Bullion Lane Primary School
A PARENTS' GUIDE TO MATHS IN THE CURRICULUM

Year 3

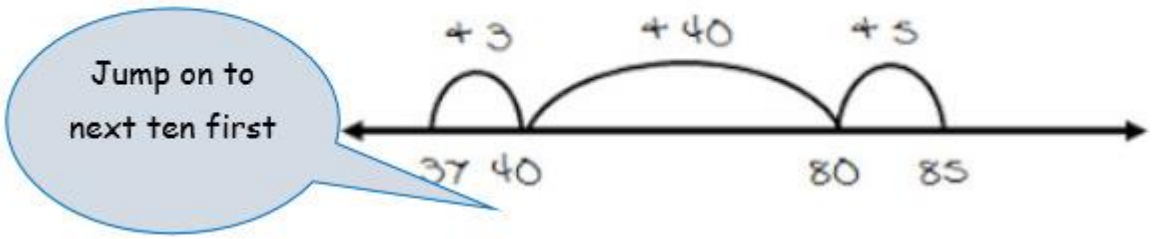
Addition

I can add and subtract numbers with up to 3-digits using the formal written methods of column addition and subtraction.

2 3 6
1 6 3 +
3 0 9

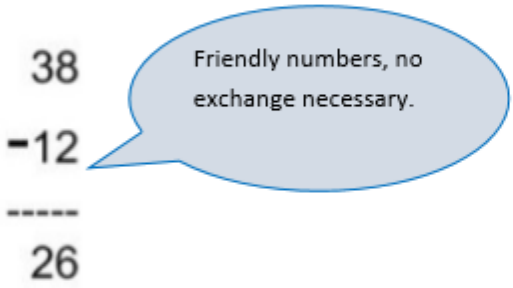
Add the units first. Carry any digits over to the tens column on top of the line. Add the tens, remembering to add on the one carried over. Add the hundreds.

Subtract on an empty number line (ENL) by counting on

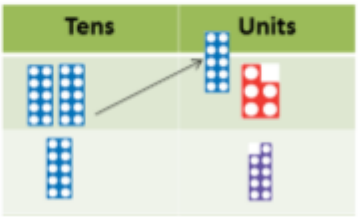


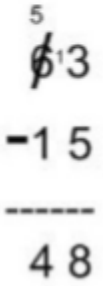
E.g. **85 – 37 = 48**

Begin to use formal column subtraction method, first using 'friendly numbers'.



Move to formal subtraction using 'take and make'.





Teach the children to consider the most appropriate method

I can estimate and use fact families (inverse operations) to check answers in a calculation.

66+34=100

34+66=100

100-34=66

100-66=34

I can add and subtract numbers mentally, including:

i. **a three-digit number and 1s**

ii. **a three-digit number and 10s**

iii. **a three-digit number and 100s**

For example,
What is 234 + 7?
What is 985 – 6?

What is 789 + 10?

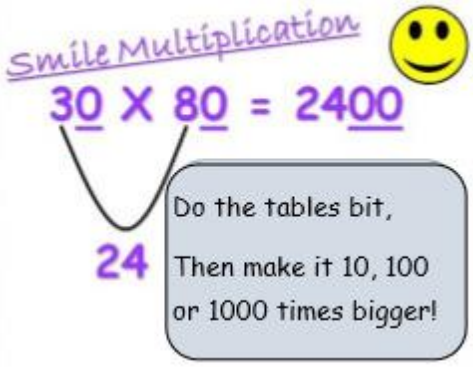
What is 305 – 10?

What is 951 + 100?

What is 678 – 100?

For added challenge, try examples which cross a tens, hundreds or thousands barrier.
Try this when dealing with larger Numbers in real life contexts such as baking.

I can multiply 2-digit (2d) numbers by a 1-digit (1d) number using formal written layout.



Moving onto …

1st Step	2nd Step	3rd Step
1 ¹2 3	¹1 ¹2 3	¹1 ¹2 3
5 ×	5 ×	5 ×
5	1 5	6 1 5

I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

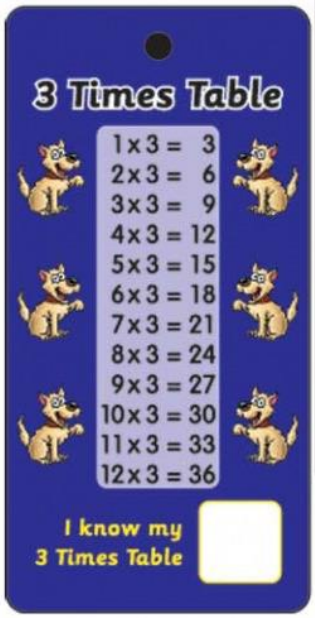
Work together to learn times tables using fun games, reciting table facts out loud and

