## Dividing by 10

When we divide a whole number by 10, we need to make our number 10x smaller. To do this we can use a place value chart and move our digits ONE place to the RIGHT. Because we know that multiples of 10 end in a zero, we can only divide whole numbers which end in a zero by 10 exactly! If they don't end in a zero then we will end up with a decimal – we aren't worrying about this yet!. When we move our digits, you will notice that the zero on the end moves to the tenths column. Because it is a zero in the tenths, then we don't need to write .0 in our answer. Be careful if your number ends in 2 zeros as only one of them will end up in the tenths column!

$$340 \div 10$$

| Н | T | 0 | • | t | h |
|---|---|---|---|---|---|
| 3 | 4 | 0 |   |   |   |
|   |   |   |   |   |   |
|   | 3 | 4 | • | 0 |   |

$$340 \div 10 = 34$$

## Dividing by 100

When we divide a whole number by 100, we need to make our number 100x smaller. To do this we can use a place value chart and move our digits TWO places to the RIGHT. Because we know that multiples of 100 end in two zeros, we can only divide whole numbers which end in two zeros by 100 exactly! If they don't end in two zeros then we will end up with a decimal – we aren't worrying about this yet! When we move our digits, you will notice that the zeros move to the tenths and hundredths columns. Because it is a zero in the tenths and hundredths, then we don't need to write .00 in our answer. Be careful if your number ends in 3 zeros as only two of them will end up in the tenths and hundredths columns!

| Th | Н | Т | 0 | • | t | Н       |
|----|---|---|---|---|---|---------|
| 6  | 2 | 0 | 0 |   |   |         |
|    |   |   |   |   |   | <b></b> |
|    |   | 6 | 2 |   | 0 | 0       |

$$6200 \div 100 = 62$$