

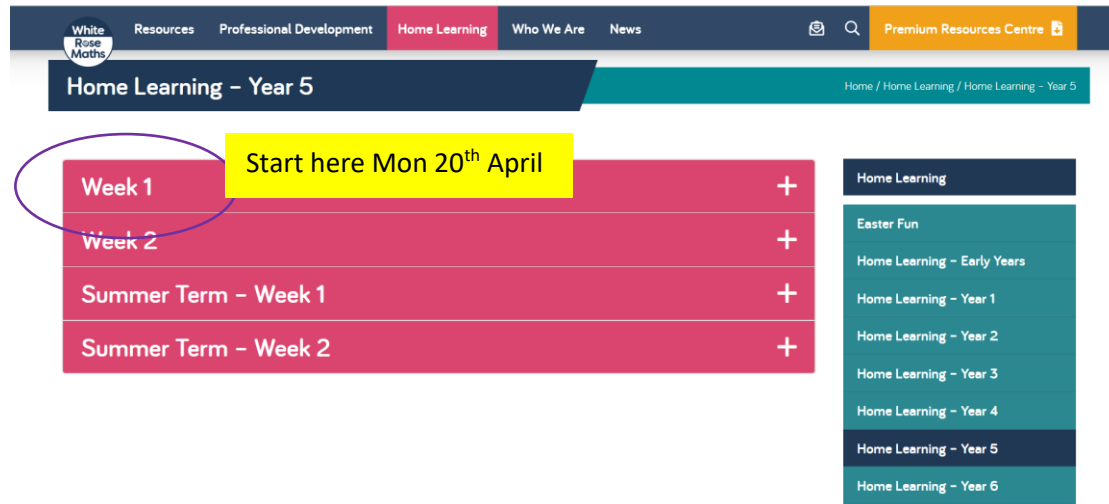
## Maths Summer Term - Week 1

**Decimals - use the activities from the White Rose website.**

White Rose has set up pages specifically for home learning.

<https://whiterosemaths.com/homelearning/>

<https://whiterosemaths.com/homelearning/year-5/>



Do one lesson each day. You need to do the Year 5 - Week 1 work first (ignore the link to Summer Term Maths at this point, we are still working through Spring Term work).

Watch the tutorials and follow the instructions. If you can't work from the website, use the pdfs that have been emailed to you for help. Complete the worksheet for each lesson.

**Times Tables:** practise every day. Make sure you can do multiplication and division for each times table. Learn the fact families, e.g.  $3 \times 4 = 12$ ,  $4 \times 3 = 12$ ,  $12 \div 4 = 3$ ,  $12 \div 3 = 4$ .

If you have a Smart speaker, you can ask it to tell you a times table. (Alexa - tell me the multiplication table for 5) See if you can get the answers quicker than the app.

**Mixed Mental Maths** - practise every day. See how many questions you can answer in 10 minutes. There are different levels of challenge - you should be working on the purple level but if it is too hard - try the green. Too easy? - have a go at the pink level.

Decimals - Place Value - useful clip:

<https://www.bbc.co.uk/bitesize/topics/zsjqtfr/articles/zsbd7p3>

Also look out for the BBC Daily Lessons which are starting on Monday 20<sup>th</sup> April.

## Decimals - help sheet

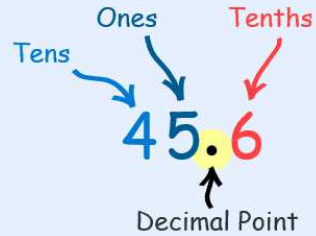
The following is taken from: <https://www.mathsisfun.com/decimals.html>

A Decimal Number (based on the number **10**) contains a **Decimal Point**.

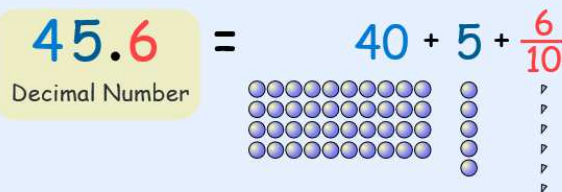
First, let's have an example:

Here is the number "*forty-five and six-tenths*" written as a decimal number:

The decimal point goes between Ones and Tenths.



**45.6** has 4 Tens, 5 Ones and 6 Tenths, like this:

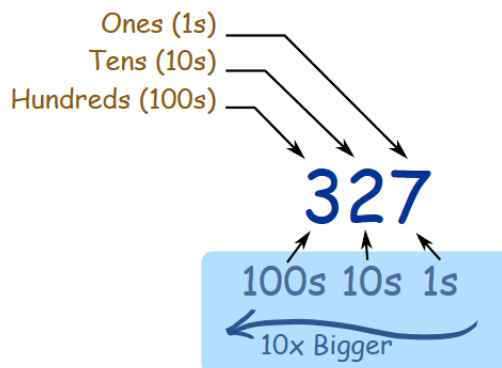


It is all about **Place Value** !