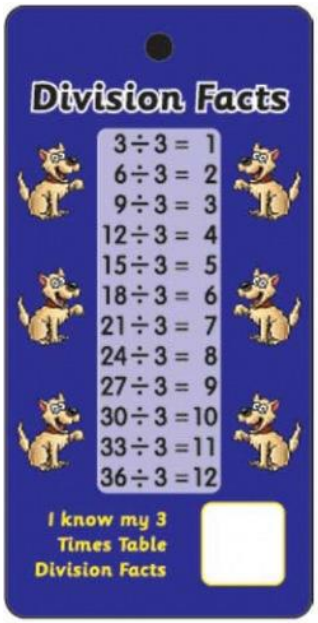
answering quickfire questions in a random order.
There are lots of great apps for times table practise on tablets:

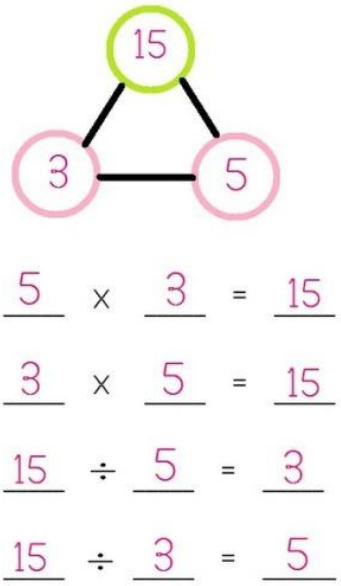
- Squeebles (although it does cost)
- Dorling Kindersley times table game – DK 10 minutes a day
- Times Table ! !
- DoodleTables: Times Tables

And some super websites including:
www.timestables.co.uk
www.topmarks.co.uk
www.mathschase.com

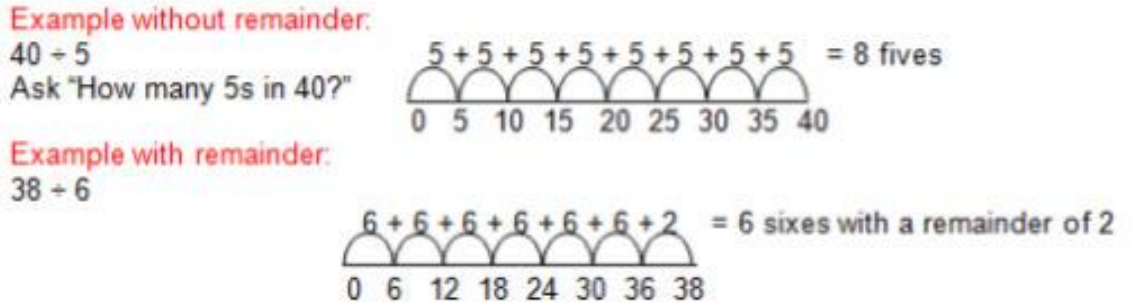
Use fact families (the inverse operation) to learn multiplication and division facts for the 3, 4 and 8 times tables:



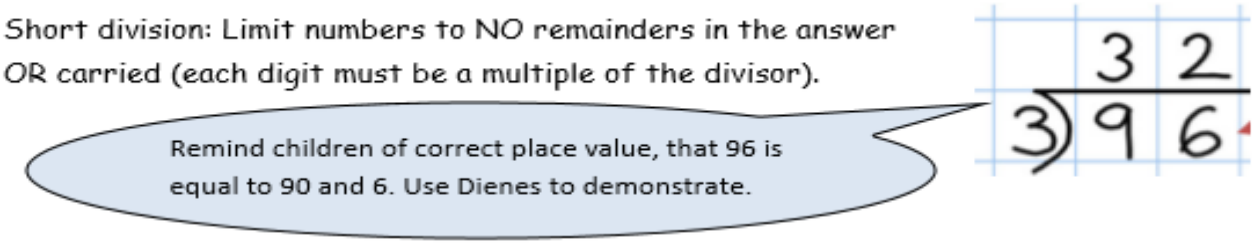




I can write and calculate mathematical statements for multiplication and division using times tables, including for two-digit numbers times one-digit numbers.



Then progress onto formal written methods…



Try using any of the calculation strategies above to solve real life problems.

When shopping, calculate the cost of a number of items or how much change you will receive.
Try emptying piggy banks and purses to find how much money is already saved and how much more your child needs to buy the next treat!
When baking, calculate the total weight of ingredients.

