

Mercer County Schools



**PRIORITIZED
CURRICULUM**

Mathematics

Content Maps

Fifth Grade

CONCEPT MAP

MATH - Grade 5

Suggested Sequence:

1. Geometry
2. Operations - Numeration
3. Measurement
4. Parts of Whole
5. Graphing
6. Algebra

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.

MATH (Grade 5) CONCEPT MAP

estimated days to complete - 15

Key Concepts:

Polygons

Protractors

Multiple Lines of Symmetry

Transformations
(reflections, rotations,
translations)

3-Dimensional Figures

Topic: Geometry
CSOs: 5.3.1 5.3.2 5.3.3 5.3.4 5.3.5

Enduring Understanding:
Geometric figures can be depicted graphically and with models.

Essential Question(s):
How are dimensions relevant to the understanding of geometric figures and relationships?
Where is geometry in the natural and man-made world?

Examples:

Identify polygons

Measure angles

Draw multiple lines of symmetry

Construct models of orthathogonal figures

Key Vocabulary:

vertex*

dimension*

protractor*

reflection*

rotation*

translation*

symmetry*

***prerequisite**

MATH (Grade 5) CONCEPT MAP

Key Concepts:

Estimation

Whole Numbers
(\div, \times)

Strategies

Estimated days to complete - 40

Topic: Operations-Numeration
CSOs: 5.1.4 5.1.11 5.1.12

Enduring Understanding:

Mathematics is a language consisting of symbols and rules to ensure that the values obtained through operations will be consistent.

Essential Question(s):

Why are mathematical symbols operations and rules necessary in life?
When is precision needed?
How do we solve difficult problems?

Examples:

Model equivalencies

Solve story problems
through multiple
strategies

Multiply and divide whole
numbers

Use mental math to make
reasonable estimations

Key Vocabulary:

divisibility

rounding

expanded form*

standard form

period*

inverse

associative

distributive

commutative

identity

compatible numbers

*prerequisite

MATH (Grade 5) CONCEPT MAP

Key Concepts:

Estimation

Customary Metric Units

Formulas

Elapsed Time

Scale Drawing

estimated days to complete - 25

Topic: Measurement
CSOs: 5.3.6 5.4.1 5.4.2 5.4.3 5.4.4 5.4.5
5.4.6 5.4.7 5.4.8 5.4.9

Enduring Understanding:
Measurement helps us understand and describe our world.

Essential Question(s):
What would happen if we did not have systems of measurement?
How does what we measure influence how we measure?

Examples:

Estimate units of length
in customary and standard
units

Find perimeter, area,
volume of shapes using
formulas

Construct a scale drawing

Calculate elapsed time

Key Vocabulary:

elapsed*

mass

capacity*

area*

perimeter

volume

scale

milli, centi, M, K, L, ml, kl,
g, kg

*prerequisite voc.

MATH (Grade 5) CONCEPT MAP

estimated days to complete - 40

Key Concepts:

Decimals

Fractions

Topic: Parts of A Whole
CSOs: 5.1.2 5.1.4 5.1.5 5.1.6 5.1.7 5.1.8 5.1.9
5.1.10

Enduring Understanding:
Parts of a whole can be represented with different mathematical forms, such as fractions and decimals.

Essential Question(s):
What is the importance of showing parts of a whole?
Why is it useful to be able to represent the same number differently?

Examples:
Solve decimal problems using all operations

Solve fraction problems using all operations

Make conversions between all parts of whole

Model parts of whole

Key Vocabulary:

LCM*

GCF*

improper

mixed number

simplest form

prime

composite

factor

divisibility

multiple*

*prerequisite voc.

MATH (Grade 5) CONCEPT MAP

estimated days to complete - 12

Key Concepts:

Graphs/Tables

Probability

Topic: Graphing
CSOs: 5.5.2 5.5.3 5.5.4 5.5.5

Enduring Understanding:
The ways in which data are collected and displayed influence interpretation.

Essential Question(s):
What is the best way to show this data?
On what are predictions based?

Examples:

Collect, organize, display data in various forms

Interpret information represented on graphs

Construct graphs to represent data

List possible outcomes of choices

Key Vocabulary:

mean

median

mode

range

data

probability

MATH (Grade 5) CONCEPT MAP

estimated days to complete - 18

Key Concepts:

Missing elements/patterns

Input-Output

Equations with variables

Topic: Algebra
CSOs: 5.2.1 5.2.2 5.2.3 5.2.4

Enduring Understanding:
Known information provides keys to unknown information.

Essential Question(s):
What kinds of things in life can equations and patterns help us accomplish?
How can abstract ideas be applied to real life?

Examples:

Explore patterns with missing elements

Identify rule of pattern

Write equations with variables

Solve equations using variables

Key Vocabulary:

variable*

equation*

square

power

*prerequisite