

The Candy Factory Instructional Sequence Summary

This instructional sequence follows on from the Candy Shop instructional sequence.

1. Introduce the candy factory scenario.
2. Pack up the candies - estimate the number of rolls in your bag, then pack them up. Revise your estimates. If you have more than 10 rolls, pack them up into a box. (You can put a rubber band around them to represent a box or use a large ziplock bag for a box.) Next have several groups consolidate their candies into one large group and continue packing. This will make it possible to generate several boxes.
3. Circling candies - Use this activity only if it was not already used with the candy shop.
4. Candy Flash - teacher flashes overhead displays of boxes, rolls, and individual pieces. The teacher can simply draw pictures or can use overhead materials. (These are very expensive and generally not worth the cost. Students definitely need materials for two digits. If they really understand coordination of units of two rank, pictures should suffice for three digits.)
5. Transformation task - different ways to have a certain number of candies, i.e., different ways to have 257 candies.
6. Transformation task - use overhead pictures to create tasks analogous to the strips and squares for two digits. Keep the number of boxes small.
7. Inventory form - introduce the form as a way to keep track of what is in the store room.
8. Inventory form pages - students figure out which forms show the same quantity. Then have a page with a variety of forms (see examples below). You might want to have pairs that “match”.

boxes	rolls	pieces
3	14	54

boxes	rolls	pieces
1	27	14

9. Transaction tasks - student pages with problems involving making more candies and selling candies.
10. Transaction tasks using the inventory form - student pages where the problems are posed using the inventory form.
11. Three digit addition and subtraction problems posed in standard vertical format without the inventory form notation.

Throughout the candy factory sequence, use analogous money tasks as well, using only one, ten, and hundred dollar bills. Students can actually have enough bills to use to solve the problems whereas it is not possible for them to have enough cubes to solve the candy factory tasks using materials.