

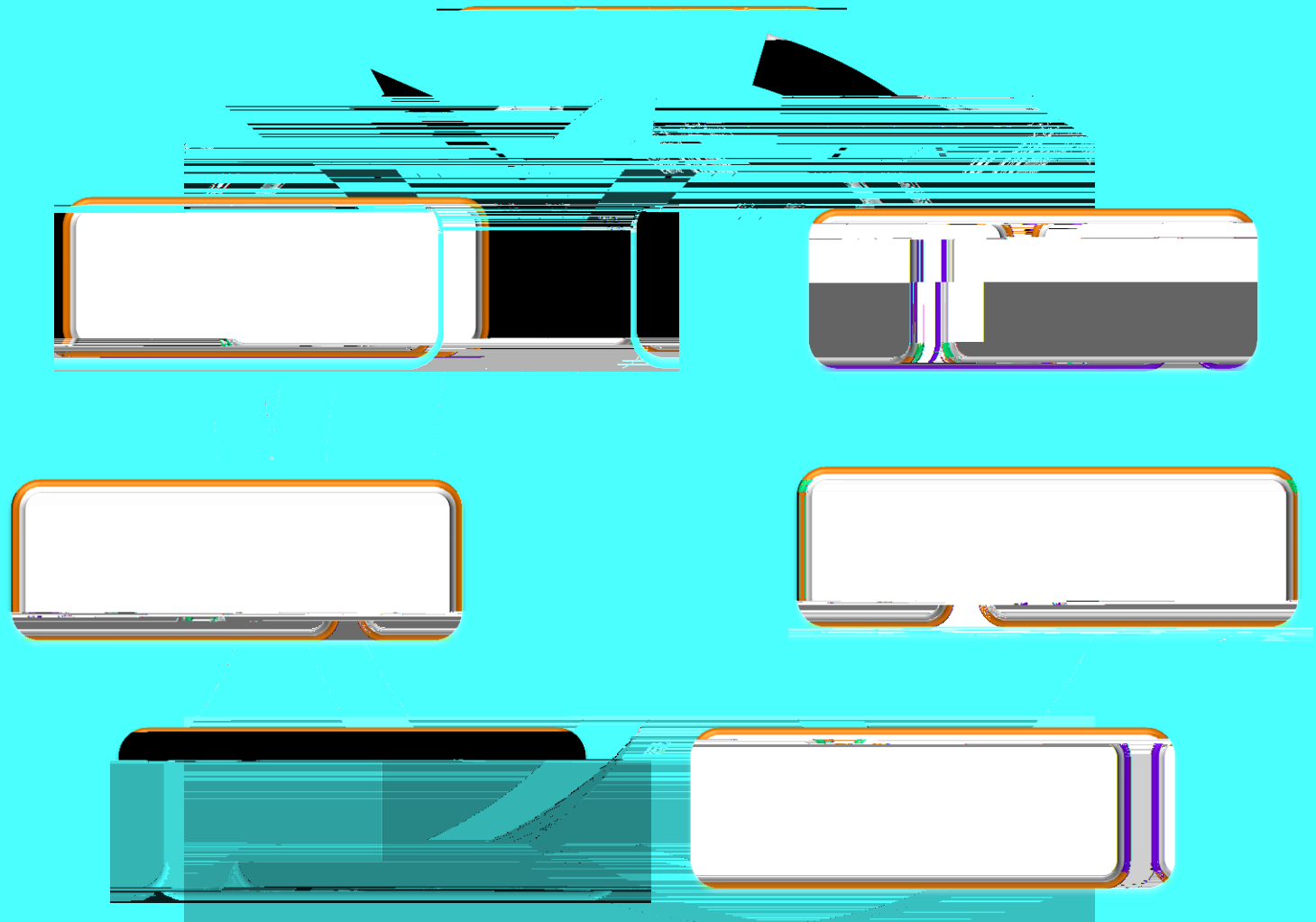


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Design Methodology





Evidence of SMPs

Review: SMPs

#1: Making Sense of Problems and Persevere in Solving Them

#6: Attending to Precision

Think of an exemplary student response that provides evidence for Math Practice 1.

Is $\frac{7}{8} > \frac{8}{9}$? Explain your reasoning



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Analyzing Work

Work in partners or triads

Look at the student work samples we provide for you

Complete the “evidence recording” template

Create two piles:

- 1) Samples that *have* evidence of SMP 1, 4, or 6
- 2) Samples that *do not have* evidence of SMP 1, 4 or 6



Analyzing Student Work

Examining your student work

Work in partners or triads

Complete the “evidence
recording” template



Analyzing Student Work

As a table group...

Choose 1 or 2 pieces of student work that



Analyzing Student Work

Gallery Walk

Place your 1-2 pieces of student work (with the post-its) on the wall

As you are walking, take post-its...

Write questions and comments



Break Time

10 minutes



Trying on the math

Equivalent fractions with Algebra



Instructional Shifts in Action

Focus: What is the enduring mathematical understanding from this lesson? (share as a table/whole group)



Instructional Shifts in Action

Coherence: If students can understand equivalent fractions, how does that help them when they get to ratios and proportions? (Share as a table/whole group)



Instructional Shifts in Action

Rigor (fluency, deep understanding, application, dual intensity): What did the teacher do to allow students to gain an understanding of equivalent fractions?
(share as a table/whole group)



Lesson Planning Part A

Use the enhanced lesson planning guide
Complete section A

What is the focus of your lesson?

What should students have learned
beforehand? (prior knowledge)

How will their new understanding enrich
future learning?



Lunch

1 hour



Read Shift: Focus
Write 2-3 key ideas



Shifts

Read Shift: Coherence

Write 2-3 key ideas

Write down what a teacher's shift in coherence looks like in the classroom

WHOLE-GROUP SHARE OUT:

In relation to the prompt for "Coherence" on your "Shifts in Action" worksheet, what new understanding do you have?



Shifts

Read Shift: Rigor (fluency, deep understanding, application, dual intensity)

Write 2-3 key ideas

Write down what a teacher's shift in rigor looks like in the classroom

WHOLE-GROUP SHARE OUT:

In relation to the prompt for "Rigor" on your "Shifts in Action" worksheet, what new understanding do you have?



Answer getting vs. learning mathematics

USA:

How can I teach my kids to get the answer to this problem?

High Performing Countries:

How can I use this problem to teach the mathematics of this unit?

[Phil Daro]



Teach at the speed of learning

More time per concept
More time per problem
More time per student talking
= less math problems per lesson

[Phil Daro]



Lesson Planning Part B

Complete section B of the lesson planning guide

Be prepared to share out

Share your expected evidence on a half-sheet of paper

Turn it in



Complete section C of the lesson
planning guide



Reflection

Please complete your evaluation