

Math Minutes #4

Rigor, Relevance, and Relationships:

Focusing on doing the **ORDINARY**, extraordinarily.

Norton
Elementary



The mission of Norton Elementary School is to educate and encourage every student to his/her highest potential through the acquisition of knowledge and appropriate behavior. This will lead to the development of the whole child and optimal student achievement with our local, national and world-class counterparts.



Constructed and Extended Re



Standard	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
4.NBT.1 4.NBT.2 4.NBT.3 4.NBT.5 4.NBT.6	Adds and subtracts up to three digits, uses place value to read and write numbers, and illustrates and explains calculations when multiplying and dividing.	Adds and subtracts, finds whole-number quotients to two digits, uses place value to compare numbers, and reads and writes numbers and uses expanded form.	Adds, subtracts, and multiplies fluently; finds whole-number quotients to four digits; represents numbers in expanded form to 1000; uses place value to order and compare numbers; and recognizes whole-number patterns in base ten.	Adds, subtracts, multiplies, and divides fluently; uses place value to symbolically order and compare numbers; represents numbers in expanded form; rounds to specified place values; and explains whole-number patterns.

Post achievement level descriptors in your classroom.

Connect strategies and implementation through Number Talks



I wonder...I noticed... Have students **REFLECT** on their work.

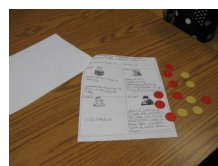
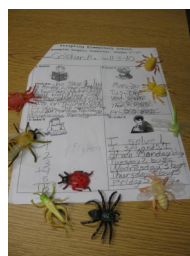
Rubric posted in First Grade

Use a rubric to score responses. Post in your classroom.

Make rubrics a part of the routine.

Strategy R.A.C.E. ✓	PEER/SELF ASSESSMENT	Teacher's Rating	Student's Rating
R	RESTATE the question		
A	ANSWER is CORRECT		
C	CREATE a Model or REPRESENTATION that is CORRECT		
E	Extend and Explain with connections and details.		
EXTRA	More Explanation, Models, or more than one solution		
TOTALS	How many can you check off?		
<small> Examples: 1-2 Checks = Novice, 3 Checks = Apprentice, 4 Checks = Practitioner, 5 Checks = Expert Constructed Response: 1-2 Checks = Zero points, 3 Checks = One point, 4 Checks = Two points, 5 Checks = Three points Extended Response: 1 Check = One point, 2 Checks = Two points, 3 Checks = Three points, 4 Checks = Four points, 5 Checks = Five points </small>			

Use manipulatives with your problem solving in ALL grades K-5 to help students **SCAFFOLD** their strategies and thinking



Listen to students **TALK** about their math thinking?



Allow students to use graphic organizers.



CONCRETE

I can use my five senses with the math.

SEMI-CONCRETE

Draw a picture of the math. (symbols)

SEMI-ABSTRACT
Organize and represent the math graphically

Reflect and Respond

ABSTRACT

Post, model, and use multiple problem solving strategies in your classroom? Confer with students about their thinking.



February Formative Assessment Strategy: Two Stars and a Wish!

Use "Two Stars and a Wish" as a way to balance positive feedback with constructive feedback for improvement!

Provide students with an opportunity to demonstrate their learning through conceptual understanding, multi-step problems or problems that require explanation and justification of thinking. In your feedback, write two comments of good features in the student work (stars) and one comment that encourages revision or further improvement (wish).

Potential Modification: Use "Two Stars and a Wish" instead as a student reflection! Students can provide two things they felt they mastered in the lesson and one thing they wish they could spend more time learning.

March Formative Assessment Strategy: Look Back

What I Learned	How I Learned It

[Click here for a blank template!](#)

This formative assessment allows students to reflect on what they learned over a given instructional time. Students can summarize their learning and think about how they learned the material in order to integrate into new mathematical understandings.

Use this formative assessment to examine which instructional practices are most effective for your students!