



Coffee Chat

with the Diverse Learners Cooperative



Math Intervention: Data Based Planning

- Friday, October 16
- 8:30 - 8:45am CST



The Diverse Learners Cooperative is a nonprofit organization connects teachers and leaders with professional **learning**, **resources**, and **networks** to improve outcomes for diverse learners and increase teacher and leader retention.

Today's Mission



Develop 1-2 next best steps for planning **WHAT** to teach your math intervention small group math

AGENDA:

1. Setting the Stage
2. Where Do I Start?
3. What Does a Weekly Schedule Look Like?
4. Tips and Resources



What Challenges Are We Trying to Solve?

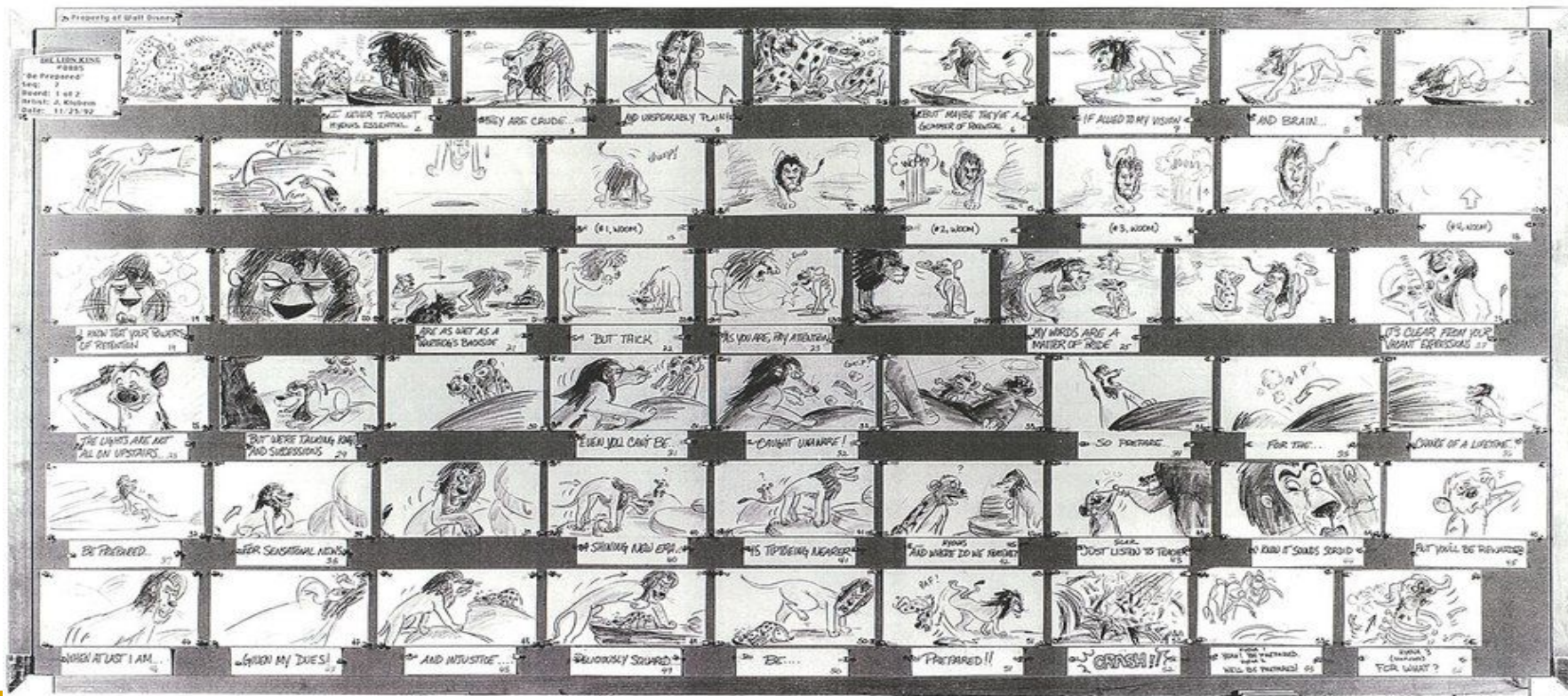
- 1) Students have difficulty accessing grade level standards
- 2) Students have significant gaps with foundational math skills
- 3) There is no scope and sequence for math intervention

So...

