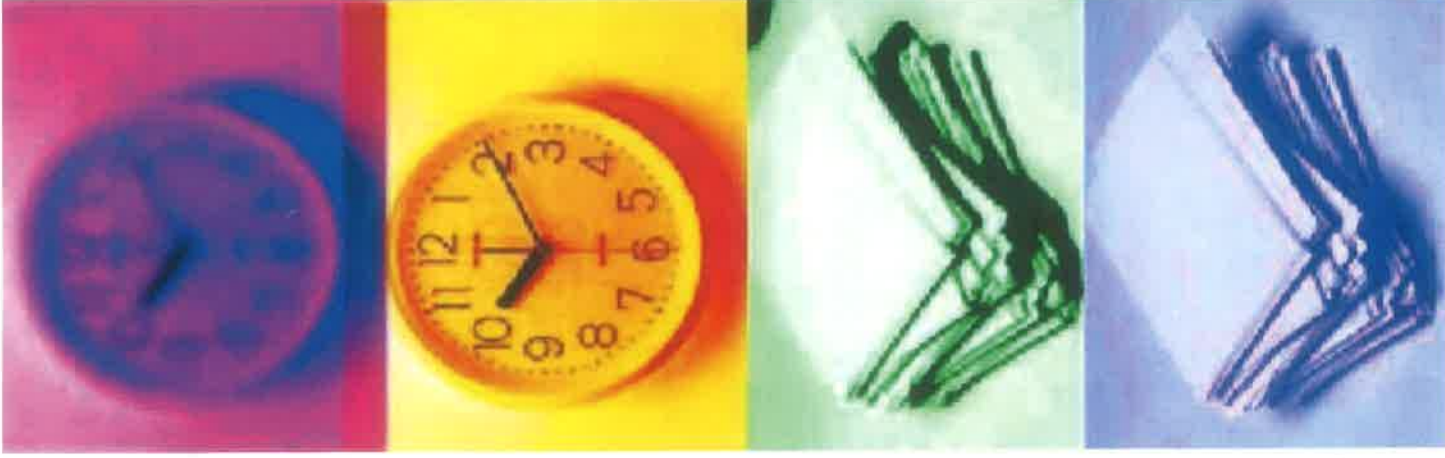


The background is a collage of four images: a clock face in the top-left (red and blue), a stack of papers in the bottom-left (blue), a clock face in the top-right (yellow and red), and a pen in the bottom-right (green).

