Fluency Sprints

Todd Smith
Math Instructional Specialist
Monroe #1 BOCES
Todd_Smith@boces.monroe.edu
http://thinkmath.blog.monroe.edu/
Administration of Math Sprints (Goal: About 10 – 12 minutes)
Remember: We do the sprints so that students come to school for excitement related to academics. Sprints should be fun!

1. Take a sprint (It has two parts with closely related problems on each. They should be cut apart if they are printed on the same sheet).
2. Assume the role, as closely as possible, of an athletic coach.
3. Say, “You will have 60 seconds to do as many as you can. I do not expect you to finish all of them. Just do as many as you can.”
4. Place the first part of the sprint on the students’ desks upside down with instructions to not look at the problems until the signal is given.
5. Say, “Take your mark, get set, go!” Time one minute precisely. Say, “Stop!” or “Pencils down.” “Put a smiley face at your last answer.”
6. Immediately correct this first part of the sprint with the students. Read out the answers at a quick “stay awake” pace and direct them to say, “yes!” rously (when correct, while signaling with the “got it” move of the elbow and fist) until no one has any more correct.
7. Direct them to simply circle incorrect answers.
8. Direct the students to write the number they got correct at the top of their page.
9. Ask them to raise their hand if they have one or more correct, two or more correct, three or more correct etc. until no one raises their hand any more.
10. Applaud and call the names of the student(s) with the most correct answers.
11. Say, “I’ll give you some time to finish the first part of this sprint.” Watch and see their concentration level. Move to part 2 when some have completed the problems.
12. Do some physical exercise of some kind. For example: jumping jacks while skip counting etc.
13. Hand out the second part of the sprint and repeat steps 2 through 10.
14. Ask them to raise their hand if they improved by one or more, two or more, three or more etc. until no one raises their hand.
15. Applaud the student(s) who improved the most.
16. Students may take the sprints home. What they do with it is their choice.
Subtracting 9

Percents

Whole Number x Decimal
Creating a Sprint
Integrate sprint planning into your lesson planning process
The sequences should be carefully thought out and scaffolded in difficulty, just as our lesson are.

- Only deliver sprints in topics the students have already mastered
- They can be used as review, to access prior knowledge for that days lesson, etc..
- Keep the energy level high

1. Choose a topic that your students have already mastered
2. Decide the highest level problem you will give
3. Scaffold up to that level of difficulty
4. Look for patterns, sequences or specific conceptual development that will help students become fluent in the topic
5. Build these patterns/sequences in groups of 2-5 throughout the sprint
6. Break the problems up into 4 quadrants (11 problems each), where each quadrant increases in difficulty
7. Try to make your first 11 problems easy enough that every student can complete them in 1 minute
8. Try to make the last 11 problems challenging enough that even the strongest students might not finish.
9. You do not necessarily need to continue the pattern/sequence in the last quadrant
10. After giving the sprint, reflect and adjust the difficulty level for future uses