## I. Fluency

Important piece is to say the $\qquad$ fact $(3 \times 7=21)$

- "Three times seven is twenty-one."

If the student misses the fact, error correction:

- ISay
- __Say
- You Say
- __Say


Time Per Day : $\qquad$ only on a maximum of $\qquad$ new facts

## II. Problem Solving

A. Deep Practice should be practiced $\qquad$ .

Problems should not be $\qquad$ or $\qquad$ . They should lead to discourse and multiple strategies on how to solve the problem.

Ways to discuss:

- 4 Corners (if multiple choice)
- "Which Answer": teacher calls out 6 students and writes their answer on the board. Students then look at the ways each answer was developed, and identify which one is correct.
- "My Favorite No" - teacher selects student work that is not correct, but has all of the work shown and allow students to identify the small error made to cause the incorrect answer


## B. Fostering Perseverance

Article from: Vol. 22, No. 2, September 2016; NCTM "Mathematics Teaching in Middle School"

## III. Vocabulary

## A. Taboo

- Make "Taboo" cards with vocabulary words and key words that students can’t say when describing the words. Students complete in teams.
- Modeled after the original game "Taboo", just use with math words


## B. Word Sneak

- Each group of students gets 3 content/academic words and one "silly" word.
- Students take turn saying sentences using their words in conversation. The sentence must make sense and include proper context of the academic word.


## Relax

- Set ___ (and stick with them)
- Consistency is the

- Out of 150 influences on learning, teacher-student relationships was ranked number 12 (Hattie, 2012)
- For students to be engaged, they must $\qquad$ that their work has meaning. Having a $\qquad$ relationship between the teacher and student is a critical piece to designing engaging work (Schlechty, 2011)


## Reading


"Engaging Students: The Next Level of Working on the Work" by Phillip C. Schlechty
"Visible Learning for Teachers: Maximizing Impact on Learning" by John Hattie
"The End of Molasses Classes: 101 Extraordinary Solutions for Parents and Teachers" by Ron Clark

NCTM "Mathematics Teaching in Middle School" Journal; Vol. 22, No. 2, September 2016;

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