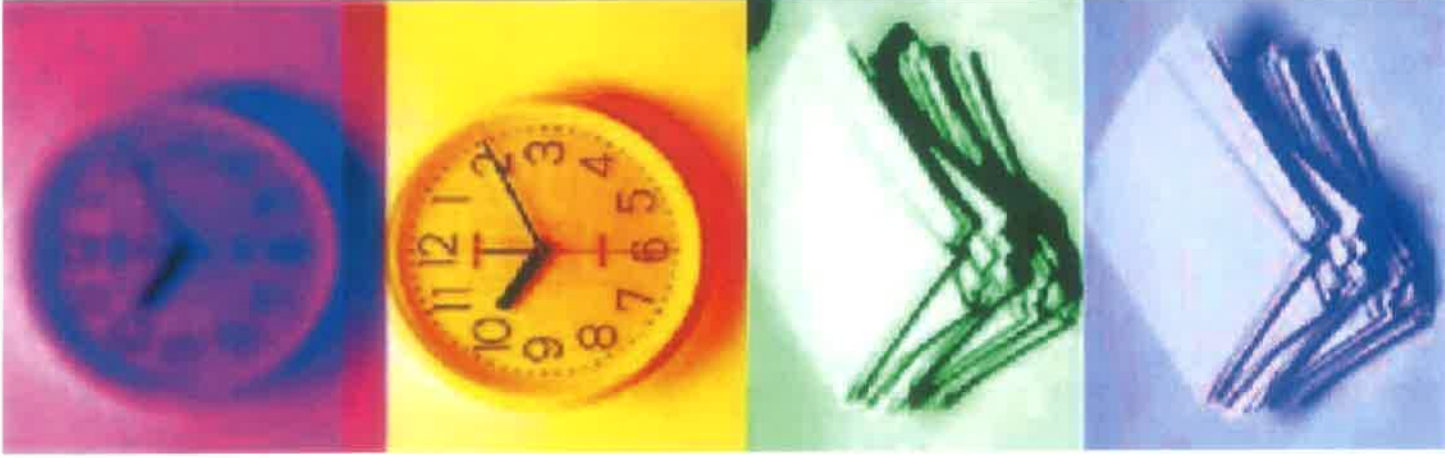
# Data Driven Instruction

At Ruffner Middle School



# Who is involved?

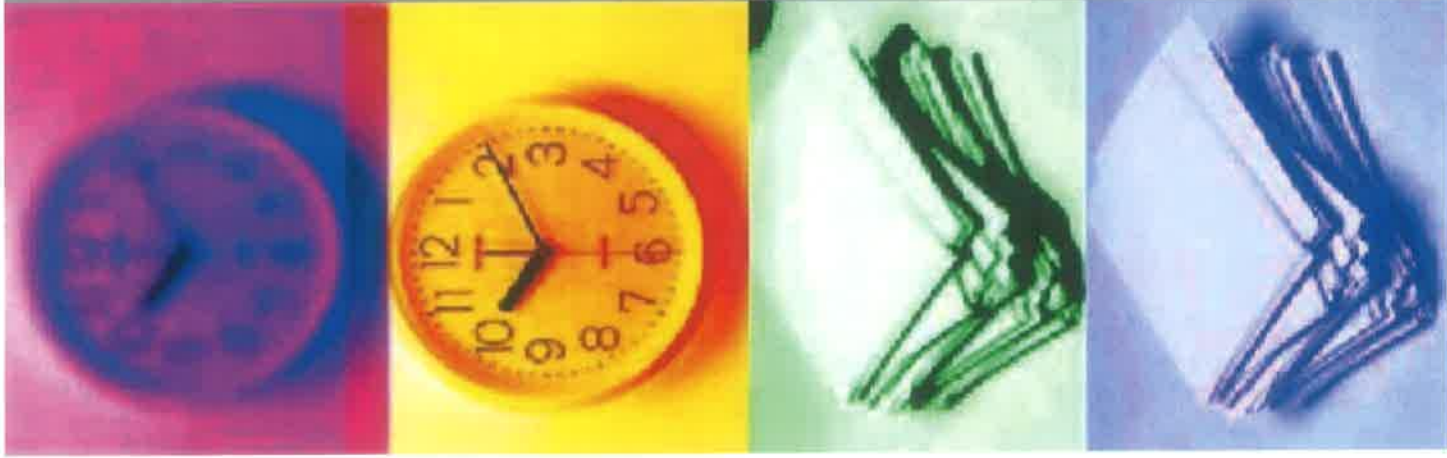
- Math
- Science
- History/Social Science
- English
- Special Education



# How do we put it together?

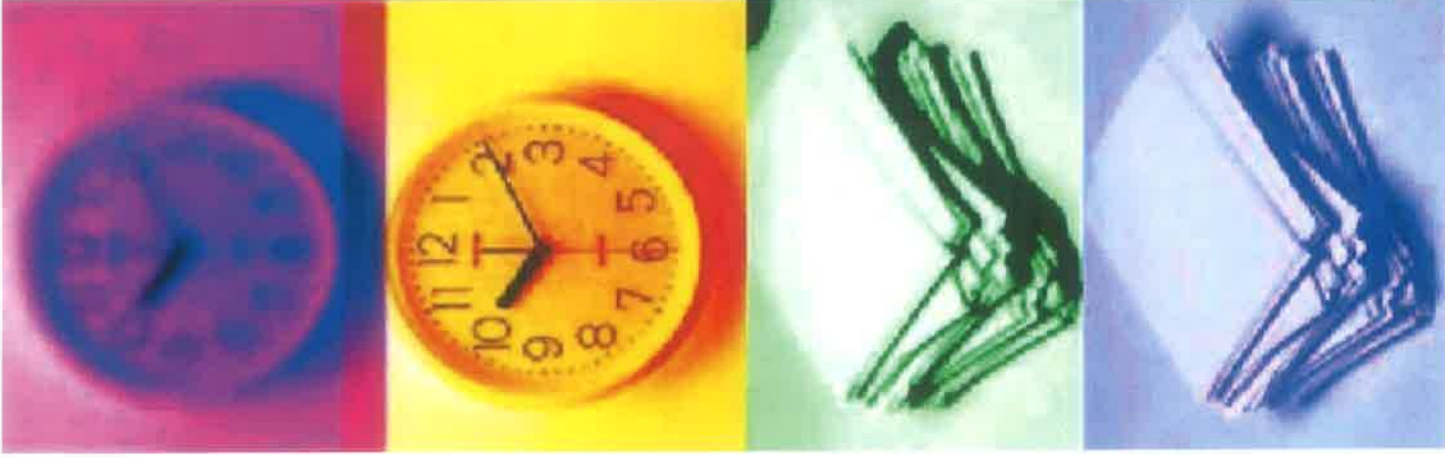
It starts in daily planning...by content team!

