

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



Course Title/ Course #: Math Grade 7

Unit Title/ Marking Period # (MP): 1

Start day:

Meetings (Length of Unit): 2 days

Desired Results ~ What will students be learning?

Standards of Learning/ Standards

SOL 7.1e

The student will...

e) identify and describe absolute value for rational numbers.

Essential Understandings/ Big Ideas

Why is the absolute value of a number positive?

The absolute value of a number represents distance from zero on a number line regardless of direction. Distance is positive.

Key Essential Skills and Knowledge

- Demonstrate absolute value using a number line.
- Determine the absolute value of a rational number.
- Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle to solve practical problems.

<u>Vocabulary</u>	
<u>Academic Vocabulary</u>	<u>Content Vocabulary</u>
Absolute Value Rational Numbers Integers Whole Numbers Distant Negative Numbers Positive Numbers Difference Number line Graph Opposite	Identify Describe Determine Demonstrate
<i>Assessment Evidence ~ What is evidence of mastery? What did the students master & what are they missing?</i>	
<u>Assessment/ Evidence</u>	
<ul style="list-style-type: none"> • Interactive Achievement • Exit Quiz • Virginia SOL Coach, New Gold Edition, Mathematics, Grade 7, Absolute Value, page(s) 50 -52; questions 10 and 12 <p>H.O.T –(Higher Order Thinking) <u>Virginia Math Connects, Course 2</u>, ©2012, Price, et al, McGraw-Hill School Education Group 1, Absolute Value, page 82</p> <p>Test Practice Questions: <u>Virginia Math Connects, Course 2</u>, ©2012, Price, et al, McGraw-Hill School Education Group 1, Absolute Value, page 82</p>	
<i>Learning Plan ~ What are the strategies and activities you plan to use?</i>	
<u>Learning Experiences/ Best Practice</u>	
<ul style="list-style-type: none"> • Have students create a Frayer or Marzano Vocabulary entry on Absolute Value, Integers, and Rational Numbers • Create a foldable on Absolute Value and Opposites 	

- Task Cards on Absolute Value
- Have students show the distance a number is from zero by having them “walk it out” on a number line. Illustrate how opposites are the same distance from zero.
- Absolute Value is always positive unless there is a negative symbol on the outside of the absolute symbol.
- [Absolute Value - Idea](#)
- [Matching Absolute Value Cards](#)

Explore Activity -

- [Virginia Math Connects, Course 2](#), ©2012, Price, et al, McGraw-Hill School Education Group 1, page 76

Interactive Student Practice:

[Khan Academy –Absolute Value](#)

[Applying Absolute Value](#) Interactive Game

Technology Integrations

Brainpop

SmartBoard

[Supplementary Video on Absolute Value](#)

Resources

Text

[Virginia Math Connects, Course 2](#), ©2012, Price, et al, McGraw-Hill School Education Group 1, **Absolute Value page(s) 76 – 80; 771**

Virginia SOL Coach, New Gold Edition, Mathematics, Grade 7,

Absolute Value page(s) 37 - 42

Technology

[BrainPop](#)

Absolute Value

Virginia Department of Education

[Absolute Value SOL 7.1e](#)

Other Sites

[Are You Absolutely Sure of the Value? - Lesson Plan](#)

[PBS Learning – Absolute Value](#)

Cross Curricular Connection

Reading – [Absolute Location](#) – Students will read about how absolute value is used in providing the distance between locations

Materials

Manipulatives

Number lines

Absolute Value War:

Adding machine tap

Tape

Ruler

Markers

70 centimeter cubes

Script Card

Playing Cards or Integer cards -13

to 13

Technology Resources

LCD Projector

Speakers

Computer w/Internet Connection

Student Supplies

Whiteboards/Markers

Frayed Model/ Marzano

Student Notes

Laminated Absolute Matching Cards