



Helping your child with maths in Primary 6

Whatever you do, make sure your children enjoy it.

If they struggle to understand, make mistakes, or get bored: keep calm, make it easier, change the subject, tell them a joke, play football, go to the park but please don't get cross or impatient - you could put them off maths for life. Some of the pupils already have a can't do attitude.

Generally the advice is;

- Talk about and involve children in the situations in which you use maths in everyday life;
- Play games involving numbers and/or logic, such as card games, dominoes, darts, draughts, chess etc.;
- Stimulate their thinking at times of boredom, (such as when travelling), with mental activities
- **Be positive** about maths. Don't say things like "I can't do maths" or "I hated maths at school"; your child might start to think like that themselves.
- **Point out the maths in everyday life.** Include your child in activities involving maths such as using money, cooking and travelling
- **Praise your child for effort rather than talent** - this shows them that by working hard they can always improve

| X | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |



www.helpyourchildtolearn.co.uk

Multiplication and Division

Much of the knowledge in this class relies on number facts being easily recalled. For example, to find common factors or to make simple conversions, knowledge of multiplication tables is essential. Any practice at home to keep these skills sharp will certainly be appreciated by your child's class teacher!

By primary 6 we want our pupils to be able to use division remainders.

A very good recall of number facts is when your child can take a number between 1 and 50 and divide it by any unit number and give you an accurate answer fairly promptly.

E.g. $34 \div 6 = 5 \text{ r } 4$ $35 \div 8 = 4 \text{ r } 3$ $43 \div 7 = 6 \text{ r } 1$

Practice little and often and it makes the difference.

Target 1000 Roll a dice 6 times. Use the six digits to make two three-digit numbers. Add the two numbers together. How close to 1000 can you get?

One million pounds

Assume you have £1 000 000 to spend or give away. Plan with your child what to do with it, down to the last penny.

Decimals

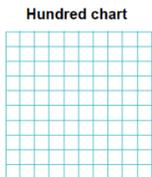
A decimal is a number expressed in the scale of tens. Commonly speaking **we talk about decimals when numbers include a decimal point to represent a whole number plus a fraction of a whole number** (tenths, hundredths, etc.)

A **decimal point** is a point or dot used to separate the whole part of a number from the fractional part of a number.

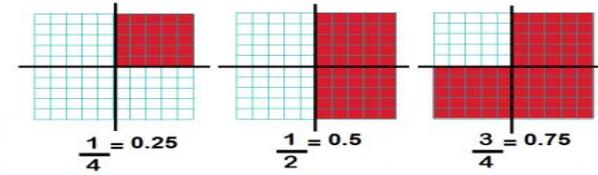


Explaining decimals to children

One of the best ways to describe decimals, is to show a child a **blank hundred number square or number chart** and explain that this represents 'one':



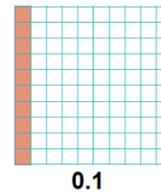
Children need to know that when we talk about decimals, it is as if we are **splitting one whole up into smaller parts**.



If you coloured in one of the squares in the above diagram, this would be represented as the decimal 0.01 (which is one hundredth or $1/100$).



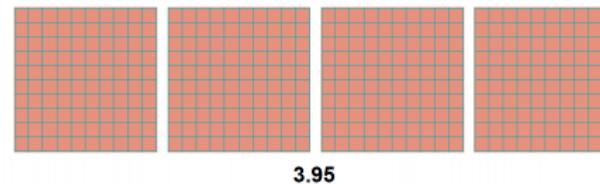
If you coloured in ten of the squares in the above diagram (therefore colouring in $10/100$ or $1/10$), this would be represented by the decimal 0.1 (children may write 0.10 because they have coloured 10 squares – you need to explain that the zeros after decimal points are always knocked off).



The **place value** of decimal numbers can be shown the following table:

| | | | |
|-------|---|--------|------------|
| 3 | . | 9 | 5 |
| Units | | Tenths | Hundredths |

A pictorial representation of this number is:



Time activities

2018 Calendar

| January 2018 | | | | | | | February 2018 | | | | | | | March 2018 | | | | | | | April 2018 | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|---------------|---|----|----|----|----|----|------------|----|----|----|----|----|----|------------|----|----|----|----|----|----|----|----|----|----|----|----|
| W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | | |
| 1 | | 1 | 2 | 3 | 4 | 5 | 6 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 2 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 6 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 10 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | |
| 3 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 7 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | |
| 4 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 8 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 12 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 17 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 5 | 28 | 29 | 30 | 31 | | | | 9 | 25 | 26 | 27 | 28 | | | | 13 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 18 | 29 | 30 | | | | | | | |

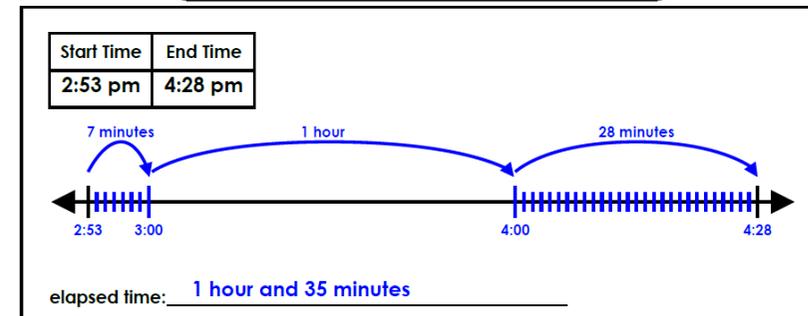
| May 2018 | | | | | | | June 2018 | | | | | | | July 2018 | | | | | | | August 2018 | | | | | | | | | | |
|----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|-------------|----|----|----|----|----|----|----|----|----|----|
| W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S |
| 18 | | | 1 | 2 | 3 | 4 | 5 | 22 | | | | | | 1 | 2 | 27 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 31 | | | 1 | 2 | 3 | 4 | |
| 19 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 23 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 28 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 32 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 20 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 24 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 29 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 33 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 21 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 25 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 30 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 34 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 22 | 27 | 28 | 29 | 30 | 31 | | | 26 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 29 | 30 | 31 | | | | | 35 | 26 | 27 | 28 | 29 | 30 | 31 | |