- A master schedule that allows for daily content team planning!
- Align instruction to the specific scope and sequence guidelines in our curriculum/ pacing guides.
- Create daily lessons focused on those specific standards that are aligned with the rigor and depth of knowledge expectations in the standards. (Scope and Sequence, SOL Blueprint)
- Design a daily instructional model to create Tier I, II and III support(s)
- Assess students: questioning, daily exit tickets, weekly quizzes, and unit CFA's
- Develop a system where each assessment that is given is reviewed and re-taught until the objective strands and concepts (student skill gaps) are reduced or eliminated.



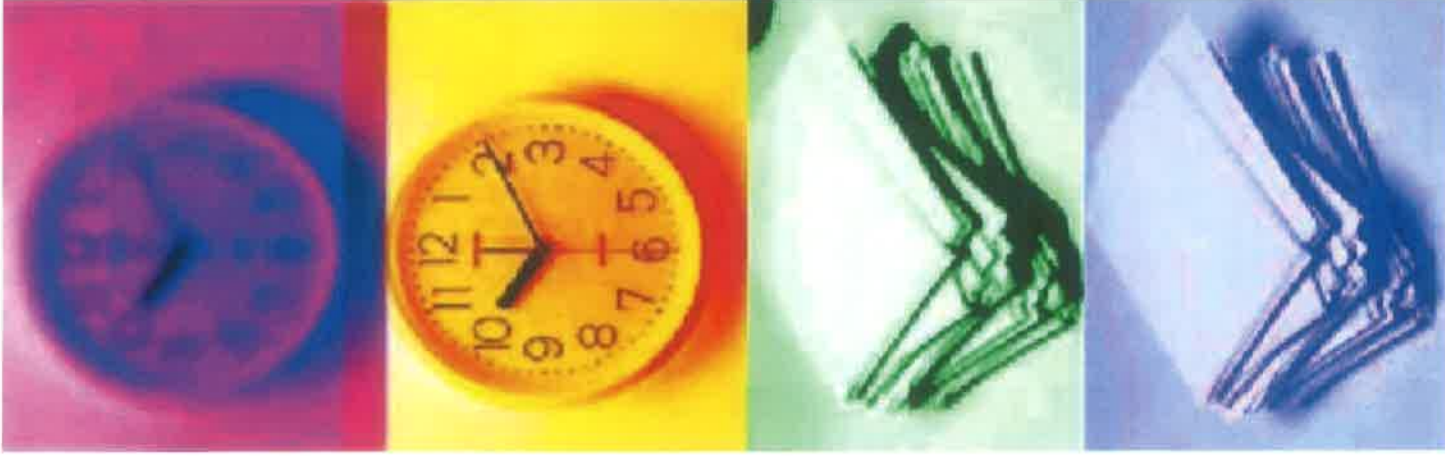
## Daily Data practice

- Tier III- Daily Review. CFA data reviewed to start the lesson. Continuous... until skill gaps are reduced. 70%+
- Tier III- Weekly quizzes on objective strands from D.R. Assess, adjust.
- Tier II- Exit Ticket review, Re-Teach from yesterdays direct instruction.



## Why do we do it?

- It is a system of continuous improvement.
- It creates opportunities for unit/objective mastery, before moving away from that focus.
- It identifies students in need of additional support Tier II/ III



## Why do we do it? (cont.)

- It creates opportunities for teachers! Mentoring new team members. No Islands!
- It promotes collegiality and sharing of BEST practices.
- It allows for year end evaluations of performance (i.e. students and teachers)

## Data Thoughts!!!

### **Why do we use data?**

Does it help us to make decisions related to target groups, strategies, and resources? Does it expose weaknesses and emphasize strengths?

