Fun activities to do at home

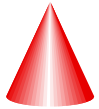
Money

Use a catalogue and ask children to choose 5 items under £20. Calculate how much they cost and the change from £100.

Give them a budget for the week/month – encourage them to keep a record of their spending and what they have left

Allow children to experience the use of real money

Can your child help you research a holiday destination? What will it cost? What is the temperature likely to be? What is the exchange rate? What is the cheapest way to get there?



Measures and shape

Measure some rectangles in the home e.g. coffee table, bedside cabinet, CD case, DVD case and work out their area.

Wrap a 'box' shaped present. How much wrapping paper will be needed?

Cut out different triangles and quadrilaterals. Name and sort them.

Which have right angles? Which have acute angles? Which have parallel sides? Etc.

Carr Hill Community Primary School

Ofsted Outstanding 2010|2011

Supporting Mathematics in Year 5

This booklet has been written to support parents and children in maths. It explains the different methods we use to solve +, -, x and ÷ calculations. It also includes some useful websites and activities to do at home.

Working Together for our Children

Carr Hill Community Primary School

Addition methods in Year 5

- Children begin by partitioning numbers into hundreds, tens and ones, making them easier to add:

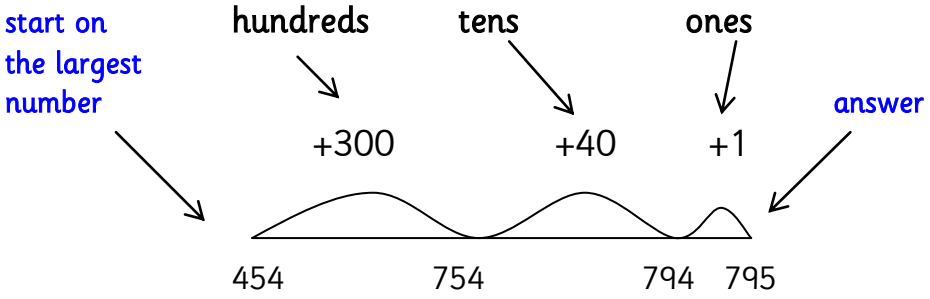
345 + 234
= (300 + 200) + (40 + 30) + (5 + 4)
= 500 + 70 + 9
= 579

partition, then add the hundreds, tens and units

Partitioning means breaking it down into hundreds, tens and units, so 345=300+40+5

- They then use a blank number line by starting on the largest number, then adding the hundreds, tens and the ones from the second number.

454 + 341 = 795



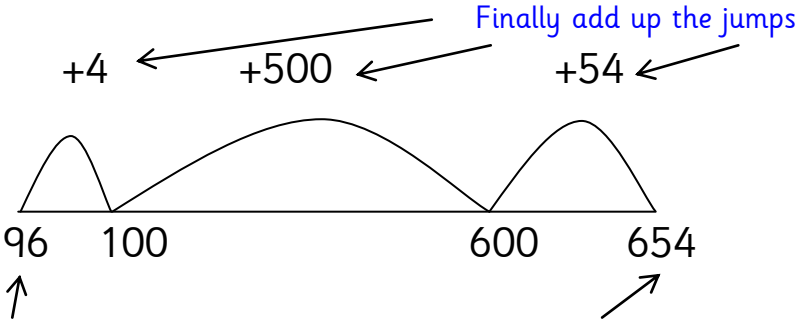
- They also use column addition to solve: 725 + 348 = 1073

```
  7 2 5
+ 3 4 8
-------
1 0 7 3
  1 1
```

first, add the units (5+8), carry the 1 ten below
next, add the tens including the carried ten finally, add the hundreds (700+300), carry the thousand and add it on.

Subtraction methods in Year 5

- Children begin using a blank number line to solve 654 - 96 by counting up in appropriate jumps.



start on the smallest number (number that you are taking away)

count up to the largest number (number that you are taking away from)

So that 654 - 96 = 500 + 54 + 4 = 558

- Next they use the extended method for column subtraction to solve 972.9 - 196.7 by counting up from the smallest number, in simple steps, until they reach the largest number.

```
  9 7 2 . 9
- 1 9 6 . 7
-----------
    0 . 3 (197)   196.7 + 0.3 to make 197
    3 . 0 (200)   197 + 3 to make 200
7 0 0 . 0 (900)   200 + 700 to make 900
  7 2 . 9 (972)   900 + 72.9 to make 972.9
-----------
7 7 6 . 2
  1
```

Start with smallest number: 196

add them altogether

Count on to the largest number in easy steps

Multiplication in Year 5

- They use the expanded method to solve:

38 x 9 = 342

```
  3 8
x   9
-------
 2 7 0  (30 x 9)
+ 7 2   (8 x 9)
-------
 3 4 2
 1
```

Partition 38 into 30 + 8 then multiply each by 9.

