2.NBT Saving Money 1

Task

Materials

- Popsicle sticks and rubber bands or base-10 blocks
- Paper and pencil for each student

Actions

The teacher should pose the following question to students:

Louis wants to give $15 to help kids who need school supplies. He also wants to buy a pair of shoes for $39. If Louis gets $1 every day for his allowance, how many days will it take him to save enough money for both? Explain how you know.

IM Commentary

The purpose of this task is for students to relate addition and subtraction problems to money and to situations and goals related to saving money. This task has students adding two 2-digit numbers that require regrouping and the solution shows a more concrete approach than the solution approach shown in 2.OA, NBT Saving Money 2. This problem can be adjusted based on where students are in their understanding of addition involving two digit numbers.

Teachers can make the problem more personal by letting the student choose a toy he/she wants and the toy their sibling or friend may want and researching the costs. If students do this type of research, they will be engaging in MP 4, Model with mathematics. Students can also choose how much money they want to donate and for

what cause. If the students in the class don't receive allowance, the child in the task can make money by helping a neighbor (perhaps walking a dog or bringing in the mail).

This task is part of a set collaboratively developed with *Money as You Learn,* an initiative of the President's Advisory Council on Financial Capability. Integrating essential financial literacy concepts into the teaching of the Common Core State Standards can strengthen teaching of the Common Core and expose students to knowledge and skills they need to become financially capable young adults. A mapping of essential personal finance concepts and skills against the Common Core State Standards as well as additional tasks and texts will be available at http://www.moneyasyoulearn.org.
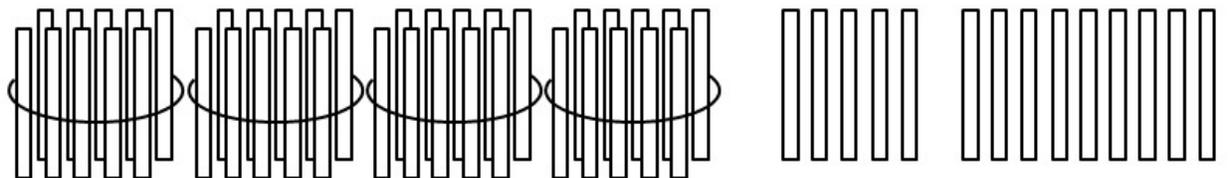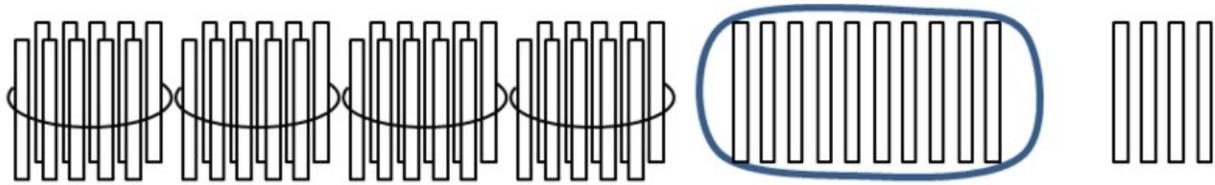
Solutions

Solution: Using bundled objects

To find out how much money he needs to save, we will find 15 + 39. First, let's represent 15 with 1 bundle of ten and 5 single sticks and 39 with 3 bundles of ten and 9 single sticks:
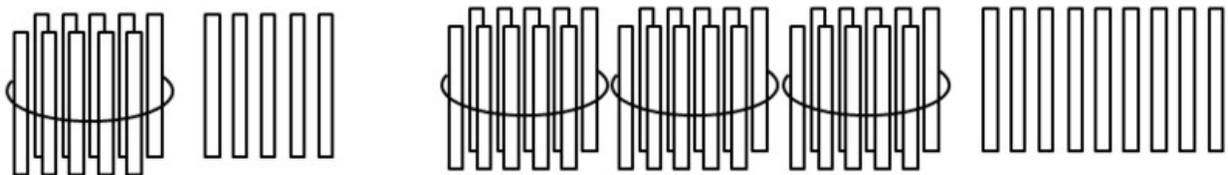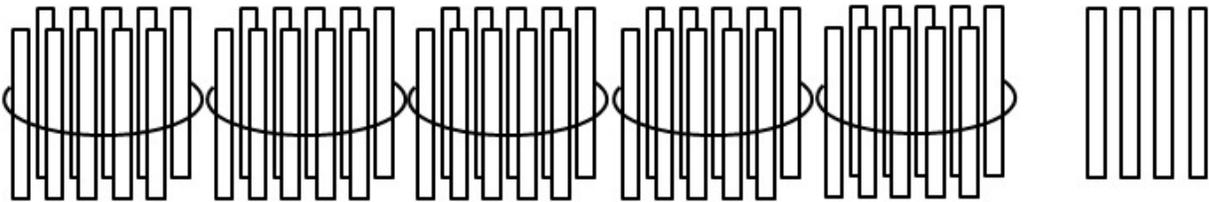
If we put the tens together and the ones together, we have 4 bundles of ten, and 5 singles and another 9 singles:

If we take 5 singles from the 9 and put them with the other 5:

we can make another bundle of ten:

(Students might also take 1 from the five and put it with the 9 to make 10.)

Now we have 5 bundles of ten and 4 singles, which represents 54. Since he gets $1 per day, it will take him 54 days to save for both.
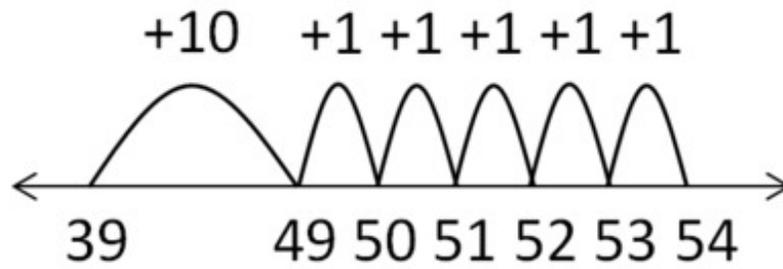
Solution: Using an empty number line

To find out how much money he needs to save, we will find 15 + 39.

We can start at 15, then count up by tens 3 times, then count up by ones 9 times:
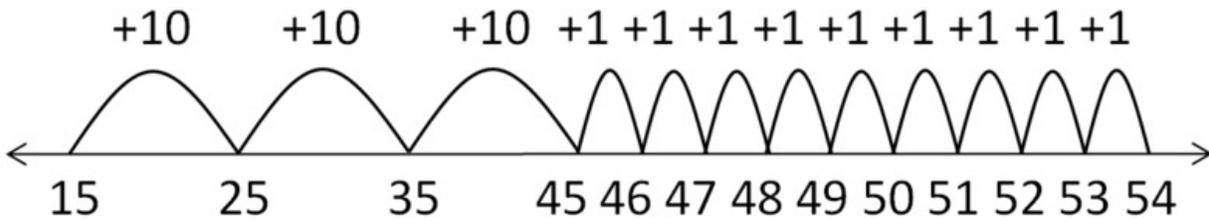
It is actually more efficient to start with 39 and add 15 to it; some students will recognize this:

+10   +1 +1 +1 +1 +1

39   49 50 51 52 53 54

Since he gets $1 per day, it will take him 54 days to save for both.