

Chapter 16 - Decimal Numbers and Rounding

Arrow cards decimals 3 minutes and 22 seconds

We can use arrow card to explain to children how the place value principle works in the context of decimal numbers. Remember if there's a number like this three point six seven, is made up of a three-three ones. A six which represents six tenths because of the place it's written in and the seven, which represents seven hundredths. This particular number has been constructed from three arrow cards. Here's the arrow card for three, there's the arrow card for zero point six and there's the arrow card for zero point zero seven. We put these together to make our number three point six seven. Notice that the arrows on these cards are on the left rather than on the right as they were with whole number arrow cards. This is because the numbers get longer as they get smaller. Because now you're extending beyond the decimal point to the right, rather than extending to the left in front of the decimal point. So this particular number then we've seen is made up of a three which is three ones, a zero point six which is six tenths and a zero point zero seven. We'd explain to children of course that we need the zero in front of the decimal point simply so that we don't lose track of it.

Well of course we'd have a whole set of cards like this and from these we would get children to construct various numbers. Which cards would we need to make three point eight six? Well we'd need a three, point eight, we'd need a zero point eight and to get the six after that, we would need a zero point zero six card, which represents six hundredths and then we'd put the cards together lining up the arrows on the left and there appears the number three point eight six. The children can construct decimal numbers and they can take them apart and have a look at the constituent parts. Three whole ones, three units eight tenths and six hundredths.

Notice again that this is quite good when you have a zero as a place holder so making up a number using these two cards three and zero point zero six, where we have no tenths card involved in this, just the two cards put together and there we can see the

zero, three point zero six and that zero is telling us now that we have no tenths. So there you are, make your own set of...(inaudible word) arrow cards with decimals and try those out with children. Help them to make connections to understand how place value works with decimal numbers.