

2.NBT Many Ways to do Addition 2

Task

Materials

For each student:

- A large index card
- A pencil

Action

Part 1

The teacher will put up the following addition problem:

$$\begin{array}{r} 24 \\ +32 \\ \hline \end{array}$$

This problem should be within easy grasp of all students because the focus of this lesson isn't the solution that $24 + 32 = 56$ but rather making explicit to students all the ways they can go about solving such a problem.

First the teacher and the class should do the problem in the traditional way, moving from right to left. Young learners love to have the "answer" to things and students won't be able to focus on the next part of the problem until they know the teacher knows that they know the answer!

The teacher should then have students brainstorm a different way they could solve the problem. Students should talk with a talking partner first so everyone has "talk time" and goes to their seat with an idea.

Students should then go to their seats with an index card and a pencil. Once there, students will write or draw an alternative way to solve the problem. Some examples of this are using the left to right method, drawing a picture, using base ten blocks, turning it into a story problem or another creative way that maybe only the student knows about.

Once students have been given about 5 minutes to write or draw, the teacher should bring the class back together. The teacher can use a random calling method such as sticks with students' names or can take raised hands. Random calling will ensure that many students get a chance to talk. The teacher will compile a list on the board of all the ways students have come up with.

Students may also come up with other ways not listed here, and the teacher should validate all reasonable responses. The teacher may need to provide a few higher level ideas, such as left to write addition or using number charts.

Once students have brainstormed ideas the teacher should give them another chance to talk. The teacher can use the give one/get one procedure. Students stand up and find a friend to talk to. They give the friend one addition strategy and then get one additional strategy.

If the teacher needs to do this task over two days they can break here and do Part 2 on another day.

Part 2

After the class has talked about all the ways they could solve the two digit addition problem the teacher should put the following three digit addition problem on the board:

$$\begin{array}{r} 224 \\ +132 \\ \hline \end{array}$$

The students should look over the brainstormed list of solution ways and see if each solution would also apply to solving three digit addition problems. (They all should work for both two and three digit addition problems.) The class can then talk about how their skills for two digit problem solving transfer to three digit problem solving.



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