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PRIMARY SCHOOL

Mathematics: Year 3

1 Match the numbers with the words.

a 848   nine hundred and ninety three

b 327   eight hundred and forty eight

c 901   three hundred and twenty seven

d 993   nine hundred and one

3 Figure out the number from the clues:

a There is a 6 in the hundreds column, a 2 in the tens column and a 1 in the units column.

b There is an 8 in the tens column, a 3 in the hundreds column and a zero in the units column.

**5** Complete this crossword by writing the digits:
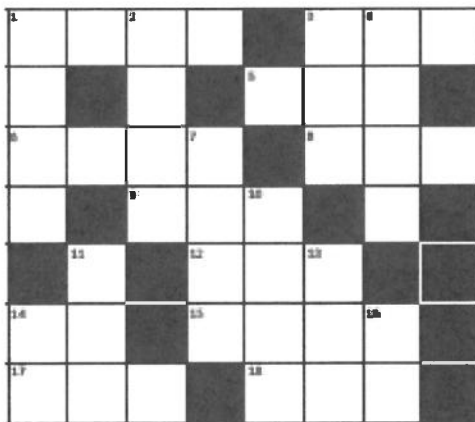
Across
1 Four thousand, six hundred and eighty two
3 Number before 926
5 Seven hundred and thirty two
6 Three thousand, one hundred and forty four
8 Add 6 to 600
9 Nine hundred and forty three
12 1 less than 530
14 Thirteen
15 Six thousand, four hundred and sixty three
17 7 less than 700
18 Five hundred and twenty four

Down
1 Four thousand, eight hundred and thirty six
2 1 less than 8 650
3 Nine hundred and thirty six
4 2 200 plus 9
7 Four thousand, four hundred and fifty six
10 Three thousand, two hundred and forty five
11 1 less than six hundred and forty
13 Nine hundred and sixty two
16 Thirty four

Some of these clues are about 4 digit numbers. 4 digit numbers are in the thousands.

2 Imagine this chart continued into the 300s. Complete the missing numbers from these parts:

a | | 362 | |

b | | 378 | |

c | | 351 | |

d | | 332 | |

e | | 311 | |
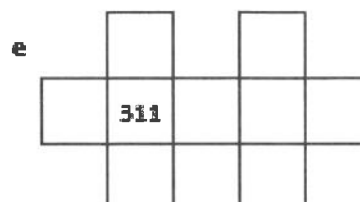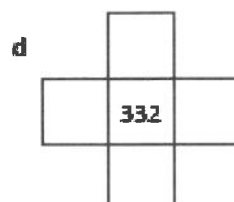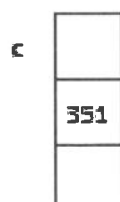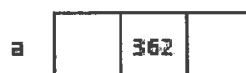
Adding more than two numbers together is easier if we look for a ten. Circle the numbers that add to 10 first, then add what is left:

a ⑥ 3 ④ = ☐   b 1 5 5 = ☐

c 9 5 1 = ☐   d 7 6 3 = ☐

e 5 6 4 = ☐   f 2 1 8 = ☐

Look for a ten and change the order of the numbers in each addition problem to make it faster to add.

a 4 + 5 + 3 + 5 + 6

_____ = ☐

b 9 + 3 + 7 + 1 + 5

_____ = ☐

Use these addition frames to double each of these numbers as quickly as you can:

⑤ ⑦ ⑨ ② ⑫ ⑧

☐ + ☐ = ☐   ☐ + ☐ = ☐   ☐ + ☐ = ☐

☐ + ☐ = ☐   ☐ + ☐ = ☐   ☐ + ☐ = ☐

Complete the grid below so that the question in the top row matches the answer in the bottom row. The first one has been done for you.

Once you know your basic double facts, you can use them to double bigger numbers e.g. 12 + 12 = 20 + 4 = 24

2 + 2		3 + 3	4 + 4			7 + 7	8 + 8	
= 4	= 10			= 2	= 12		= 18	

Near doubles strategy is when you double a number and adjust.

