Illustrative Mathematics

1.NB Hundred Chart Digit Game

Alignment 1: 1.NBT.A.1

Materials

- A 100 chart per pair of students
- A set of digit cards per pair of students (four each of cards 0-9)
- Two different colors of counting chips, one for each student

Action

- Player One draws two cards and then makes and reads aloud both of the numbers that can be made with those digits. Player One then chooses which of the two numbers to cover on their 100 chart.
- Player Two draws two cards and then makes and reads aloud both of his /her numbers and chooses which number to cover on the 100 chart.
- Players cannot cover a number that has already been covered, but they may have more than one counter in each row.
- If a player cannot make a number that is uncovered/available with the cards they drew, they lose their turn for that round.
- Play continues until one player has at least one number covered in each row of the 100 chart.
- If students run out of cards they should re-shuffle the cards and continue play.
- For a shorter version, students work together to cover at least one number in each row on the 100 chart.
- This can be extended by asking students to record the numbers they create.

Commentary:

- Ideally, students will place counters strategically. For example, if they get they draw the cards 1 and 3 and they already have a “teen” number covered they would place the counter on “31.” Students will often end up with more than one counter in each row as they reach the point in the game that they only have a few rows left to cover a number in.

- This game can be useful to help students who are having trouble with reversing numerals when reading numbers, for example, 14 as 41 or vise versa. Students often make this mistake because of the difference between reading teens which are read from right to left “Fourteen” versus “forty-one” which is read from left to right. Children will sometimes carry this over into other numbers and read 72 as 27 etc.

- If you have extended the activity so that the students are recording the numbers, the opportunity may arise to discuss the role of "zero" when reading and writing numbers. For example, if a student draws a 9 and a 0 and has to decide whether to cover nine or ninety, we would not record the nine as 09 but only 9. Generally, however, issues with "zero" do not cause much confusion until students are writing three digit numbers. This can still offer a place to start this discussion with children.

- A long pause when identifying a number may indicate that a student is counting in order to get a “running start” to help identify a number. You may also see some “sub-vocal” counting (sort of like counting under their breath) from another number to arrive at the correct numeral name. This is a common student strategy that should be noted when assessing a student’s facility with number identification. Make sure to note if students have to count to identify as this indicates that additional practice is needed with this numeral before they can be considered facile.

Solution: Solution

A winning game board will have one number in each row of the hundred chart covered by one color of counting chip, for example, 8, 12, 25, 34, 46, 51, 67, 78, 88, 93. If the shorter version is being played then the numbers may be covered by chips of both color.