape

Color

Topic:

Sort and Classify

CSO's: MA.K. 2.1

Enduring Understanding:

Groups or objects can be classified and sorted. In a group, the members are alike in some way and not alike in other ways.

Essential Question(s):

How are the attributes alike, different and the same?

Examples:

Sort attrilinks into two groups by color and shape. Divide onto paper.

Sort buttons by common characteristics. Alike/different.

Sort attrilinks according to one color. Tell how they are alike.

Overlap Zhula hoops to make a Venn Diagram.

Key Vocabulary:

Thick

Thin

Large

Small

Circle

Square

Rectangle

Triangle

Color words

Attrilinks

Attribute blocks

Same

MATH (K) CONCEPT MAP

Estimated days to Complete: 6

Key Concepts:

Circle

Square

Rectangle

Triangle

Recongition

Topic:

Geometric Shapes

CSO's: MA.K. 3.1; 3.2

Enduring Understanding:

Geometric figures in 2 and 3 dimensions can be described, identified, compared, and classified.

Essential Question(s):

Why are shapes important?
Where do we find shapes around us?

Examples:

Draw the shapes

Trace fingers over tactile shapes

Walk the shapes

Go for a walk and look for shapes in the environment.

Key Vocabulary:

Circle

Square

Triangle

Rectangle

Oval

Corners

Sides

Long

Short

Can

Ball

Box

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Making and copying patterns.

Describing patterns.

Creating patterns.

Extending patterns.

Topic:
Patterns
CSO's: MA.K. 2.2; 2.3

Enduring Understanding:

Patterns can be described, reproduced, extended, and created.

Essential Question(s):

What is a pattern?
How do we make patterns?
How do we show patterns?
How sure are you of what comes next?
Do you see any patterns around you?

Examples:

Look for patterns around you.

Sort objects by color, size, and shape to make patterns.

Use connecting cubes or color tiles in two colors to make patterns.

Draw squares to make a two-color pattern – use stamps to make patterns.

Key Vocabulary:

Pattern

Next

Sort

Connect

Color

Tiles

Squares

Shape

Size

Before, after

Cubes

Copy

MATH (K) CONCEPT MAP

Estimated days to Complete: 20

Key Concepts:

Classification of (identify and label) numbers 0-10

Use a model to compare numbers 0-10 (number value)

Use models to measure (show different combinations that name a number)

Ordering numbers 0-10

Topic:

Number Recognition (0-10) CSO's: MA.K. 1.1; 1.2; Building numbers 0-10 (number system)

Enduring Understanding:

Numbers can be used to count, label, order, identify, measure, and describe things.

Essential Question(s): Show me number 5 (etc.).

What is a number?

Which number is greater, 2 or 3?

Why do we have numbers?

What if we didn't have numbers?

Which number tells how many is in the group?

Examples:

Make tactile numbers 0-10

Use connecting cubes to make 1-unit, 2-unit and 3-unit groups.

Play memory type of games to match numerals to dot cards or dominoes.

Count steps and objects with students.

Key Vocabulary:

Zero

One

Two

Three

Four

Five

Six

Seven

Eight

Nine

Ten

Greater than, Less than

MATH (K) ARTS CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Ordinal positions

Identify positions

Topic:
Ordinal Numbers
CSO's: MA.K. 1.5

Enduring Understanding:

To put objects in order according to the ordinal numbers first through tenth.

Essential Question(s):

When does placement (position) matter?

Examples:

Line up objects in a specific order.

Name the ordinal positions of objects.

Key Vocabulary:

First

Second

Third

Fourth

Fifth

Sixth

Seventh

Eighth

Ninth

Tenth

Before

After

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Counting

Order of numbers

Memorizing numbers

Greater and less number

Number value

Topic:

Number Order/Rote Counting

CSO's: MA.K. 1.1; 1.2

Enduring Understanding:

Numbers can be used to count, order, identify, measure, and describe things and experiences.