See: 5 + 6   See: 7 + 6

Think: double 5 + 1 = 11   Think: double 7 − 1 = 13

5 Complete the near double strategy for these. The first one has been done for you.

a 2 + 3 = double 2 + 1 = ☐ 5

b 4 + 5 = double 4 + 1 = ☐

c 6 + 7 = double 6 + 1 = ☐

d 3 + 4 = double 3 + 1 = ☐

e 8 + 9 = double 8 + 1 = ☐

f 7 + 8 = double 7 + 1 = ☐

6 Complete the near double strategy for these. This time you are calculating a near double that is 1 less.

a 8 + 7 = double 8 − 1 = ☐

b 6 + 5 = double 6 − 1 = ☐

c 5 + 4 = double 5 − 1 = ☐

d 12 + 11 = double 12 − 1 = ☐

e 15 + 14 = double 15 − 1 = ☐

f 16 + 15 = double 16 − 1 = ☐

We can also use number lines to bridge to the next ten and then add what is left.

$22 + 16 = 38$

| +8 | | +8 |

| 22 | 30 | 38 |
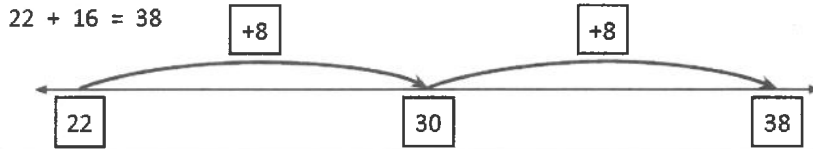
2 Practise bridging to ten with each addition set. The first one has been done for you.

Set 1:

a $8 + 6 \rightarrow$ 10 + 4 = 14

b $7 + 5 \rightarrow$ ☐ + ☐ = ☐

c $6 + 7 \rightarrow$ ☐ + ☐ = ☐

Set 2:

a $16 + 5 \rightarrow$ ☐ + ☐ = ☐

b $17 + 6 \rightarrow$ ☐ + ☐ = ☐

c $19 + 6 \rightarrow$ ☐ + ☐ = ☐

) Complete these addition tables by bridging to the next ten in your head.

a

Add 12	
49	
56	
38	

b

Add 17	
36	
17	
58	

c

Add 13	
77	
48	
59	

The jump strategy is when you use a number line to jump in tens and then units.

$32 + 25 = 57$

| +10 | +10 | +5 |

| 32 | 42 | 52 | 57 |
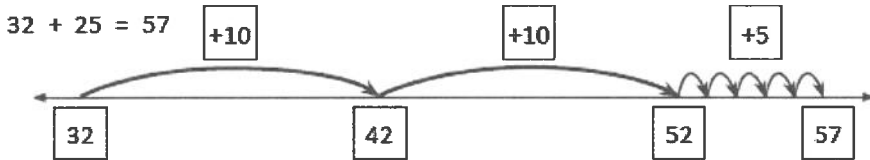
Add these using the jump strategy. Show your working on each number line:

a $57 + 35 =$ ☐

b $54 + 28 =$ ☐

c $62 + 35 =$ ☐

When adding large numbers in our heads, it can be easier to split one of the
numbers into parts and add each part separately.

$$57 + 46 \begin{cases} 40 \\ 6 \end{cases} \longrightarrow 57 + 40 = 97 \longrightarrow 97 + 6 = 103$$

Use the split strategy with these problems:

a 38 + 34

b 29 + 28

c 75 + 14

d 94 + 17

Solve these word problems using either the jump or the split strategies. Show all your working.

a Mitch and Anna held a lemonade stall over the weekend. They sold 25 cups on Saturday and 18 cups on Sunday. How many cups did they sell altogether?

b I practised my guitar for 48 minutes before school and 34 minutes after school. How many minutes did I practise altogether?

c Charlotte received $15 for her birthday from her grandmother. She added this to her savings account which has $53. How much does Charlotte have now?

Knowing one addition fact means you also know two related subtraction facts.

