6Richmond Public Schools

Department of Curriculum and Instruction Curriculum Pacing And Resource Guide – Unit Plan



Course Title/ Course #: Pre-Algebra Math 8

Unit Title/ Marking Period # (MP): Fractions, decimals, percents in scientific notation/MP 3

Start day: 69

Meetings (Length of Unit): 7 Days

Desired Results ~ What will students be learning?

Standards of Learning/Standards

8.1b Compare and order fractions, decimals, percents, and numbers written in scientific notation.

Essential Understandings/ Big Ideas

How does the different ways rational numbers can be presented help us compare and order rational numbers?
 Numbers can be represented as fractions, decimals, percents, and in scientific notation. It is often useful to convert numbers to be compared and ordered to one representation.

Key Essential Skills and Knowledge

• Compare and order no more than five fractions, decimals, percents, and numbers written in scientific notation using positive and negative exponents. Ordering may be in ascending or descending order..

<u>Vocabulary</u>		
Ascending		
Descending		
Fraction		
Decimal		
Percent		
Scientific notation		

Assessment Evidence ~ What is evidence of mastery? What did the students master & what are they missing? Assessment/ Evidence

Mulligan Checkpoint 8.1b Mulligan Checkpoint 8.1b Interactive Achievement HCPS Mini Quizzes

Give students no more than five numbers in different representation and ask them to put them on a number line. Have students complete a project on <u>scientific notation</u>, but extend it to have students order the numbers.

Learning Plan ~ What are the strategies and activities you plan to use?

Learning Experiences/ Best Practice

- Review how to interchange fractions, decimals and percents using a foldable, whiteboards, or smartboard technology
- Use number cards to have students compare and order up to five numbers. Make a number line to hang up in the room and have students put the numbers on the number line explaining why they chose the particular spot.
- Have students play compare and order "I declare war"
- Have students use benchmarks of zero, half, and one to estimate fractions and put them on a number line

Technology Integrations

Gizmo

Educational Games-under resources Compass Learning

Allen Teachers

Brain Pop

Khan Academy

Resources

Text

Glencoe Pre-Algebra pages:

123-129 (Fractions and Decimals)

341-346 (Fractions, Decimals, and Percents)

Mulligan Math in Minutes 8.1b

SOL Coach Book Va Edition: pages 19-27

Technology

Study Zone-Comparing Scientific Notation-Interactive/Games

BrainPop-Scientific Notation-Video/Skill Activity

Discovery Education-Scientific Notation-Video

School Tube-Scientific Notation Rap-Video

Compass Learning-https://www.thelearningodyssey.com - M8001, MA8021, MA8025, M8023, M8026,

Allen Teachers-Compare and Order-TEI Practice

Allen Teachers-Compare and Order- TEI Practice

Allen Teachers-Scientific Notation-TEI Practice

Virginia Department of Education

VDOE-Ordering Numbers-Lesson Plan

Other Sites

HCPS - Expressions and Operations - Instructional materials, practice page, assessments

Illuminations-Fraction Feud-Lesson Plan

Math Play-Scientific Notation-Educational Review Game

Cross Curricular Connection

History: Scientific notation project. Teacher could limit certain countries based on topic of study.