Essential Question(s):

Why does the order of numbers matter?

Examples:

Math – Harcourt Brace
Chapters 4, 5, and 7

Line up with flash cards
– get in order.

Number line

Calendar

Key Vocabulary:

Order

Greater

Less

Next

Before

After

Count

MATH (K) CONCEPT MAP

Estimated days to Complete: 12

Key Concepts:

Recognize and name 11-20

Build numbers 11-20

Place value of 11-20

Number order 11-20
Before/After

Count to and name 20

Topic:

Number Recognition 11-20

CSO's: MA.K. 1.1; 1.2;

Enduring Understanding:

Numbers can be represented in many ways. Numbers can be ordered and compared. Numbers can be used to count, order and name.

Essential Question(s):

Show me number 11 (etc.).
What is a number?
How will you build numbers?
What is the order of numbers?
What will come after 12?

Examples:

Use of manipulations to
build numbers

Count 1 to 20

Recognize numbers 11-20

Place numbers in order

Key Vocabulary:

11, 12, 13, 14, 15

16, 17, 18, 19, 20

10 frame

Add

Build

Group

More

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

10 frame

Group by 5s

Group by 10s

Count groups of objects

Topic:

Place Value

CSO's: MA.K 1.3; 1.4

Enduring Understanding:

The value of a number is determined by its position.

Essential Question(s):

How can we show mathematical relationships?
What is a number?

Examples:

10 frame

Number cards

Counters

Manipulatives

Key Vocabulary:

Ones

Tens

Hundreds

Groups

More

10, 20, 30, 40, 50, 100

5 - 10

MATH (K) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Guess/count

Guess/measure

Topic:
Estimation
CSO's: MA.K. 1.6; 4.1

Enduring Understanding:

To use guess-and-check problem solving strategy.

Essential Question(s):

What is an estimate?

Examples:

Pencils

Cubes

Rulers

Compare objects

Key Vocabulary:

Guess

About

As long as

MATH (K) CONCEPT MAP

Estimated days to Complete: 8

Key Concepts:

Skip Count

Count by 5's and 10's
CSO's : MA.K 2.3

Key Vocabulary:

Fives

Tens

Skip counting

Group

Number patterns

Group by 5's

Enduring Understanding: The value of a number is determined by its ability to be multiplied by 5 or 10.

Essential Question(s): How can numbers be used in skip counting by 5's and 10's? How can numbers be shown as multiples of 5 or 10?

Group by 10's

Real world application to money and time

Hundred chart
(highlighted with five's and tens)

Use money as a manipulative with nickels and dimes/use the clock

Dailey number line
(highlighted with five's and ten's)

Rote counting by 5's and 10's as a rhyme

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

/Key Concepts:

Calendar components
Identification of seasons

Days are across top of
calendar, under month's name

Seasons change in sequence
and have different
characteristic

Topic: Days of the Week/Seasons of the Year CSO's: MA.K. 4.4

Enduring Understanding:

Explore parts and function of a calendar especially days of a week.
Explore the sequence and characteristics of the seasons of the year.

Essential Question(s):

Where do you see the days listed on the calendar?
What are the characteristics of each season?

Examples:

The calendar is a daily
activity in the classroom –
an ongoing activity.

Put flash cards of days in
order as shown on a
calendar.

Using big or individual
calendars, find what day
of the week is the 9th of
June (ex.).

Math – Harcourt Brace

Key Vocabulary:

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Winter

Spring

Summer

Fall

Days, /Week/Seasons

MATH (K) CONCEPT MAP

Estimated days to Complete: 5

Key Concepts:

Analog clock

Digital clock

Sequencing events

Topic:
Time to the Hour
CSO's: MA.K. 4.5

Enduring Understanding:

Events, objects, ideas, and symbols can be ordered.

Essential Question(s):

Why do we need to know what time it is?

Examples:

Turn the hands on an analog clock after the time is called out.

