**Get the Goof**

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| This is lesson six in a series of six lessons focused around developing a mathematical community at the beginning of the school year. The goal is to promote the idea that it is okay to make mistakes in math as long as we try to figure out the mistake and fix it. |

**NC Mathematics Standards:**

**Extend and recognize patterns in the counting sequence.**

**NC.2.OA.3** Read and write numbers to 1000 using base- ten numerals, number names, and expanded form.

**Extension**

**NC.2.OA.2** Count within 1000. Skip count by 5s, 10s, and 100s.

**Standards for Mathematical Practice:**

1. Make sense and persevere while solving problems in mathematics.
2. Reason abstractly and quantitatively.

**Student Outcomes:**

* I can persevere while solving a math problem.
* I can identify and correct errors in counting.

**Math Language:**

* ones, tens, hundreds, place value, skip counting

**Materials:**

* Copy of “Get the Goof” activity sheet, 100 boards, number line, place value chart, place value blocks
* **Advance Preparation**: Be sure to have taught lesson 5 before beginning this lesson. Gather materials.

**Launch:**

1. Introducing Get the Goof
   * Review the anchor chart from day 5 about what to do if you make a mistake.

* Ask, *“What does it mean to persevere?”*
* Have students share their ideas about what this means.
* Discuss the importance of not giving up when you make a mistake, but instead to persevere through it.
* Say, “*I want you to identify the mistake in the list of numbers.”*
* Display mistake number 1. Ask*, “What do you notice about the mistake?”*
* Ask, “*How can you correct it?”*
* Have students work on mistake 2 with a partner and discuss the goof.
* Assign mistake 3 for students to complete individually and walk around the room to check for student understanding. Discuss answers and misconceptions.
* Once students have a general understanding, pass out “Get the Goof” sheets for them to complete with a partner.

**Explore:**

1. Get the Goof Activity

* Give the students the activity sheet, “Get the Goof.” Tell students that they are going to work with partners to identify the counting errors that they see.
* Since this lesson was written for the beginning of second grade, all of the numbers are within 120.

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| **Observation** | **Questions to Ask** |
| * Students struggle identifying the error in the number sequence. | * “*When you count on from the first number do you say every number on the list? Do you notice something different when you count out loud?”* Provide place value blocks/hundreds boards for anyone struggling. |
| * Students do not know how to correct the number sequence. | * *“When you count on from the first number, what is the order of the next few numbers? Can you write them down?”* |
| * Students have difficulty counting on to the next tens or next hundred correctly. | * *“Show me the number with place value blocks. Now add one more. What number comes next?”* |

**Discuss:**

1. Bring the class back together to discuss the activity. Facilitate using the questions below.

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| **Sample Questions** | **Possible Responses** |
| * *What was the goof for this list?* | * Answers will vary based on the list. |
| * *How did you know how to correct the list?* | * I counted out loud in my head from the first number. * I added one more. |

* For a few of the examples feel free to use place value blocks on a place value mat to show hundreds, tens, and ones. Add one more and then model how to bundle up the ones to make a ten or the tens to make a hundred.
* Conclude the discussion by saying, “*What are some skills you had to use to be successful with today’s activity?”*
* Say “*It is okay if we make mistakes. Mistakes show even more about what we know than what we don’t know yet. The big idea is that if we make a mistake we work hard to figure out the mistake and fix it.”*

1. Watch the video from Jo Boaler, [Mistakes Are Powerful](https://www.youcubed.org/weeks/week-2-grades-k-2/) Discuss what happens when you make a mistake. How does persevering help us?

**Additional Activities:**

* Challenge students by changing the counting sequence to skip counting by 10s, 2s, or 5s.
* Allow for early finishers to create their own number sequences for a friend to find the goof.

**Evaluation of Student Understanding:**

**Informal Evaluation:**

* During the Explore activity make observations about students’ strategies and evidence that students understand or are struggling with concepts.

**Formal Evaluation**

* The work from the Explore task could be used as a formal evaluation.

**Meeting the Needs of the Range of Learners:**

**Interventions:**

* Use only numbers 120 or less for the “Get the Goof” activity.
* Provide students with place value mats and place value blocks. Students may prefer to use hundred boards or number lines as well.

**Extensions:**

* Add rigor to the opening task by having students find counting patterns by 5s, 10s or 2s.
* For students who complete the task easily, use larger numbers.
* Consider revisiting this task in centers in the coming weeks to reinforce the skills.

**Possible Misconceptions/Suggestions:**

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| **Possible Errors**  **and Misconceptions** | **Suggestions** |
| * Students struggle identifying the error in the list of numbers. | * *“When you count on from the first number do you say every number on the list? Do you notice something different when you count out loud?”* |
| * Students do not know how to correct the list. | * *“When you count on from the first number what are the next few numbers? Can you write them down?”* |

**Special Notes:**

* This is the sixth lesson in a series of six lessons focused on building classroom community.
* The Opening activity with the mistakes can be used as a routine at other times during the year.
* The Additional Activities can be used as centers at other times during the year.

Mistake 1

18, 19, 21, 22, 23, 24

Mistake 2

86, 87, 88, 89, 91, 92

Mistake 3

108, 109, 110, 111, 120

Get the Goof

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| --- | --- |
| **Goofy list of numbers** | **Correct list of numbers** |
| 13, 14, 15, 17, 18 |  |
| 46, 47, 48, 49, 60 |  |
| 88, 89, 90, 100, 101 |  |
| 96, 97, 98, 99, 109 |  |
| 108, 109, 1010, 1011, 1012 |  |
| 23, 25, 26, 27, 28 |  |
| 79, 80, 84, 85, 86 |  |

Pick one of the goofy lists above. Write a sentence explaining why the list is goofy.

The list is goofy because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain how you corrected the list.

I corrected the list by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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