

Lesson plan
Elvira's Elementary 4th grade
August 22, 2013
M Dominguez

Topic: Multiplication and combinations

Math core standards:

Operations and algebraic thinking:

3.OA.1 Represent and solve problems involving multiplication and division.

3.OA.8 Solve problems involving the four operations, and identify and explain patterns in arithmetic.

4.OA.3 use the four operations with whole numbers to solve problems.

Numbers and Operations in Base Ten:

4.NBT.5 Use place value understanding and properties of operations to perform multi-digit arithmetic.

Standards of mathematical practice:

MP.1 Make sense of problems and persevere in solving them.

MP. 2 Reason abstractly and quantitatively.

MP.4 Model with mathematics

- 1) Read the problem layout out loud and possibly project it on the board.
- 2) Reword the problem and write what we know on the board (as bullets) and have the student re-write the problem in their journals, their thoughts and what they understand.
- 3) Ask the question.
- 4) Let the students think for a couple minutes and discuss with their classmates what they think they should do to try to answer the problem (collective learning).
- 5) Discuss as a whole class how to try to answer the question in a more verbal sense, not get the numeric value, but discuss in a little more detail how to go about answering the question.
- 6) Allow the student to work on the problem in small groups.
- 7) Go around the classroom and listen to their reasoning.
- 8) Have a student from each group come up to the board and write their answer on the board and compare the results from different groups.
- 9) Discuss the differences and similarities.
- 10) Agree on the correct answer.