Because 7 + 3 = 10 you also know that 10 − 7 = 3 and 10 − 3 = 7

1 Show the related addition and subtraction facts for each set of digits. The first one is partially completed for you.

a (8) (4) (12)

8	+	4	=	
4	+	8	=	
12	−	4	=	
12	−	8	=	

b (7) (9) (16)

	+		=	
	+		=	
	−		=	
	−		=	

c (13) (7) (20)

	+		=	
	+		=	
	−		=	
	−		=	

d (10) (8) (18)

	+		=	
	+		=	
	−		=	
	−		=	

A ten frame is useful to show the bridge to ten strategy when subtracting.

Here are 17 counters in 2 tens frames.

When you see 17 − 8 = [?], cross out 8 from the first ten frame then add what is left.
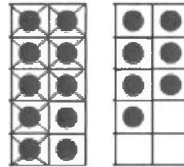
17 − 8 = 9

1 Use each ten frame to subtract using bridge to ten. Cross out the number of counters that are subtracted from the first ten frame:

a 16 − 9 = ☐

b 13 − 7 = ☐

c 14 − 9 = ☐

d 15 − 8 = ☐

2 Write a subtraction fact that matches each ten frame:

a ☐ − ☐ = ☐

b ☐ − ☐ = ☐

3 Complete the subtraction wheels. Use a ten frame in your mind.

a
	5	7	
11			3
	13 –		
6			10
	13	4	

b
	9	6	
11			13
	18 –		
5			18
	8	10	
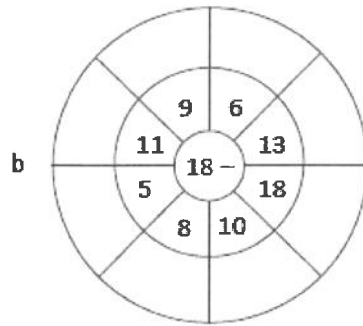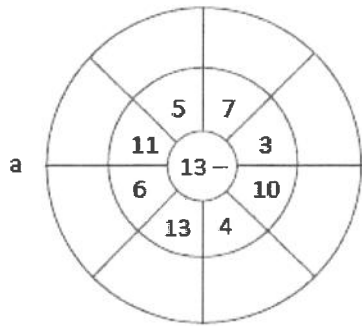
Bridge to the next ten and then count on what is left.

$25 - 16 = \boxed{9}$

$\boxed{+4}$ $\boxed{+5}$

$\boxed{16}$ $\boxed{20}$ $\boxed{25}$
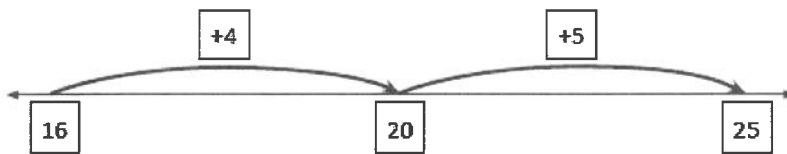
6 Use the number lines to bridge to ten:

a $52 - 15 = \square$

$\boxed{+}$ $\boxed{+}$

$\boxed{15}$ $\boxed{20}$ $\square$

b $62 - 13 = \square$

$\boxed{+}$ $\boxed{+}$

$\boxed{13}$ $\boxed{20}$ $\square$
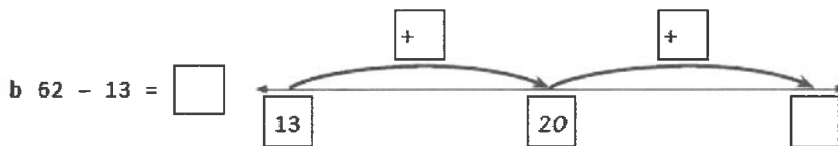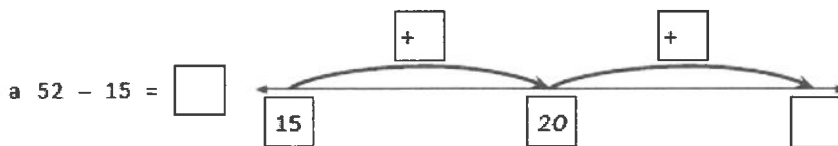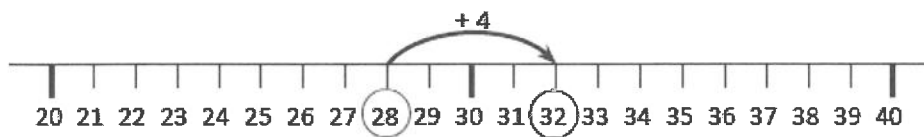
If there is only a small difference between the numbers, use counting on to find the difference.   See: $32 - 28 = \boxed{?}$

Think: What can you add to 28 to get 32? Count on by 4.

