1.A Understand Decimals up to Thousandths

Place value refers to the value of the digits in any given number.

In the number 482 for example, the value of the digit '4' is **400**, the value of the digit '8' is **80** and the value of the digit '2' is simply **2**.

At a more advanced level, in the number 36.57, the value of the digit '5' is **0.5** and the value of the digit '7' is **0.07**.

							Decimal point		

One Millions	Hundred Thousands	Ten Thousands	One Thousands	Hundreds	Tens	Ones	.	tenths	hundredths
3	0	1	5	2	6	8	.	4	9

10 times bigger

10 times smaller

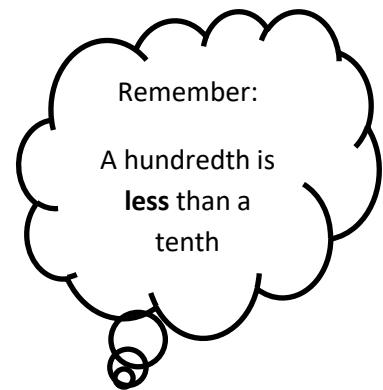# Important vocabulary

Compose: put a number together from its parts, for example 600+30+2=632

Decompose: break down a number into parts, for example 456 is 400+50+6

Decimal number: a number written in decimal notation, for example 34.5

Regroup: to change the way a number is written, for example 456=400+50+6, but you can also change this to 400+40+10+6

Remember:

A hundredth is **less** than a tenth

1.B Multiply and Divide by 10, 100 or 1000
- **If you multiply a whole number by:**

10 add one zero, for example 34×10 is 340

100 add two zeros, for example 34×100 is 3400

1000 add three zeros, for example 34×1000 is 34000

- **If you multiply a decimal number by:**

10 move the decimal point **one** place to the **right**

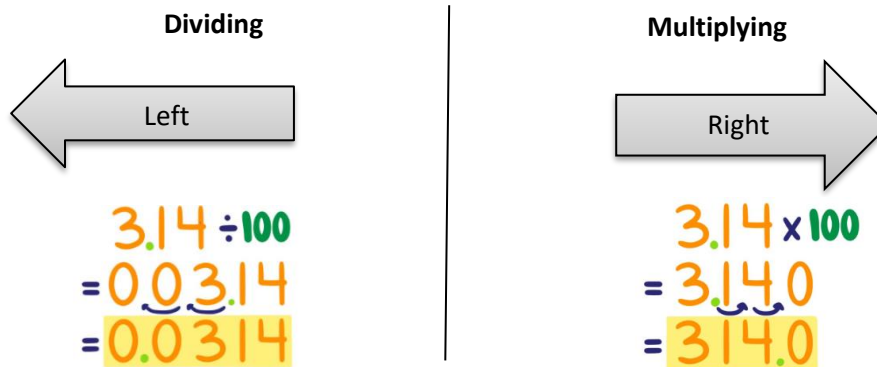100 move the decimal point **two** places to the **right**

1000 move the decimal point **three** places to the **right**

- **If you divide a decimal number by:**

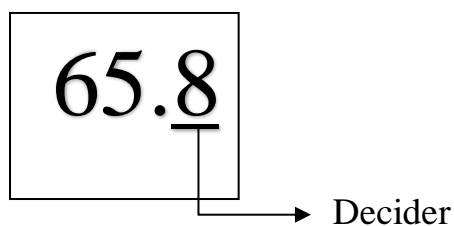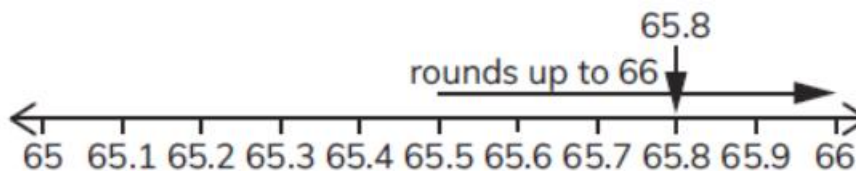10 move the decimal point **one** place to the **left**

100 move the decimal point **two** places to the **left**

1000 move the decimal point **three** places to the **left**

Dividing	Multiplying
Left	Right

$$3.14 \div 100$$
$$= 0.03.14$$
$$= 0.0314$$

$$3.14 \times 100$$
$$= 3.14.0$$
$$= 314.0$$

1.C Round Decimal to the Nearest Whole Number or Tenth

You can round a number to the nearest whole number, for example 65.8 is rounded to 66 as follow:

65.8
rounds up to 66

65 65.1 65.2 65.3 65.4 65.5 65.6 65.7 65.8 65.9 66

$$65.\underline{8}$$

→ Decider

If the decider is:

Less than 5 so round down

5 or more so round up

Rounding Rhyme

Five to Nine –
Climb the Vine!

Zero to Four –
Slide to
the Floor!

good luck
to you