

## Math Minutes #3

**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.*

### Tips for teaching Fact Fluency...

**Start with the  
CONCRETE.**

**BUILD** the Facts.  
**DRAW** the Facts.  
**WRITE** the Facts.  
**LEARN** the Facts.  
**REMEMBER** the Facts.  
**USE** the Facts.

**Build up to the  
ABSTRACT.**

**"DRILL AND KILL"** does not work for everyone. Timed math fact tests are not one size fits all. This is memorizing the facts in an exclusively abstract way.

**DO** - Have students practice facts as part of a center.

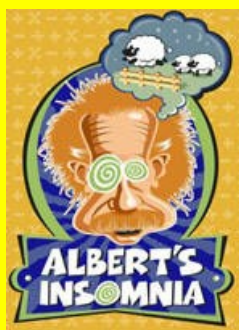
**DON'T**— Supplant instruction with fact practice.

### Instructional Highlight

Basic arithmetic skill goes beyond memorization and includes learning to use numbers to solve problems and develop number sense. An emphasis on computation done in isolation does not prepare children to use their skills to solve everyday problems. Although students may demonstrate proficiency with simple addition, subtraction, multiplication, or division, it does not necessarily mean they understand the **MEANING of the MATH**. The purpose for learning mathematical skills is the real life situational application of math skills. Educators can help children develop concept understanding in the **context of problem solving**. Children must also be able to practice mental math, make reasonable estimates, and understand the meaning of mathematical relationships in order to be both **"confident and competent"** in their number understanding"

Marilyn Burns - (Math Guru) - 2000. We are directly aligned with Marilyn's thinking. Our teachers are awesome. Thanks for all you do for your students!

### Albert's Insomnia helps with Fact Fluency...



The NES Math Club added 3rd grade this year, and they use Albert's Insomnia to hone their math fluency skills.

The Math Club practices with cards and competes online.



Brain research tells us that practice is essential to lasting learning. Our students practice fact fluency in flexible and engaging ways that garner success.

Every student in 3rd grade will be able to use the Albert's Insomnia online program to track fluency practice and progress.



### November Formative Assessment Strategy: **Hot Seat!**



Place anywhere from one to five chairs in an area of the classroom to serve as the **hot seats**.

Distribute a question or questions to the **whole class** to consider first and **prepare their own individual responses**.

Then ask the hot seats to **share their responses**. The class listens to the responses and **provides feedback** to the students on whether they agree or disagree and why.

### December Formative Assessment Strategy: **Traffic Light Cards!**



Click [HERE](#) for pre-made cards!

Provide students with three colored cards (Red, Yellow & Green) to self-assess their learning!

Students can either hold up their cards or place the cards in the corner of their desk as they work to indicate their level of understanding on a concept.

Consider using these cards as a quick way to flexibly group students!