### **How do we use data?**

We look at numerous School Net reports to define student comprehension by power objective. What do we do with those reports?

### **Is data making a difference?**

Depends on how you use it...so how is your team using it? Is it a task to complete and turn in or is it the driving force in instructional planning, delivery and assessment?

Is the overall pass rate above 70%, the most important aspect of our data packet/meeting?

What does the mean score of a CFA tell you?

What does the question item analysis tell you?

What is the blue print pass percentage for your SOL test? *(By grade level and content)*

How do we effectively use the data from last year's CFA's results and the Student Performance Analysis sent out by VDOE in our planning?

How do we use historical data in our choice of activities and strategies?

### **What do you know about the students in your class!**

1. How many students in your class scored between 375 and 399 on last year's SOL test?

2. Can you identify the kids in your classes that fall in your target group?

3. Where do you have the largest opportunity to show gains, *(what student group)* in your classes?

## Data as a Predictor of SOL Success

The following are factors in using data to predict results on the SOL:

1. The rigor of our CFA's must be equal to or greater than that of the state SOL Assessment. Anything below this threshold will be a grave disservice to our ability to predict outcomes.
2. We must know the state's test blueprint for the pass rate required to achieve a minimum of 400 on this year's test. *(it is different for each content and subject)*
3. CFA's must be directly aligned with the curriculum; leaving out additional 'nice to know' information.

4. Never review for a CFA the day of the test, but plan reviews during the preceding class. Also, review concepts and objectives only, and not the actual questions included in the CFA preparation...NEVER!!!

5. Testing must occur within a two day window (1 odd/even, and 1 make-up day).
6. All scantrons must be scanned to ensure accurate data.
7. Data meetings should be held the 5<sup>th</sup> day (4 days after the assessment is given).
8. Post-data discussions are encouraged to review progress of strategies listed in the data packet.

*If we can consistently do these things, we will be utilizing data to create positive change, and we can use it as a very accurate predictor for SOL results.*

## Data Expectations

Data analysis is the responsibility of all members of the team. Data should be analyzed collectively and independently. Teams are expected to discuss inferences, priority standards, and strategies in the data meeting.

- **Teachers** are responsible for testing all students. Teachers should provide their team leader with a print out of their class rosters, highlighting the students not included in their data and a reason why. Teachers are expected to come to data meetings with a comprehensive knowledge of their data. All data should be calculated and inputted prior to the data meeting.
- **Team Leaders** are responsible for notifying the department chair as to the date of the data meeting. This should be the 5<sup>th</sup> day, 4 days after the assessment was given. It is the team leader's responsibility to finalize the data packet and submit it to the department chair before leaving the building on the 6<sup>th</sup> day, 5 days after the assessment has been administered. Data packets must be submitted electronically, however, paper copies of teachers' rosters indicating students not included in the data are acceptable.

- **Department Chairs** are responsible for reviewing the data packet, printing the Standards by Section, and the Overall Item Analysis. The entire packet should be submitted to Mrs. Langhorne or Mr. Fraley by the 9<sup>th</sup> day, 8 days after the unit assessment has been administered.

# DAILY BLOCK SCHEDULE 2014-2015

BLOCK	MEETING TIMES	ELECTIVES
1/2	8:15-9:41	8th Grade Core Off. Students in elective classes.
3/4	9:45-11:11	7 <sup>th</sup> Grade Core Off. Students in elective classes.
5/6	11:15-1:15	P.E./Electives Off. All students in core classes.
7/8	1:19-2:45	6 <sup>th</sup> Grade Core Off. Students in elective classes.

Core Content Team  
Daily Planning Locations  
2014-2015

Content	Grade	Time	Location
English 8	8	8:30-9:30	Room 203
History 8	8	8:30-9:30	Room 210
World Geo.	8	8:30-9:30	Room 211
Math 8	8	8:30-9:30	Room 215
Alg. I	8	8:30-9:30	Room 320
Geometry	8	8:30-9:30	Room 214
Science 8	8	8:30-9:30	Room 212
Biology	8	8:30-9:30	Room 316
Earth. Sc.	8	8:30-9:30	Room 316