When we write numbers, the **position** (or "**place**") of each digit is important.

In the number **327**:

- the "7" is in the **Ones** position, meaning 7 ones (which is 7),
- the "2" is in the **Tens** position meaning 2 tens (which is twenty),
- and the "3" is in the **Hundreds** position, meaning 3 hundreds.





As we move left, each position is **10 times bigger!**

**Tens** are 10 times bigger than **Ones**

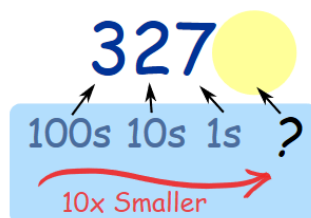
**Hundreds** are 10 times bigger than **Tens**

... and ...

As we move right, each position is **10 times smaller.**



From **Hundreds**, to **Tens**, to **Ones**

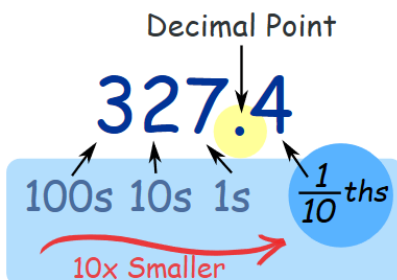


But what if we continue past Ones?

What is **10 times smaller** than Ones?

$\frac{1}{10}$ ths (Tenths) are!

But we must first put a **decimal point**,  
so we know exactly where the Ones position is:

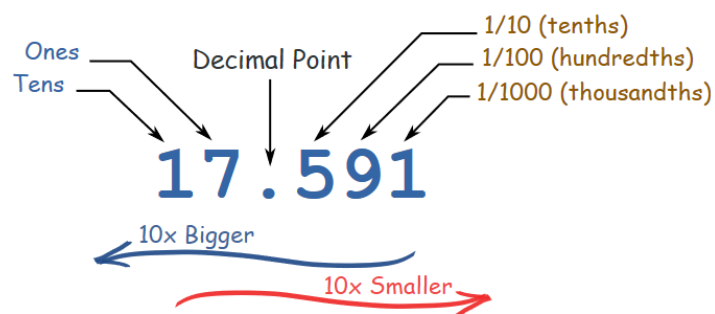


"three hundred twenty seven **and four tenths**"

but we usually just say "three hundred twenty seven **point four**"

And **that** is a Decimal Number!

We can continue with smaller and smaller values, from **tenths**, to **hundredths**, and so on, like in this example:



## Large and Small

So, our Decimal System lets us write numbers as large or as small as we want, using the decimal point. Digits can be placed to the left or right of a decimal point, to show values greater than one or less than one.

The **decimal point** is the most important part of a Decimal Number. Without it we are lost, and don't know what each position means.

**17.591**

On the left of the decimal point is a  whole number (such as 17) •

As we move further left,  
every place gets **10 times bigger**.

•  The first digit on the right means **tenths** ( $1/10$ ).

As we move further right,  
every place gets **10 times smaller**  
(one tenth as big).

## Ways to think about Decimal Numbers ...

... as a Whole Number Plus Tenths, Hundredths, etc

We can think of a decimal number as a whole number plus tenths, hundredths, etc:

### Example 1: What is 2.3 ?

- On the left side is "2", that is the whole number part.
- The 3 is in the "tenths" position, meaning "3 tenths", or  $3/10$
- So, 2.3 is "2 and 3 tenths"

### Example 2: What is 13.76 ?

- On the left side is "13", that is the whole number part.
- There are two digits on the right side, the 7 is in the "tenths" position, and the 6 is the "hundredths" position
- So, 13.76 is "13 and 7 tenths and 6 hundredths"

### ... as a Decimal Fraction

Or we can think of a decimal number as a Decimal Fraction.

A Decimal Fraction is a fraction where the denominator (the bottom number) is a number such as 10, 100, 1000, etc (in other words a **power of ten**)

So "2.3" looks like:  $\frac{23}{10}$

And "13.76" looks like:  $\frac{1376}{100}$

### ... as a Whole Number and Decimal Fraction

Or we can think of a decimal number as a Whole Number plus a Decimal Fraction.

So "2.3" looks like:  $2 \text{ and } \frac{3}{10}$

And "13.76" looks like:  $13 \text{ and } \frac{76}{100}$

Those are all good ways to think of decimal numbers.

# Decimal Place Value Chart

|   |   |     |                     |
|---|---|-----|---------------------|
|   |   | M   | Millions            |
|   |   | HTH | Hundred Thousands   |
|   |   | TTh | Ten Thousands       |
|   |   | Th  | Thousands           |
|   |   | H   | Hundreds            |
|   |   | T   | Tens                |
|   |   | O   | Ones                |
| ● | ● | t   | tenths              |
|   |   | h   | hundredths          |
|   |   | th  | thousandths         |
|   |   | tth | ten thousandths     |
|   |   | hth | hundred thousandths |
|   |   | m   | millionths          |