$+4$

20 21 22 23 24 25 26 27 ⟨28⟩ 29 30 31 ⟨32⟩ 33 34 35 36 37 38 39 40

1 Find the difference between these by counting on.

a $32 - 29 = \square$ b $33 - 28 = \square$ c $34 - 27 = \square$

d $71 - 68 = \square$ e $82 - 76 = \square$ f $73 - 69 = \square$

g $83 - 77 = \square$ h $112 - 109 = \square$ i $201 - 196 = \square$

Use repeated addition to find the total number of fingers.
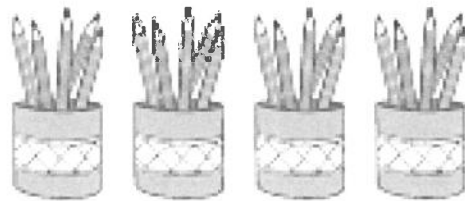
5 + 5 + 5 = 15

3 groups of 5 is equal to 15.

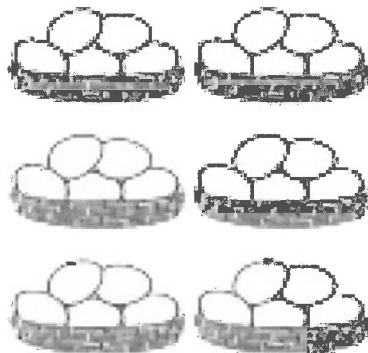**1** Find the total of each group by using repeated addition.

a   How many pencils?

☐ + ☐ + ☐ + ☐ = ☐

☐ groups of ☐ is equal to ☐

b   How many eggs?

☐ + ☐ + ☐ + ☐ + ☐ + ☐ = ☐

☐ groups of ☐ is equal to ☐

c   How many beads?

☐ + ☐ + ☐ + ☐ + ☐ = ☐
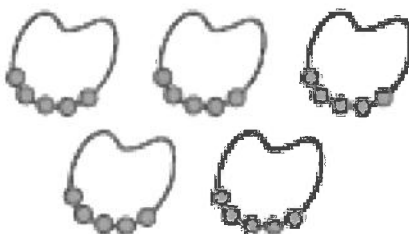
☐ groups of ☐ is equal to ☐

1 Write the multiplication fact for each array:
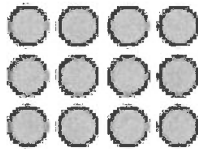
a   3 fours

☐ × 4 = ☐
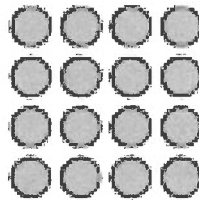
b   4 fours

☐ × 4 = ☐
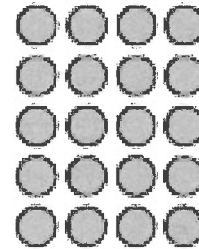
c   5 fours

☐ × 4 = ☐
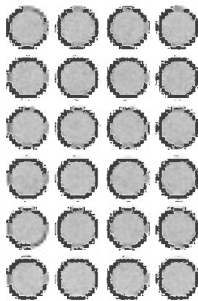
d   6 fours

☐ × 4 = ☐
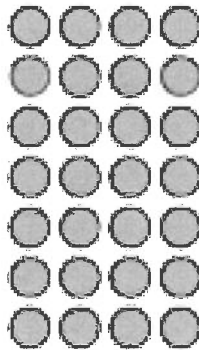
e   7 fours

☐ × 4 = ☐
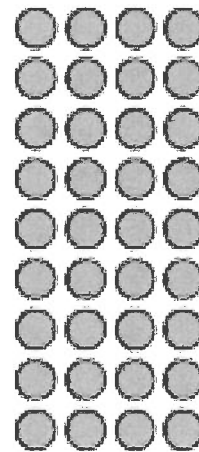
f   9 fours

☐ × 4 = ☐

2 How many cupcakes are there on:

a   4 plates?