Content	Grade	Time	Location
English 7	7	10:00-11:00	Room 308
History 7	7	10:00-11:00	Room 314
Pre. Alg 7	7	10:00-11:00	Room 301
Alg. I 7	7	10:00-11:00	Room 320
Science 7	7	10:00-11:00	Room 313
Science Honors	7	10:00-11:00	Room 313

Content	Grade	Time	Location
English 6	6	1:30-2:30	Room 405
History 6	6	1:30-2:30	Room 410
Pre Alg. 6	6	1:30-2:30	Room 414
Science 6	8	1:30-2:30	Room 412

# Daily Planning Schedule 2014-2015

STAFF RESPONSIBILITY	DAY OF THE WEEK
Team plan: All members to include Co-Teacher	Monday
Team plan: All members to include Co-Teacher	Tuesday
Team plan: All members to include Co-Teacher	Wednesday
Collection/ Creation day: Team members are completing documents for instruction; i.e., lesson plans, PowerPoints, United Streaming clips etc.	Thursday
Team data or teacher data: Completing individual data tracking by class, or team data packets; to include Co-Teachers.	Friday
Co-Teachers: IEP updates, CST meetings.	
1 time per month/quarter either an ABC meeting or floor meeting.	
<p><b>“Content team leaders” - You are responsible for team attendance, if teachers are not present then you email the Dept. Head and copy it to the administrator in charge of that team.</b></p>	

- \* Introduce agenda and activities for the day
- \* Daily Review: -CFA objective strands to Re-Teach ( Tier III )
- \* Exit Ticket Review, Re-Teach, Yesterdays direct instructional assessment ( Tier II )
- \* State Learning objective(s)
- \* Direct Instruction ( Tier I )
- \* Guided and Independent practice ( Tier I )
- \* Closure activity... Exit Ticket application ( Tier I ) assessing today's instruction; (graded, ready for tomorrow)

## Delivery Model for 2014-2015

# Daily Review Activity

- \* Must be differentiated...must have a catchy name...  
Math = Daily Math Review (DMR)  
Science = Do Now
- \* Focus of Daily Review...Objective strands discovered from last CFA or DBA, must continue to re-visit and practice skill until mastery occurs. Tier III
- \* How do we define mastery- After 4 D.R's we give a quiz on that strand or strands...assess, evaluate, adjust...
- \* Differentiated (oh no not that word) YIKES! Content, Product, Process, pick the easiest one to start...

## Exit Ticket Review

- \* Data derived from yesterdays direct instruction
  - \* Specific by content- Tier II
  - 1. Math... 3 equations or expressions from lesson
  - 2. Science... Lab scenario to define IV, DV, Hypotheses etc.
  - 3. English... Sentence correction, written paragraph on a reading topic from the day
  - 4. History... Summarize a primary document, SOL released questions, Identify meaning(s) of political cartoons
- Reading, writing and vocabulary strategies should be applied by all contents! This will be the focus of our professional development this school year!

**RUFFNER MIDDLE SCHOOL DATA TEAM MEETING MINUTES**

<b>Team</b>	Pre-Algebra 7	<b>Date</b>	Friday November 21, 2014	<b>Members Present</b>	Drew	<b>Members Absent</b>	Pollio
<b>Test Unit</b>	Unit 3 - Integers				Andrews		Lumley
<b>Goal</b>	100% of all students will score at least 62%(SOL Blueprint Pass Rate) on the CFA						

**RESULTS: TEST SCORE REPORT BY TEACHER**

	# of Students on Roster	# of Students Tested	Percent Tested	RED GROUP (0% - 49%) Number/Percentage	YELLOW GROUP (50% - 69%) Number/Percentage	GREEN GROUP (70% - 100%) Number/Percentage	SOL Blueprint Pass Rate (62%) Number/Percentage
<b>Teacher: Drew</b>							
Mean Score REG:	51.9%						
Mean Score SPED:	42.8%						
SPED	28	27	96.4%	20/74.1%	5/18.5%	2/7.4%	2/7.4%
REG	37	36	97.3%	16/44.4%	13/36.1%	7/19.4%	9/25%
ALL	65	63	96.9%	36/57.1%	18/28.6%	9/14.3%	11/17.5%
<b>Teacher: Andrews</b>							
Mean Score REG:	45.6%						
Mean Score SPED:	32.7%						
SPED	7	5	71.4%	4 / 80%	1 / 20%	0 / 0%	0 / 0%
REG	53	53	100%	32 / 60.3%	15 / 28.8%	6 / 11.5%	10 / 19.2%
ALL	60	58	96.6%	36 / 62%	16 / 28.1%	6 / 10.5%	10 / 17.5%
<b>Teacher: Pollio</b>							
Mean Score REG:	44.0%						
REG	51	50	96%	24 / 48%	18 / 36.7%	8 / 16.3%	16 / 32.6%
ALL	51	50	98%	24 / 48%	18 / 36.7%	8 / 16.3%	16 / 32.6%
TEAM TOTALS	176	171	97.2%	96/56.1%	52/30.6%	23/13.5%	37/21.8%
Team Mean Score:	45.7%						