- **WHERE do I start?**
- **Should I focus on grade level standards or pre-requisite standards?**



Storyboard



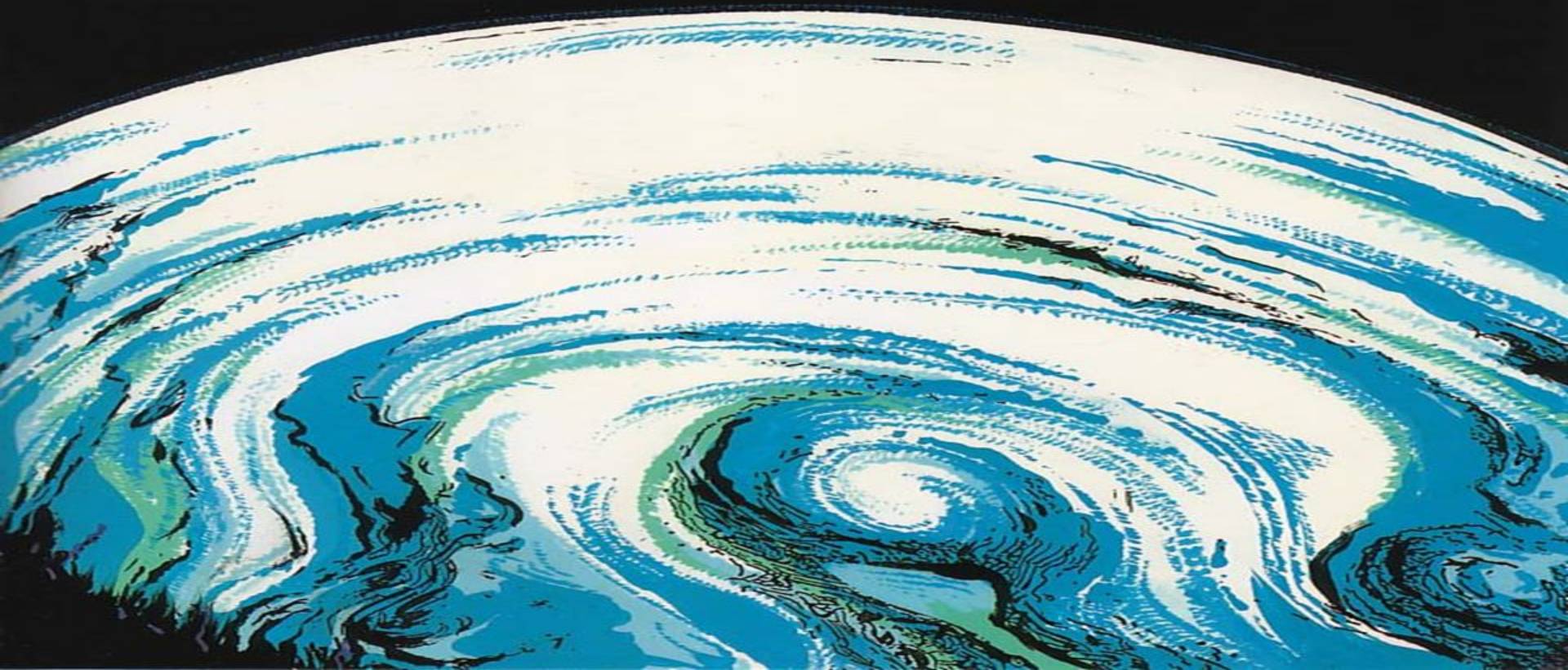
Core Idea

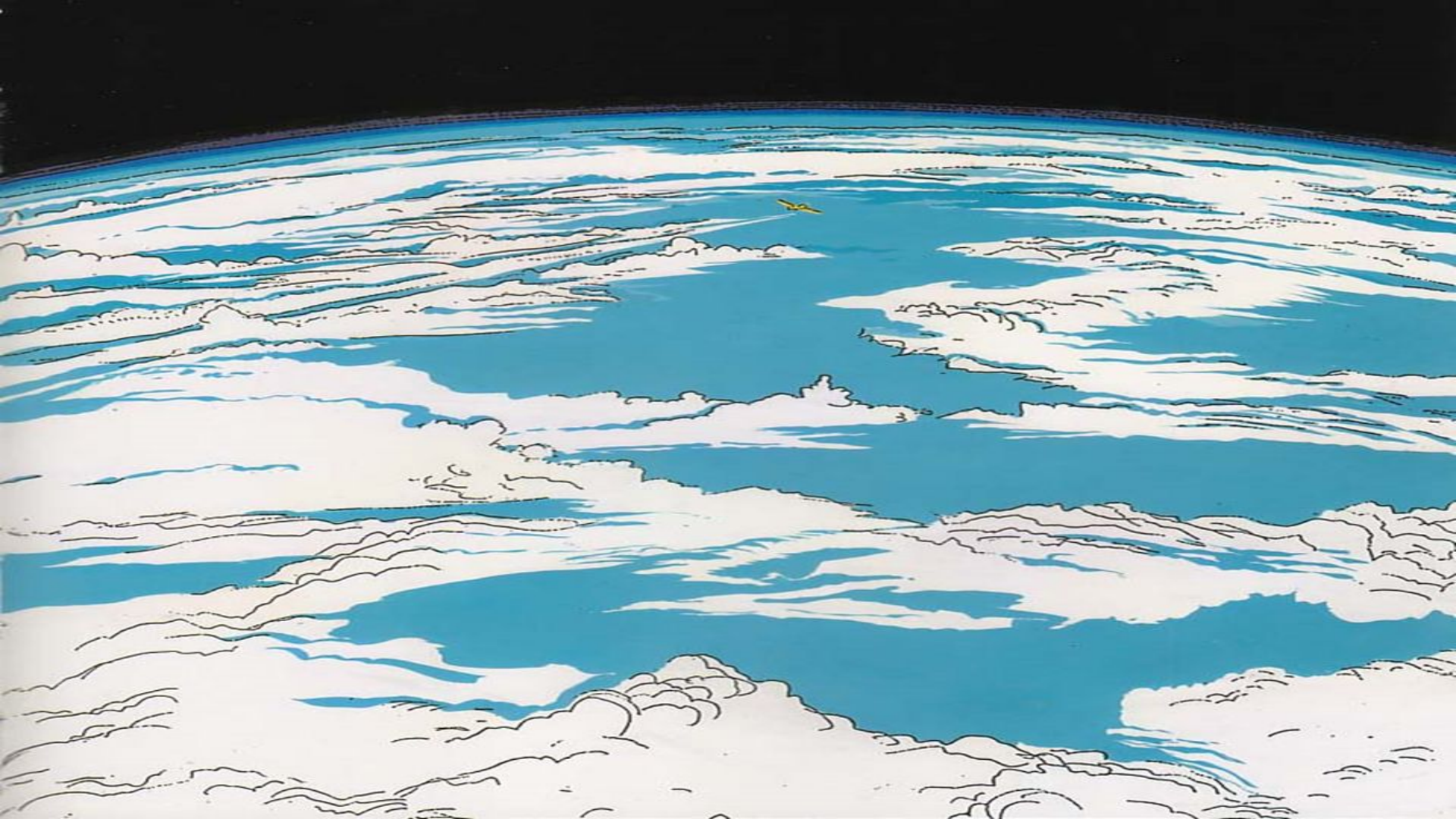
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you'll end up someplace else.”

- Yogi Berra











Guiding Principles



Week-at-Glance

Unit Planning

Lesson Planning

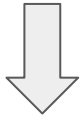
Checking for Understanding (CFU) DURING a lesson and adjusting instruction



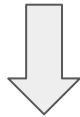
Why Do We Need Guiding Principles?



Guiding Principles (based on research!)



Influence our **Behaviors** (how we spend our time)



Our Behaviors Drive our Scholar's Performance

MORE THAN ANYTHING WE SAY,
HOW WE SPEND OUR TIME
REVEALS OUR
TRUE PRIORITIES.

Ⓐ YOUR.DAILY.TRUTH



Math Intervention Guiding Principles



1. Focus on **Major Work** standards and **prioritize the most essential prerequisite** skills and understanding for *upcoming* content
2. **Connect learning experiences** in intervention and universal instruction



**Developed from ANeT's and Student Achievement Partners recommendations*

CCSS WHERE TO FOCUS GRADE 5 MATHEMATICS



This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority¹ of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.^{2, 3}

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 5

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

- 5.OA.A ○ Write and interpret numerical expressions.
- 5.OA.B ○ Analyze patterns and relationships.
- 5.NBT.A ■ Understand the place value system.
- 5.NBT.B ■ Perform operations with multi-digit whole numbers and with decimals to hundredths.
- 5.NF.A ■ Use equivalent fractions as a strategy to add and subtract fractions.
- 5.NF.B ■ Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
- 5.MD.A □ Convert like measurement units within a given measurement system.
- 5.MD.B □ Represent and interpret data.
- 5.MD.C ■ Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
- 5.G.A ○ Graph points on the coordinate plane to solve real-world and mathematical problems.
- 5.G.B ○ Classify two-dimensional figures into categories based on their properties.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 5

5.NBT.B.5	Multi-digit multiplication
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Where Do I Start?