| September 2018 | | | | | | | October 2018 | | | | | | | November 2018 | | | | | | | December 2018 | | | | | | | | | | |
|----------------|----|----|----|----|----|----|--------------|----|----|----|----|----|----|---------------|----|----|----|----|----|----|---------------|----|----|----|----|----|----|----|----|----|----|
| W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S | W | S | M | T | W | T | F | S |
| 35 | | | | | | | 1 | 40 | | 1 | 2 | 3 | 4 | 5 | 6 | 44 | | | 1 | 2 | 3 | 48 | | | | | | | 1 | | |
| 36 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 41 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 45 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 49 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 37 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 42 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 46 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 50 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 38 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 43 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 47 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 51 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 39 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 44 | 28 | 29 | 30 | 31 | | | | 48 | 25 | 26 | 27 | 28 | 29 | 30 | 52 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | |
| 40 | 30 | | | | | | | | | | | | | | | | | | | | | | | 1 | 30 | 31 | | | | | |

Paul caught a train to Liverpool at 1.25 pm. The journey last 2 hours and 15 minutes. At what time did Paul arrive in Liverpool?

David cycles to and from school every day, each journey takes him seven minutes. How long does David spend cycling every week?

Bridging time is very tricky. (going from one hour to another). Use a number line to help with this.



Time around the world – I love the ipad app clock for time around the world. It is a lot of fun

<http://www.primaryresources.co.uk/maths/mathsE2.htm> - full of worksheets

<http://www.bbc.co.uk/skillswise/topic/time-and-date>

Use a calendar to calculate the number of days between events

Website.

<https://mathsframe.co.uk/en/resources/resource/261>

Examples of time problems.

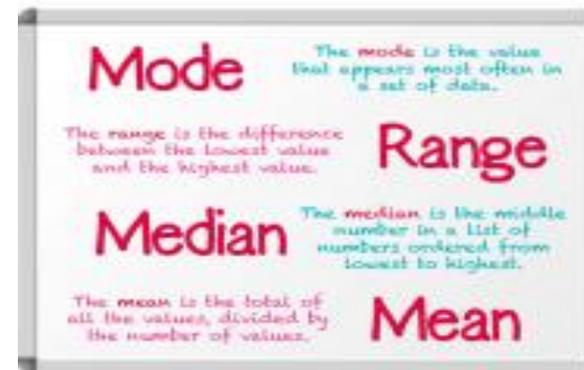
Maths starts at 10.25 and lasts for 45 minutes. At what time does Maths finish?

Science lasts for 55 minutes and ends at 3.30. At what time does Science start?

Class 3 needs to get to the museum at 11.30. It is a 17 minute walk from school to the museum. At which time must Class 3 leave school if they are to arrive at the museum at exactly 11.30?

Lucy left home at 10 am. She spent 10 minutes walking to Stacey's house and then stayed with Stacey for 2 hours. Lucy then spent another 10 minutes walking home. At what time did Lucy arrive home?

Information Handling - <https://www.theschoolrun.com/what-are-mode-mean-median-and-range> (the song is quite good)



Your child will need to be able to record decimal number as fractions and percentages.

They need to be able to write decimal equivalents of any number of tenths and hundredths, for example: $3/10 = 0.3$ and $7/100 = 0.07$.

They also need to know decimal equivalents to $1/4$, $1/2$ and $3/4$. This diagram is a good way of making this concept clear to them:

| Decimal fraction | Fraction | Percentage |
|------------------|---------------------|------------|
| 0.1 | $1/10$ | 10% |
| 0.2 | $2/10$ ($1/5$) | 20% |
| 0.3 | $3/10$ | 30% |
| 0.4 | $4/10$ ($2/5$) | 40% |
| 0.5 | $5/10$ ($1/2$) | 50% |
| 0.18 | $18/100$ | 18% |
| 0.47 | $47/100$ | 47% |

Curriculum for Excellence Second level outcomes.

By the end of primary 6 we are expecting our pupils to be able to do many of the following:

Number

- identify the number before and after any given number in the range 0-1000
- round numbers to 1 decimal place
- use rounded numbers to estimate
- solve a variety of addition and subtraction tasks using 3 digit numbers
- use a range mental strategies to solve problems
- recall all the multiplication /division facts from memory
- apply the order of operations to problems involving \times , \div , $+$, $-$
- use the associative property of addition to solve a problem by grouping numbers
- construct a number line to answer questions that involve negative numbers
understand place value of decimal numbers
- add/subtract decimal fractions with 2 decimal places
- multiply/divide decimal fractions with 2 decimal places by a whole number
- multiply/divide decimal fractions by 100
- find the fraction of an amount by using pictures or informal jottings e.g. $\frac{2}{3}$ of 15
- convert an improper fraction to a mixed number
- carry out calculations with 1%, 10%, 20%, 25%, 50%, 75% and 100%
- use equivalent fractions to compare the size of commonly used fractions and put them in order
- show the equivalence between fractions, decimal fractions and percentages using counters or a picture