Write the time below an analog and digital clock.

Draw hands on the analog clock.

Tell a story about something that happens at that time of day.

Key Vocabulary:

Hours

Clock

O'clock

Minute

Time

Ordinals 1st, 2nd, etc.

Before, after

First, next, last

Morning, afternoon, night

MATH (K) CONCEPT MAP

Estimated days to Complete: 15

Key Concepts:

Identification of coins
(penny, nickel, dime)

Value of coins

Value less than 20 cents

Equivalency of coins

Compare groups of coins

Topic:

Money

CSO's: MA.K. 4.6; 4.7

Enduring Understanding:

Money is made up of coins that are given a name and a value. Coins can be counted and compared from 1-20 cents.

Essential Question(s):

Why do we have money?
What do we use money for?
How do we get money?

Examples:

Show me a penny, nickel,
dime.

Compare amount greater
or less than.

Count coins and write the
amount.

Use manipulatives
(coins).

Key Vocabulary:

Penny

Nickel

Dime

Cents

Same amount

Equal

Greater than

Less than

MATH (K) CONCEPT MAP

Key Concepts:

Measure lengths with non-standard units.

Heights with non-standard units.

Capacity

Weight

Fractions

Estimated days to complete: 11

Topic:
Measurements/Fractions
CSO's: MA.K.1.7; 3.4;
4.2; 4.3

Enduring Understanding:

The process of measurement can be perceptual, direct or indirect through reference or by counting equivalent non-standard units by reading a measuring tool.

Essential Question(s):

Why do we measure?
Why do we need standard units of measure?

Examples:

Rulers

Balance scale

Paper clips

Inch worms

Key Vocabulary:

Measure

Longer than

Shorter than

Shortest

Longest

Taller than

Shorter than

Tallest

High

Guess

As long as

More, less

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Bar graph

Picture graph

Interpret information

Predict outcome

Topic:
Graphing/Data Analysis
CSO's: MA.K. 5.1; 5.2; 5.3

Enduring Understanding:

The ways in which data are collected and displayed influences interpretation.

Essential Question(s):

How can we show this information?
How might we show this differently?

Examples:

Manipulatives

Organize information

Graph model

Interpret graph

Key Vocabulary:

Shorter

Taller

Longer

Most

Least

Compare

More

Fewer

Bar graph

Organize

Predict

MATH (K) CONCEPT MAP

Estimated days to Complete: 9

Key Concepts:

Problem solving using story problems

Problem solving using pictures

Problem solving using manipulatives

Recognition of numerals 0-10

Problem solving using number sentences

Topic:

Addition

CSO's: MA.K. 1.8; 1.9; 1.10

Enduring Understanding:

Addition describes the process of joining two groups through problem solving, manipulatives and numerals.

Essential Question(s):

Show me how you added the sets.
How many pictures in all?

Examples:

Act out story problems.

Use manipulatives to demonstrate word problems.

Illustrate pictures to demonstrate word problems.

Number game such as "N Bingo" to review numerals.

Key Vocabulary:

Plus

Equal

Group

Adding

Number sentence

Join

In all

How many more

One more

MATH (K) CONCEPT MAP

Estimated days to Complete: 10

Key Concepts:

Problem solving using story problems

Problem solving using pictures

Problem solving using manipulatives.

Recognition of numerals 0-10

Problem solving using number sentences

Topic:

Subtraction

CSO's: MA.K. 1.8; 1.9; 1.10

Enduring Understanding:

Subtraction describes the process of separating from a whole, through problem solving and manipulatives.

Essential Question(s):

Show me hoe you subtracted the sets?
How many pictures in all?

Examples:

Act out story problems

Use manipulatives to demonstrate word problems.

Illustrate pictures to demonstrate word problems.

Number game to review numeral recognition.

Key Vocabulary:

Take away

Less

Left

Subtract

Separate

Minus

Equals