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**Developed from ANeT's and Student Achievement Partners [recommendations](#)*

What Prerequisite Standards Do I Start With?

5th Grade Student



1 to 1.5 years behind Grade Level

- 1) Identify the first [5th grade major standard](#)
- 2) Use Achieve the Core's [Coherence Map](#) to track back 1 grade level
- 3) Teach the Major standards (clusters) before teaching any supporting (“blue”) standards
- 4) Students still struggling? Consider using concrete materials to teach the standard (4.NBT.A) prior to going back to an even earlier standard ([Concrete-Representational-Abstract](#))



What Prerequisite Standards Do I Start With?

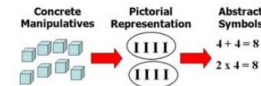
5th Grade Student



2-3 Years Behind Grade Level

- 1) Identify the [grade band](#) major work
- 2) Use assessment data from universal screener or EasyCBM/Aimsweb to get the student's instructional level and [start with the major standard](#) at that level (i.e. [3.OA](#) or 2.NBT)
- 3) Not sure which one? Assign a pre-test in [Assistments](#) or [Khan Academy](#) or use [these](#) from Achieve the Core

General Tip: *If you're picking between 2 different grade levels, start with the higher grade level standard but give the students a lot of practice using concrete manipulatives to solve the problems*



Guiding Principles

Week-at-Glance



Unit Planning

Lesson Planning

Checking for Understanding (CFU) DURING a lesson and adjusting instruction



Week-at-a-Glance

	Monday	Tuesday	Wednesday	Thursday	Friday
	Grade Level	Prerequisite (aligned to grade band focus or grade level focus standard)			Assessment; Reteach or Spiral Review
Fluency - 5-10 mins	Grade Level Fluency activity	Eureka Fluency Activity or Achieve the Core			<ul style="list-style-type: none"> • Additional Group as needed based on individual student's progress toward mastering the weekly Focus standard • Other students work through assigned Khan lessons on <i>previously</i> covered standards or Fun Friday fluency games • Bi-weekly EasyCBM Progress Monitoring* <p>*students chart their own progress in their data folder and compare their progress to their goal line</p>
Do Now - 10 min	Pre-teach the weekly grade level "Focus" lesson	1 Problem to match <u>GL</u> from previous day	1 Problem to match prereq from the previous day		
Mini-Lesson (Direct Instruction/ Modeling) 10-15 min		Pre-requisite standard lesson (Eureka or Achieve the Core)	Pre-requisite standard lesson (Eureka or Achieve the Core)		
Problem Set - 10 min	Guided Practice	Guided Practice	Guided Practice		
Exit Ticket (twice a week) 5 min	Assess the day's skill or standard.		Assess the day's standard		



Core Idea

“If you don't know where you are going,
you'll end up someplace else.”

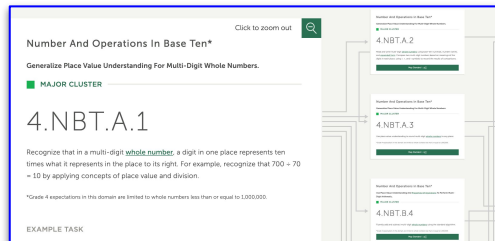
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Content Resources

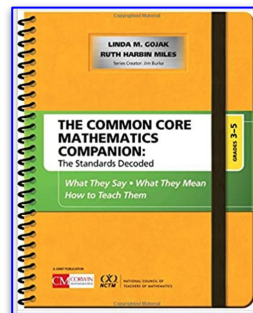
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Week-at-a-Glance**

**Sample
Week-at-a-Glance**



Focus by Grade Level

**Find the highest priority
standards**



**Common Core Mathematics
Companion: Use to plan for
student misconceptions**



Edulastic

**Assistments & Edulastic
have free virtual
assessments**

**Folder of K-5 Fluency
Activities from Achieve the
Core**

**Folder of Comprehensive
Resources (K-5) Aligned to
Engage NY & Eureka Curriculum**

**High School Math Standard
Prioritization for 20-21**

**3rd-6th Fractions Guidance
for 20-21**



Next Best Step





Thank you!

www.diverselearnerscoop.com/covid19



Join us [here](#) next time for:

“Juicy Sentences” A Comprehension Strategy

- October 23, 2020
- 8:30 - 8:45am CST



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