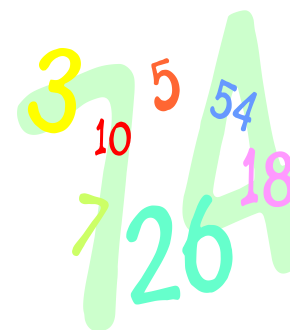## PRACTISING NUMBER FACTS

➢ Find out which number facts your child is learning at school (addition facts to 10, times tables, doubles etc). Try to practise for a few minutes each day using a range of vocabulary.

➢ Play 'ping pong' to practise complements with your child. You say a number. They reply with how much more is needed to make 10. You can also play this game with numbers totalling 20, 100 or 1000. Encourage your child to answer quickly, without counting or using fingers.

➢ Throw 2 dice. Ask your child to find the total of the numbers (+), the difference between them (-) or the product (x). Can they do this without counting?

➢ Use a set of playing cards (no pictures). Turn over two cards and ask your child to add or multiply the numbers. If they answer correctly, they keep the cards. How many cards can they collect in 2 minutes?

➢ Play Bingo. Each player chooses five answers (e.g. numbers to 10 to practise simple addition, multiples of 5 to practise the five times tables). Ask a question and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers.

Useful websites

🖰 www.counton.org has lots of ideas and games to play.

🖰 www.woodlands-junior.kent.sch.uk has a maths zone with lots of interactive activities

🖰 www.transum.org

🖰 www.bbc.co.uk/schools has games to play and links to many subjects.

A guide to helping your child with maths at home.

When faced with a calculation problem, encourage your child to ask…

- ➢ Can I do this in my head?
- ➢ Could I do this in my head using drawings or jottings to help me?
- ➢ Do I need to use a written method?
- ➢ Should I use a calculator?

Also help your child to estimate and then check the answer. Encourage them to ask…
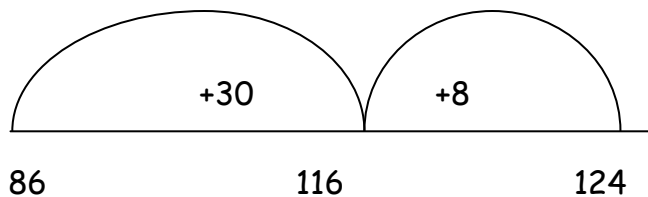Is the answer sensible?

REAL LIFE PROBLEMS
- ➢ Go shopping with your child to buy two or three items. Ask them to work out the total amount spent and how much change you will get.
- ➢ Buy some items with a percentage extra free. Help your child to calculate how much of the product is free.
- ➢ Plan an outing during the holidays. Ask your child to think about what time you will need to set off and how much money you will need to take.
- ➢ Use a TV guide. Ask your child to work out the length of their favourite programmes. Can they calculate how long they spend watching TV each day / each week?
- ➢ Use a bus or train timetable. Ask your child to work out how long a journey between two places should take? Go on the journey. Do you arrive earlier or later than expected? How much earlier/later?
- ➢ Help your child to scale a recipe up or down to feed the right amount of people.
- ➢ Work together to plan a party or meal on a budget.

Addition

The children are encouraged to ask, 'Can I do this in my head?' If not they are encouraged to use written methods which are shown below.

Blank number lines
86 + 38

```
        +30          +8
  86           116          124
```

Expanded methods build on mental methods and make the value of the digits clear to children.

```
   5 4 6
 + 4 8 7
     1 3
   1 2 0
   9 0 0
 1 0 3 3
```
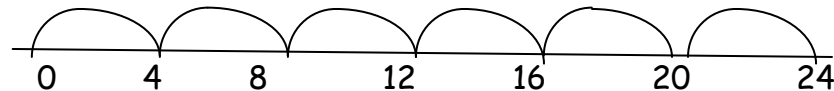
When children are confident using the expanded method, this can be 'squashed' into the **traditional compact method.**

```
 1 2 7 8 6
 + 2 5 6 8
 1 5 3 5 4
   1  1  1
```

Division

Repeated subtraction using a number line

24 – 6 =

```
0    4    8    12   16   20   24
```

Chunking method

Division by chunking: $327 \div 7$

```
    327
   -70   (7x10)
    257
   -70   (7x10)
    187
   -70   (7x10)
    117
   -70   (7x10)
     47
   -42   (7x6)
      5    46 lots of 7 with 5
                    left over
```
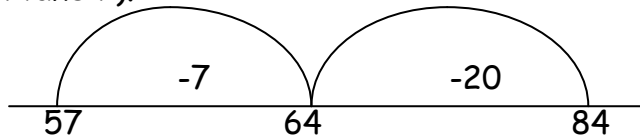
$327 \div 7 = 46$ r 7

Subtraction

The children are encouraged to ask, 'Can I do this in my head?' If not they are encouraged to use written methods which are shown below.

Blank number lines

84 – 27

Children could count back using an empty number line (start on 84, -20, then take 7).

```
        -7            -20
  _____   _____
 57         64            84
```

Alternatively, children could count up (from the smallest number to the biggest) using an empty number line as above . It is easiest to count up to a multiple of 10 or 100 (a friendly number).
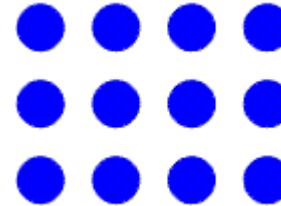
Decomposition

This is the more traditional way, however, the emphasis is no longer on 'borrowing', but 'exchanging' instead.

563 - 278

```
     4  ¹5
     5  6  ¹3
   - 2  7  8
   _____
     2  8  5
```

Multiplication

Drawing an **array** (3 rows of 4 or 3 columns of 4) gives children an image of the answer.

Partitioning

$38 \times 5 = (30 \times 5) + (8 \times 5)$

$= 150 + 40$

$= 190$

Grid method

72x34=

X	70	2		
30	2100	60	=	2160
4	280	8	=	288
				4448