

XXXX observed by XXXX

Observation Date: 12/4/2012

Class Data:

My class is made up of fourteen students. Nine boys and six girls. XXXX, a male student in my class has an IEP and receives occupational therapy two times a week, physical therapy two times a week, and speech once a week. There are two students, XXXX (Tier 2) and XXXX (Tier 1) who receive academic intervention supports for math.

XXXX, a female student in my class requires significant behavioral support in order to be successful in content areas. She has an individualized stoplight and tracking sheet to help her monitor her behavior. Frequent teacher check-ins are required. It is also noteworthy that three male students, XXXX, XXXX, and XXXX are working on the executive functioning skill of response inhibition and require support to slow down and use strategies correctly.

Two of the fourteen students, XXXX and XXXX, identified math as an area of strength when asked to assess their own intelligences. Five students identified math as their favorite subject area on a student survey given in November. On the first unit test covering number sense and addition story problems, three students, XXXX, XXXX, and XXXX, received a score of 2, eleven students scored a 3. On the second unit test covering shapes, all fourteen students received a score of 3. Many students are using counting all as a strategy for solving addition problems independently. It is only with adult support that they are developing counting on strategies at this point. This is developmentally appropriate, but something that should begin to change by midyear.

Common Core Standards:

Lesson 3.4, titled Strategies for Addition, covers three Common Core Standards involving the notation and understanding of addition and subtraction problems.

1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.*

1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$.*

1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Although not listed as a unit focus on the numeracy profile. I have supplemented each math session with addition and subtraction fluency practice as it is a school and district priority this year.

1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Lesson Objectives: Students will...

Know: The steps in solving an addition story problem. Strategies for solving addition and subtraction problems. Rules for addition and subtraction games and the skills the games target.

Understand: Addition and subtraction can be used to find a given total. Counting on and counting all are effective strategies for solving addition and subtraction problems.

Do: Use pictures, equations, and tools as needed (number lines, touch points, cubes) to solve addition and subtraction problems. Complete Today's Number: 12 page 36 and review page 37. Use standard notation when writing addition and subtraction problems. Choose an addition or subtraction game to practice counting on or counting all. Discuss strategies for solving addition story problems. Use the steps to solve two problems whole group. Complete a differentiated fluency test for addition or subtraction.

Prior/Subsequent Learning Connections:

- Lesson 3.4 is the fourth lesson of five lessons in investigation three. Each of the five lessons in investigation three targets the development of student strategy use for solving addition and subtraction problems. At this point students have had experience with solving addition story problems, and finding unknown addends for a given total. Student exposure to subtraction is new in this unit.
- The procedure for Today's Number was recently introduced as of two lessons prior. However, Today's Number mimics finding all addition combinations for a given total, with which students are familiar. Investigation three is the last of the four investigations in this unit to cover addition and subtraction story problems. The fourth investigation covers counting to higher numbers. The common core learning standards 1.OA.7, 1.OA.8, and 1.NBT.1 reoccur in units 6 and 8.
- Addition and subtraction strategies will continue to be a focus for the remainder of the year. The students' ability to distinguish between addition and subtraction story problems will be a target in subsequent lessons. Fluency will remain a target through the end of the year.

Lesson Activities (As Applicable):

Introduction:

- Guess My Number: The lesson will begin with a whole group game of Guess My Number. Students will be exposed to the greater than and less than signs. We will discuss how today's number is greater than 3 and less than 22. The vocabulary word two-digit will be introduced as a clue for Guess My Number.
- Student work book pages 36 and 37 will be explained. Expectations for strategy use during games will be discussed.
- We will review how to be a good partner.

Individual Work:

- Student will work on their own to generate ways to represent Today's Number: 12, on page 37. Students will record several addition number sentences to represent a given total. Some may record a subtraction number sentence or use pictures.
- Students will work with partners or on their own to complete games that promote counting on and counting all: Five-in-a-row, How Many and I Hiding?, and Counters in a Cup. These games are played with a partner. Roll and record is a game played by an individual.
- Students will complete a daily practice page reviewing shape attributes on their own. This is a review of the previous unit's content.
- Students will complete a fluency test on their own. Fluency tests are individualized to target student needs and styles. Some students are working on mixed review of addition because flexibility in adding a variety of number combination is a need. Others are working in a more linear fashion, completing one number set (I.e. - all plus ones, all plus twos) before moving on to the next set. Many students are just beginning subtraction.

Group Work:

- Guess My Number is a whole group activity explained in the introduction.
- Students will also work as a group to complete two story problems as a part of the lessons closure.

Closure:

Students will meet at the rug to discuss strategies for adding and subtracting. As a group students will complete two story problems demonstrating their understanding of the steps in solving a story problem. Individual students will be called to name and show the following steps:

Visualize Draw Number Sentence Strategy Solve Check

Materials:

Chart paper
Markers
Number line
Pencils

Student workbook page 36 and daily review page 37
How Many am I Hiding? recording sheet
Counters in a Cup recording sheet
Roll and Record game board
Five-in-a-row game board
Dice
Connecting cubes
Counters
Fluency folders
Timer
Colored Pencils

Assessments (As Applicable): Formative and/or Summative

Formative: Student work samples will be collected and used to inform instruction. Discussion with students at the beginning and at the end of the lesson will be used to understand what students know, understand, and can do. Fluency test scores will be used to determine which fluency test will be given the following day. Flash cards and practice pages will be updated accordingly.

Summative: The Unit 3 district assessment will be given the end of December. Lesson 3.5 Assessment Finding all combinations for a given total will be given on the day following this lesson.

Possible Adjustments to Lesson:

XXXX may need support to transition between activities. She may also need to work at her individual desk. Student understanding, as demonstrated through discussion, student work, and strategy use during games, will inform the next day's lesson and possible adjustments. A small group may be pulled to work with me if they are having difficulty with the Today's Number: 12 work sheet. Depending on absences and student needs, I may work with students to play games rather than circulate and check in with many groups. Students may complete the fluency page at a later date if we are out of time.