Number, Place Value and Fractions

I can count from 0 in multiples of 4, 8, 50 and 100

Practise counting in multiples with your child, perhaps whilst passing a ball (e.g., 4, 8, 12,16…)

I can read and write numbers up to 1,000 in numerals and in words

Look out for larger numbers in real life such as prices of larger household items, holiday prices, distances when travelling on holiday, amounts of grams or millilitres when cooking and baking.
Encourage your child to read the whole number aloud, e.g. 965 is nine hundred and sixty five.

I can order and compare numbers up to 1,000

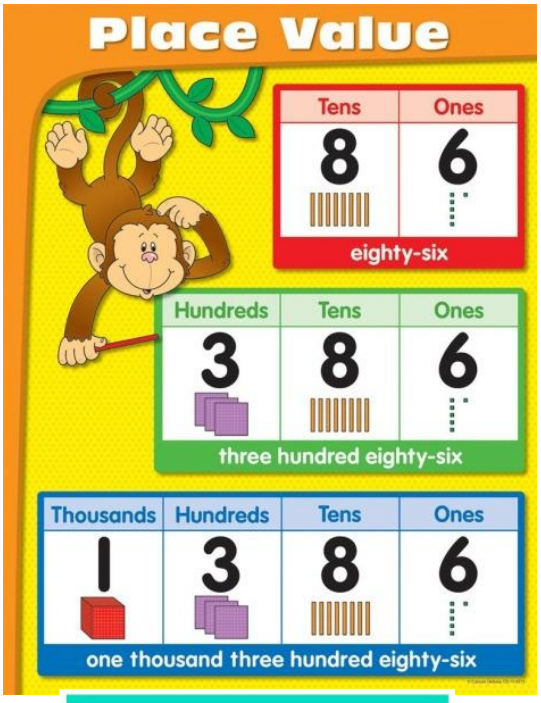
When looking at larger numbers in real life contexts, compare two or more numbers, deciding which is bigger or smaller. Try putting a range of prices in order, for example when writing a wish list of toys, can you order them from cheapest to most expensive?

I can find 10 or 100 more or less than a given number

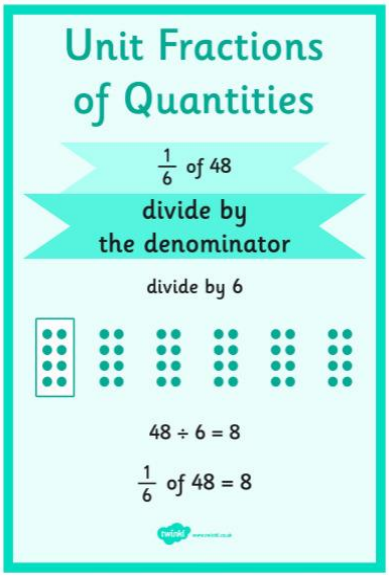
When looking at larger numbers in real life contexts, ask your child which number is 10 or 100 more or less. For example, what is 10 more than 365g?
For an extra challenge, try examples which cross the hundreds barrier.
For example:
What is 10 more than 295ml? What is 100 more than 950g?

I can recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)

When looking at larger numbers in real life contexts, ask your child what the place value of each digit is, e.g. in 386 what is the 3 worth? 3 Hundreds.



I can recognise, find and write fractions of a set of objects

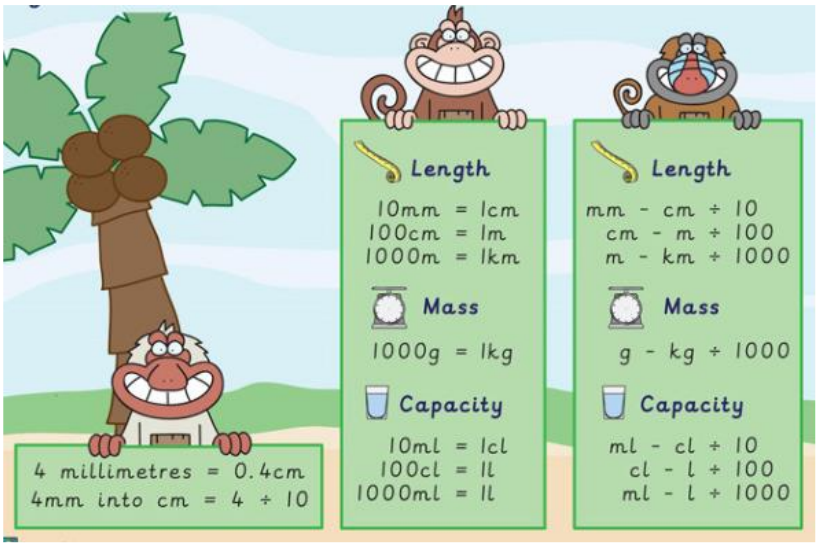


Use times tables to help with division skills.
Try finding a half, a third, a quarter, a fifth or a tenth of a group of objects.
For example, what is one third of these grapes? How many raisins would there be in half of the box?