Teacher	3 Highest % Questions REG/SPED		Inference	3 Lowest % Questions REG/SPED			Inference	
Drew	2 91.7%	6, 26 88.9%	4 83.3%	*Students were able to apply integer operations rules to simplify expressions involving the addition of two integers, and division of integers involving a negative. *Students were able to recognize that subtracting a negative number is the same as adding that same number, in order to simplify an expression. *Students were able to identify the operation for, and solve real world problems involving the multiplication and division of integers. *Students were able to write an equation for a pictorial representation of adding integers using counters.	11 0%	3, 20 19.4%	12, 14, 19 25%	*Students struggle with using mental math to apply integer operation rules in order to solve problems with integers without a calculator. *Students struggle with applying integer rules to pairs of numbers to identify more than one result. *Students struggle with operation vocabulary (sum and product). *Students struggle with recognizing that subtracting an integer is the same thing as adding a negative integer to another. *Students struggle with finding the difference between two integers in a real world situation. *(TEI) Students struggle with identifying real world situations to match an expression with integer operations. *(TEI) Students struggled with real world problems (deposit/withdrawal) with multiple steps. *Students struggled with recognizing a representation of subtraction of integers on the number line.
Andrews	6 88.9%	2, 26 85.2%	1, 15 66.7%	*Students were able to recognize that subtracting a negative number is the same as adding that same number, in order to simplify an expression. *Students were able to identify the operation for, and solve real world problems involving the multiplication and division of integers. *Students were able to write an equation for a pictorial representation of adding integers using counters.	11 3.7%	14, 19 11.1%	20 14.8%	
	2 92.3%	26 84.6%	17 69.2%		11 3.8%	12, 16 17.3%	5 25%	
Pollio	2 82.2%	15 80%	1, 4, 8, 18, 23, 26 60%		5, 10 0%	11, 12 0%	20 0%	
<b>Priority Standards/Skills</b>								
<ul style="list-style-type: none"> <li>7.3a – Modeling addition, subtraction and multiplication of integers using the number line.</li> <li>7.3a – Modeling subtraction of integers with counters.</li> <li>7.3b – Adding, subtracting, multiplying and dividing integers using mental math.</li> <li>7.3b – Solving practical problems involving addition and subtraction of integers.</li> </ul>								
<b>Instructional Strategies to Insure Success</b>								
<ul style="list-style-type: none"> <li>Reinforce the conceptual understanding of integer operations in the context of word problems using visual representations and highlighting strategies to support understanding.</li> <li>Reinforce vocabulary for each topic through DMR and remediation sessions.</li> <li>Reinforce the visual strategies (t-chart and triangle) for solving problems with integer operations without a calculator.</li> <li>Incorporate pictorial representations (drawing and matching) into the DMR with a focus of addition, subtraction and multiplication of integers on the number line.</li> <li>Incorporate real world problems into DMR remediation and reinforce highlighting strategies, as well as modeling the problem with a visual representation in order to identify its solution.</li> </ul>								

### Additional Strategies

- Error analysis will be used to promote student discourse and recognize common misconceptions.
- Additional real world scenarios to stimulate and connect higher-level concepts.
- Essential vocabulary activities and interactive word walls to build vocabulary capacity to include:
  - Word Sorts
  - Similarities and Differences
  - Closure activity to involve students discussing meaning of essential vocabulary via whole group
  - Student created pictorial representations of essential vocabulary to be placed on word wall
  - The use of graphic organizers for students to create their own definition of essential vocabulary given the mathematical definition, a pictorial representation, and a real world situation where the word is used (i.e. create a word problem...)
- All foundational concepts that were below 70% on the CFA will appear on Daily Reviews. **Daily Reviews will serve as the primary source of remediation for addressing common misconceptions. Mastery will be assessed through Daily Review quizzes.**
- Use higher level questions to access prior knowledge and build conceptual understanding. The idea of “reasonable answer” will be a focal point of all discussions.
- Remediate via whole group in class on a single specific SOL with more focus on **practice and application.**
- **Daily Review Quizzes (2 cycles)**

