Name of Lesson Plan: Adding and Subtracting Decimals **Grade Level:** 3rd
Topic: Adding and Subtracting Decimals **Time required**: 50 min. **Space**: Classroom
Preparer: Christina Millson **Audience**: Whole Group   **Number of Students**: 22

Resources: document camera, projector, math journals, pencils, laptop, SOL released items, white board, dry erase marker

VA SOL:
3.7 The student will read and write decimals expressed as tenths and hundredths, using concrete materials and models.
3.12 The student will add and subtract with decimals expressed as tenths, using concrete materials, pictorial representations, and paper and pencil.

Behavioral Objectives:
Given concrete models, students will write decimal for the models and add and subtract decimals.
Given decimals in numeral form, students will add and subtract decimals.

Lesson Description:

Introduction: Have students take out math journals and a pencil. Explain to students that now that they know more about decimals less than and greater than one, they can learn how to add and subtract decimals. Tell students that they have been adding and subtracting decimals throughout the year when they have added or subtracted money amounts for homework or daily reviews.

Content Focus: Model an adding decimals problem for students using money ($4.55 + $3.77). Make sure to emphasize that the numbers need to be lined up appropriately so that the tenths place in the bottom number is under the tenths place in the top number, etc. After adding the hundredths and tenths places, bring down the decimal, telling students "Always bring down the decimal after adding the tenths place!" This will make it easier for the students to always put the decimal in the correct place.
Now model the same problem with manipulatives, using flats, tenths bars, and hundredths cubes. Ask students to help figure out how many of each piece will be needed to add the two amounts. Add using the manipulatives, regrouping the hundredths to make a tenths bar and regrouping the tenths bars to make a flat.
Now place manipulatives for 1.35 + 1.2 under the document camera. Ask students to write the decimals and an addition problem. Model the lining up of the numbers and have students solve addition problem.
Now model 2.45 + 1.76 and ask students to write the decimals and add them.
Move onto subtracting decimals. Model 2.3 – 1.1 using manipulatives and then set up equation and solve. Now place model for 3.75-2.86 and have students write decimal, set up problem, and solve. Place another model for 2.43-1.67 and have students write decimal, set up problem, and solve.
Divide class into ability-based groups to continue practice with manipulatives.

Closure: Go over several released SOL items to inform students of how the problems for adding and subtracting decimals will be set up on the SOL.

Evaluation: *Formative*: Observe students' attention and focus during lesson. Observe student's answers to questions asked during lesson and answers to released test items.
Summative: Performance on decimal worksheets and decimal quiz. Performance on decimal questions on daily practice sheets.

Differentiation: When working in groups those students needing extra support with manipulatives will be allowed to work at a slower pace and use their manipulatives more. Those students who grasp the concept quickly will have the opportunity to work at a quicker pace and move onto practice in numeral format. The differentiation will be made possible by the ability groups in which the class is divided into.