Add them up to find the total, remembering to carry the one hundred.

Moving on to using larger numbers:

147 x 9 = 1323

```
  1 4 7
x   9
-------
 9 0 0  (100 x 9)
 3 6 0  (40 x 9)
   6 3  (7 x 9)
-------
1 3 2 3
1 1
```

Partition 147 into 100 + 40 + 7, multiply each by 9, then add them up to find the total.

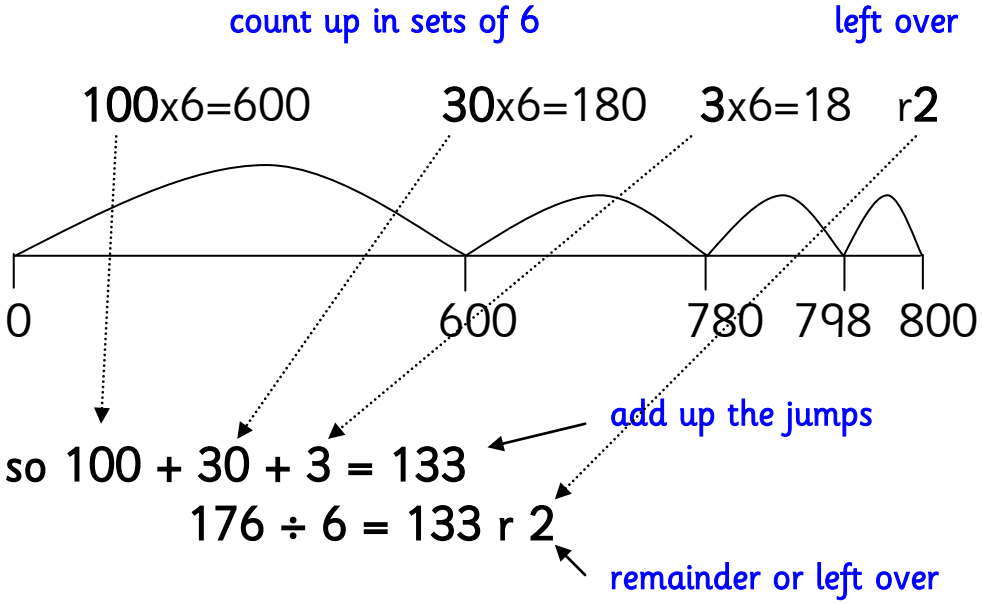
78 x 34 = 2652

```
    7 8
x   3 4
-------
 2 1 0 0  (70 x 30)
   2 4 0  (8 x 30)
   2 8 0  (70 x 4)
     3 2  (8 x 4)
-------
 2 6 5 2
   1
```

Partition 78 into 70 + 8, multiply each by 30, then by 4. Finally add them up to find the total.

Division in Year 5

- Children use empty number lines and their multiplication knowledge to solve calculations involving division. So that 800 ÷ 6 is solved using their knowledge of multiplication facts.



- Children also use their times tables knowledge to help solve multiplication and division problems, so this needs regular practise.

Fun activities to do at home

Games

·Play board games like Monopoly. Card games, darts and snooker are all good ways to help children get faster at mental maths.

·Play card games that require and practise mental maths.

Number

Practise:

• Play tables 'Millionaire'. Devise questions for each stage e.g. how many 8's in 56?

• Write fractions and decimals on different blank playing cards and match them.

• Whilst out shopping encourage children to round prices up/down and estimate totals.

• Make up word problems about time, money or measurement.

Mental calculations that children should be able to recall quickly:

- Multiplication and division facts to 12 x 12.
- Use of number bond knowledge so that if 70 + 30 = 100 then 700 + 300 = 1000
- Use knowledge of x/÷ to solve calculations and work with decimals, so when solving 30 x 60, use 3 x 6 = 18 OR use 6 x 5 = 30 to solve 0.6 x 5.
- Use rounding and adjusting to +/- 9/11 or 19/21.
- Use knowledge of doubling and halving to help solve problems, including decimals, e.g. double 6 is 12, so double 0.6 is 1.2.

Useful websites

www.bbc.co.uk/schools/bitesizeprimary
http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml
http://nrich.maths.org
http://resources.oswego.org/games
www.subtangent.com/maths/games.php
www.woodlands-junior.kent.sch.uk
www.coxhoe.durham.sch.uk
www.teachingtables.co.uk
http://www.multiplication.com
http://www.coolmath4kids.com/
http://www.primarygames.com/math.htm
http://www.wmnet.org.uk/resources/gordon/Hit%20the%20button%20v9.swf OR google — 'hit the button'