Measurement

I can measure, compare, add and subtract: length (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Practical home activities such as baking and model making are a brilliant opportunity for becoming familiar with units of measure. You could also try measuring jumps and throws in the back garden.



Try using different measuring jugs, rulers and weighing scales to explore reading a variety of scales and then compare which amounts are larger or smaller than one another.
As a challenge, try adding or subtracting different quantities or even convert between mm and cm (by x or ÷ by 10).

I can tell and write the time from an analogue clock, including using Roman numerals
from I to XII, and 12-hour and 24-hour clocks
Look at a range of analogue clocks at home or when out and about and discuss the use of Roman numerals instead of numbers on some clocks.
Use analogue clocks to help with planning a day out or when getting ready to leave the house by a certain time.
Perhaps consider giving your child an analogue watch to wear!

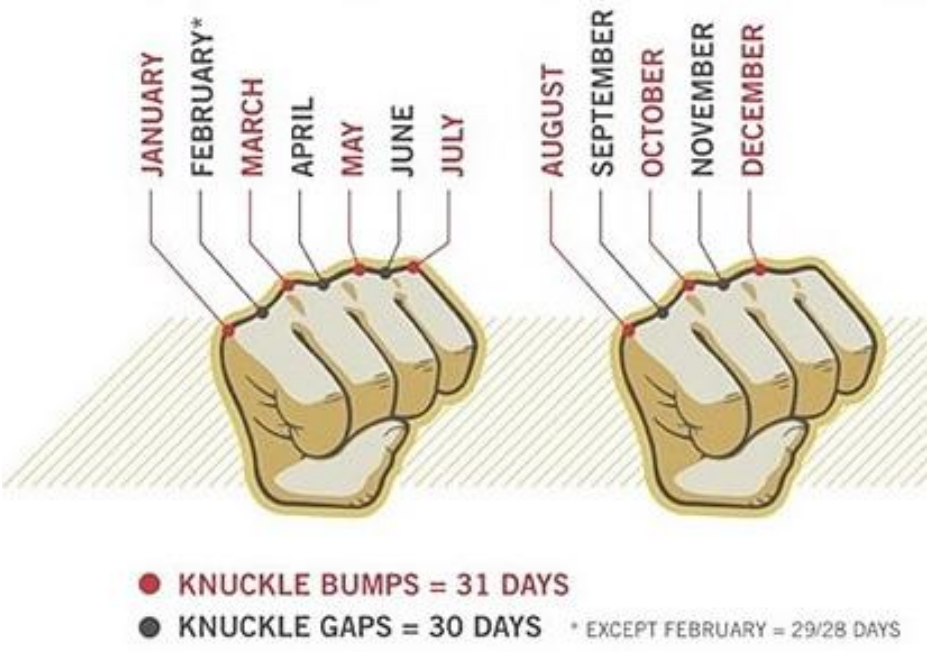
I can estimate and read time with increasing accuracy to the nearest minute;
I can record and compare time in terms of seconds, minutes and hours;
I can use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight
Use analogue and digital clocks to help with telling the time and discuss the differences between 12 and 24 hour clocks and when am or pm is needed.

Discuss how noon and midnight would appear differently on a 12 or 24 hour clock.
Try encouraging your child to accurately read the time to the nearest minute when making a timetable of daily routines and chores around the house.
Take part in a family countdown to Christmas and discuss how many weeks, days or hours there are to go!
http://www.xmasclock.com/

I know the number of seconds in a minute and the number of days in each month, year and leap year.