☐ × 4 = ☐

b   3 plates?

☐ × 4 = ☐

c   7 plates?

☐ × 4 = ☐

d   9 plates?

☐ × 4 = ☐

e   2 plates?

☐ × 4 = ☐

Division is when we make fair shares.

If we share these 6 cakes equally between 2 kids, they each get 3 cakes. We call these fair shares because each share is equal.
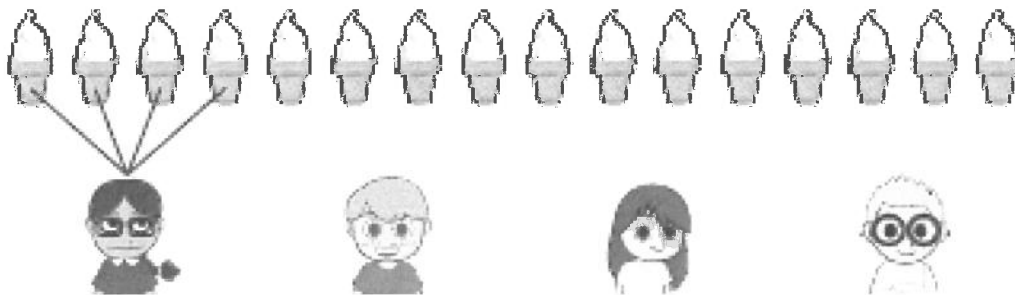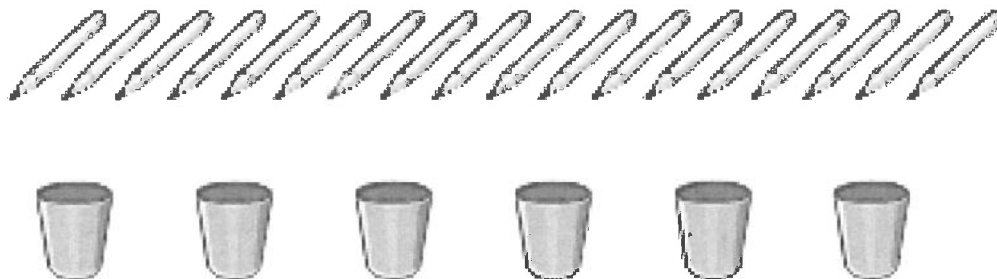
1. Share the items equally in each picture by drawing lines to connect them. Write how many are in each share.

   a Share these 16 ice creams between 4 kids.   4 equal shares = _____ each
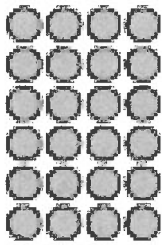
   b Share these 18 pencils between 6 pots.   6 equal shares = _____ each

   c Share these 9 eggs between 3 baskets.   3 equal shares = _____ each

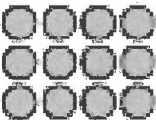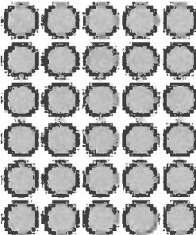Knowing multiplication facts will help with division facts.
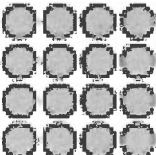
$6 \times 4 = 24$ 6 rows of 4 is 24.

$24 \div 4 = 6$ 24 divided into 4 shares is 6.

1 Describe each of these arrays using one multiplication and one division fact:

a $\boxed{} \times 4 = 12$

$12 \div 4 = \boxed{}$

b $\boxed{} \times 5 = 30$

$30 \div 5 = \boxed{}$

c $\boxed{} \times 4 = 16$

$16 \div 4 = \boxed{}$

2 This time, you are given part of the array. Complete the array and then write one multiplication and one division fact that matches:

a $\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \div \boxed{} = \boxed{}$

b $\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \div \boxed{} = \boxed{}$

c $\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \div \boxed{} = \boxed{}$