# Tier III Interventions

The following interventions are in place to address RED students in Science 8:

- Daily Tier III Instruction (DSR)**-Daily Science Review
- Breakfast Club (BC)**- Practice with SOL Preparation activities, lab activities, manipulatives and digital lessons with Science 8 Teachers on Wednesdays from 7:00 am-8:00 am.
- Push-Ins (PI)**- Students receive small-group remediation on data-based skills with the Science interventionist in small groups.
- Dinner Club (DC)**- Students receive support from designated Science 8 teacher(s) and/or Co-taught teacher from 3:00-5:00 pm on Tuesdays and Thursdays.
- Homework (HW)**- Extended Learning Opportunities and Resource Guide
- Health/ Physical Education Pull-out (H/PE)**- Students attend review session during elective/ physical education time

# Tracking Sheet

## Ruffner Academy Math Department Interventions and Performance Tracker

Teacher/Grade: Teacher A/Math 8

CFA Title: Numerical Relationships Unit 2

### Tier 3 Interventions

Breakfast Club (BC) – Before school drill and practice using DLX.  
 Daily Math Review (DMR) – Daily re-mediation pull out sessions with Interventionist and or Math Specialist.  
 Push In (PI) – Remediation inside the classroom through small groups.  
 Pull Out (PO) – Remediation outside the classroom through small groups.  
 Dinner Club (DC) – After school instruction with grade level teacher.

Priority Standard and Skill:	Student Name	CFA Grade	Cycle 1 Intervention(s) Week of:	Quiz 1	Cycle 2 Intervention(s) Week of:	Quiz 2
<b>Bell 3 / 4 Group A</b>						
8.2 – Real Number System	Student 1	28%	PI, DMR	20%	PI, PO, DMR	0%
	Student 2	25%	PI, PO, DMR, DC – 10/28	30%	PI, PO, DMR	20%
	Student 3	44%	PI, PO, DMR, DC – 10/28	40%	PI, PO, DMR	25%
	Student 4	50%	PI, PO, DMR, DC – 10/30	20%	PI, PO, DMR	20%
	Student 5	34%	PI, PO, DMR	0%	PI, PO, DMR, DC – 11/6	10%
<b>Bell 3 / 4 Group B</b>						
8.2 – Real Number System	Student 1	34%	PI, PO, DMR	40%	PI, PO, DMR	35%
	Student 2	37%	PI, PO, DMR	30%	PI, PO, DMR	15%
	Student 3	44%	PI, PO, DMR	40%	PI, PO, DMR	20%
	Student 4	47%	PI, PO, DMR	20%	PI, PO, DMR	35%
	Student 5	37%	PI, PO, DMR	40%	PI, PO, DMR	30%
	Student 6	47%	PI, PO, DMR	30%	PI, PO, DMR	20%

### Mastery and/ or Next Steps Statement

- 1 / 11 (9%) students have made growth consistently from the CFA #2.
- 3 / 11 (27%) students have made growth, but not consistently from CFA #2
- I will continue to put the real number system and perfect square/square root problems in the monthly homework book for extra practice.
- When the students stay after school, I will have them to work on DLX in those specific areas (8.2 and 8.5).

# 6th grade

Content	Pass Proficient	Percentage
Math	28 out of 50	56%
Reading	28 out of 45	62%

# 7th grade

Content	Pass Proficient	Percentage
Math	31 out of 50	62%
Reading	28 out of 45	62%

# 8th grade

Content	Pass Proficient	Percentage
Math 8	31 out of 50	62%
Algebra I	25 out of 50	50%
Geometry	25 out of 50	50%
Science 8	27 out of 50	54%
Biology	27 out of 50	54%
Earth Science	25 out of 50	50%
Reading	28 out of 45	62%
Writing	31 out of 48	65%
History	21 out of 40	53%
World Geography	33 out of 60	55%