These are really useful facts to learn, practise/discuss

Use the knuckle trick to help learn the number of days in a month:



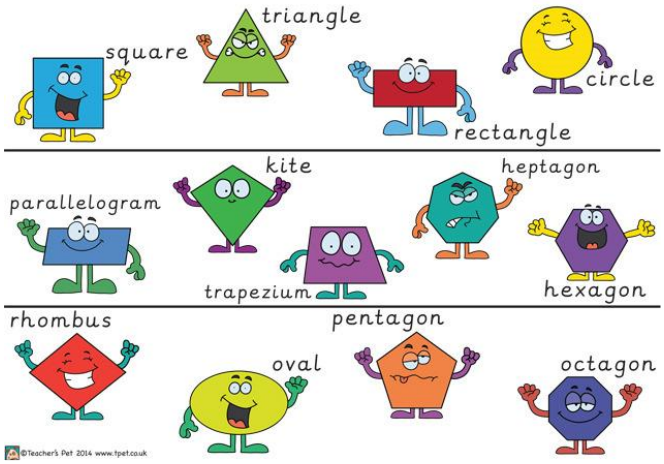
I can compare durations of events

Compare how long regular family activities take in comparison to one another, for example, brushing your teeth, attending a club, having a quick breakfast or sitting down to a family meal. Try using the vocabulary of seconds, minutes and hours to help compare events.

Properties of Shapes

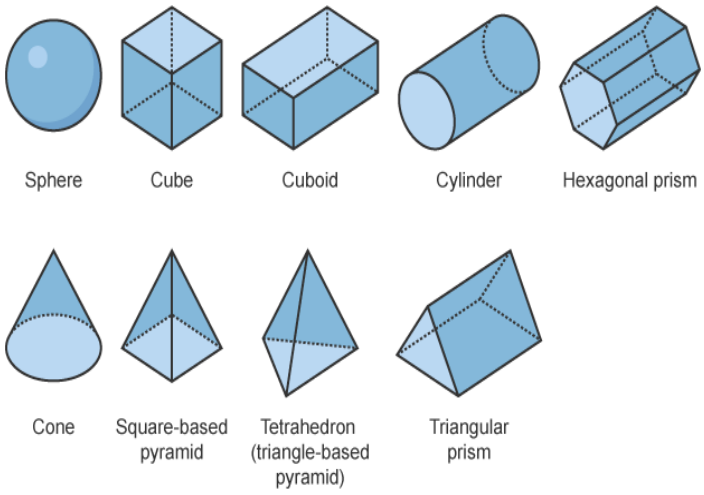
I can draw 2-D shapes and make 3-D shapes using modelling materials

I can recognise 3-D shapes in different orientations and describe them



Try using common 2D shapes in artwork or when drawing patterns. Then see how many of each type of shape you can find in your picture. As a challenge, try finding irregular shapes too (where the sides are not all the same length).

Look for examples of 3D shapes around you at home and when out and about. Junk modelling is a brilliant way to explore 3D shapes in a creative way!



I can identify right angles, recognise that 2 right angles make a half-turn, 3 make
three quarters of a turn and 4 a complete turn;

Have fun playing treasure hunt games or Easter egg hunts where instructions are given for finding the treasure! E.g. Two right angle turns to the left.

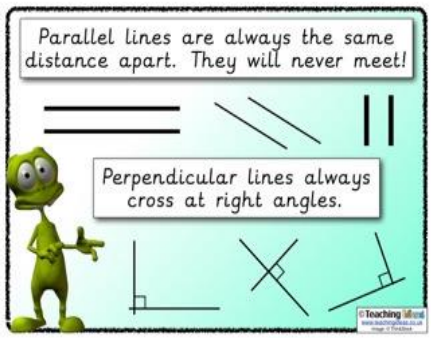
I can identify whether angles are greater than or less than a right angle

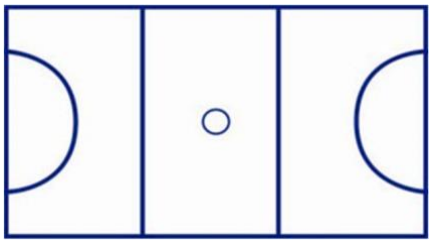
Why not try making an 'angle-eater' and use it to explore right angles in 2D shapes and 3D objects around the home?

http://www.leics.gov.uk/angle_eaters.doc

I can identify horizontal and vertical lines and pairs of perpendicular and parallel
lines.

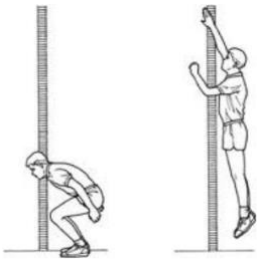
Look for examples of parallel and perpendicular lines in the environment, for example on gates and on sports courts.





Explore different types of jumps – **Vertical** – High Jump **Horizontal** – Long jump, triple jump

Why not have a go?



To see the whole of your child's Year 3 curriculum, use the following link:

The National Curriculum for Mathematics

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf

Websites that are useful:

http://resources.woodlands-junior.kent.sch.uk/maths/

http://www.kidsmathgamesonline.com/