Sample Structure Lesson 3

Year 4

Read and write numbers to 1000 in digit and word form

Objective:

Partition, decompose and combine numbers using place value.

Recognise that numbers can be decomposed in a variety of ways

Comparing and ordering numbers to 1000 (Place Value)

For students to understand how place value works in the context of Chocolate Chip Cookies packets. (In particular be able to break open packets and see how we can have equivalent forms: Thus 58 cookies is 5 packets + 8 cookies but it could also be 4 packets and 18 cookies)

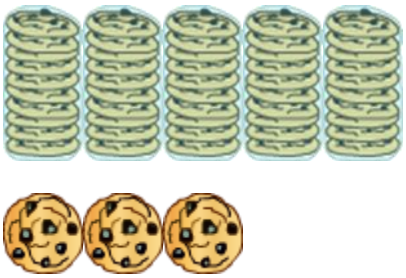
WCIT

Tell the story of the Chocolate Chip Cookie Factory while demonstrating using Cookie Factory Flip Chart (see attached): I have purchased a chocolate chip cookie factory, and we sell in the attached cookie shop. We sell the cookies in three different types of packaging: a. individual cookies b. In packets - 1 packet contains 10 individual cookies (demonstrate with a manipulative, actual cookies (you may need to adjust the packaging so that a packet= 10 cookies), or you can use base-ten units and rods –Dienes blocks or bundles of straws). c. In boxes -1 box contains 10 packets of 10 individual cookies for a total of 100 cookies. Demonstrate this with the cookies, but let students do this with the base-ten flats or straws also.

Order	Boxes	Packets	Individuals
53		/////	///

Think Pair Share

Ask the students (working with a partner) to show you with their manipulatives what it would look like if your cookie factory produced 53 cookies. *Most students will prepare order as 5 packets and 3 individual cookies.*



Prompt students to think of alternative ways of preparing the order.

Jerry has only three packets but he has lots of individual cookies. How can he prepare the order?

TPS

What other ways can the order of 53 be prepared?

You may see the following options: 53 individual pieces, 3 packets of ten and 23 individual cookies, 5 packets of ten and 3 individual cookies. Are they the same number of cookies? Why? How do you know? Which has more/less?

Ask students to explain their thinking.

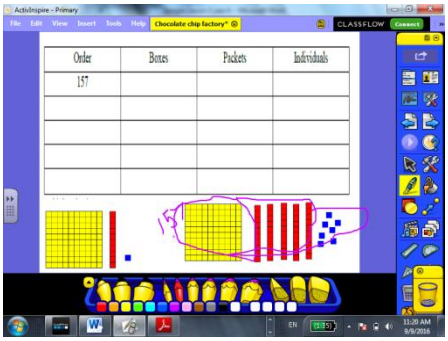
During Share Time, students' record the different equivalent representations of the order on the table.

Order	Boxes	Packets	Individuals
157			

Ask the students (working with a partner) to show you with their manipulatives what it would look like if your cookie factory produced 157 cookies. *You may see the following possible options: 157 individual cookies, 15 packets and 7 individual cookies, 1 box, 5 packets and 7 individual cookies, or a variety of other correct combinations. Are they the same number of cookies? Why? How do you know? Which has more/less?*

Ask students to explain their thinking.

Give more examples as needed to get students comfortable with the representations and showing it in different ways. Be sure that each time students explain an example to demonstrate using the manipulatives and record the order on the table.



Write a number of cookies produced eg. 139 and ask the students to show, without manipulatives, two different ways to represent and record the cookie order.

Link to images

http://www.verticallearning.org/files/cccfpv/cookie_drawings.pdf

http://www.verticallearning.org/files/cccfpv/columns_3.pdf