

**Level 13 Card 1** Times tables to learn this term: x2, x5, x10, x3

**1. Write these numbers in words:**

- a) 2750
- b) 1982
- c) 5764

**2. Write these numbers in figures:**

- a) Nine thousand
- b) Nine thousand and sixty-two
- c) Seven thousand eight hundred and twenty

**3. What number comes after** (use the number chart)

- a) 107
- b) 921
- c) 1234

**4. What number comes before**

- a) 906
- b) 427
- c) 1098

**5. Count by ones**

- a) 190 .....209
- b) 999 .....1009
- c) 1234 ..... 1244

**Level 13 Card 2**

**1. Make the tens figure grow by one ten.**

- a) 148, 158, \_\_\_\_, 188, \_\_\_\_, \_\_\_\_, 218, \_\_\_\_
- b) 367, \_\_\_\_, \_\_\_\_, 397, \_\_\_\_, \_\_\_\_, 427, \_\_\_\_

**2. Make the tens figure go backwards by one ten.**

- a) 454, 444, \_\_\_\_, \_\_\_\_, \_\_\_\_, 404, \_\_\_\_, \_\_\_\_, 374
- b) 728, 718, \_\_\_\_, \_\_\_\_, 688, \_\_\_\_, \_\_\_\_, \_\_\_\_, 638

**3. Make the hundreds figure grow by one hundred.**

546, 646, \_\_\_\_, \_\_\_\_, \_\_\_\_

**4. Count forwards by 2s**

- a) 396, 398, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 414
- b) 677, 679, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 695

**5. Count backwards by 2s**

- a) 809, 807, 805, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 791
- b) 424, 422, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 386

**6. Doubling and halving**

- a) Double 10 four times: 10, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_
- b) Double 7. Now double 70
- c) Halve each of these numbers: 8 \_\_\_\_, 80 \_\_\_\_, 800 \_\_\_\_,
- d) Halve 200 four times: 200, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_

### Level 13 Card 3

#### 1. Count by tens

- a) 140, 150, 160, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, 220  
b) 26 tens, 27 tens, 28 tens, 29 tens, \_\_\_\_ tens. What is the last number?

#### 2. Count by one hundreds

- a) 546, 646, 747, \_\_\_\_, \_\_\_\_, \_\_\_\_ (forwards)  
b) 1002, 992, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_ (backwards)

#### 3. Serial addition

$$9 + 5 =$$
$$79 + 5 =$$
$$379 + 5 =$$

#### 4. Serial subtraction

$$10 - 3 =$$
$$100 - 3 =$$
$$1000 - 3 =$$

#### 5. Place value

Using small cards showing thousands, hundreds, tens, ones, make the following:

- a) 795  
b) 425  
c) 824  
d) 1025

### Level 13 Card 4

#### 1. Counting

- a) Count by 2s from 2 to 20  
b) Count by 3s from 15 to 33

#### 2. Odd and even numbers

- a) Write the odd numbers from 457 to 469  
b) Write the even numbers from 298 and 316.  
c) Which odd number comes between 457 and 461?  
d) Which two even numbers come between 458 and 463?  
e) Which odd number comes exactly between 460 and 470?

#### 3. Place value

- a) In 469, what is the value of the 4? the 6? the 7?  
b) In 987, is the 8 worth more or less than the 9?  
c) Add zeroes to give the correct value:

$$682 = 6.... + 8... + 2$$

$$597 = 5.... + 9... + 7$$

$$2348 = 2.... + 3.... + 4... + 8$$

### Level 13 Card 5

#### 1. What number is missing?

- a) 246, 247, \_\_\_\_, 249, 250.
- b) Is it odd or even?
- c) 355, 356, \_\_, 358, 359.
- d) Is it odd or even?

#### 2. Equations

- a)  $13 - 4 - 8 = \square$
- b)  $13 - (4 + 8) = \square$
- c)  $7 + 4 + 6 = \square$
- d)  $7 - 6 + 4 = \square$
- e)  $4 + 7 + 6 = \square$
- f)  $12 \div 3 + 5 = \square$
- g)  $12 - (3 + 5) = \square$
- h)  $15 - (10 \div 2) = \square$
- i)  $(15 - 10) \times 2 = \square$

#### 3. Enter the missing signs

- a)  $33 - (9 + 14) = 33 \square 9 \square 14$
- b)  $12 \square 3 = 4$
- c)  $20 \square 10 = 200$
- d)  $12 \square (4 \square 5) = 3$

### Level 13 Card 6

#### 1. Odds and evens

- a) Write the even numbers between 140 and 150.
- b) What is the second number in your list?
- c) Write the odd numbers between 280 and 290. What is the third number on your list?

#### 2. Equations (use equipment or drawings)

- a)  $25 - 5 - 5 - 5 - 5 - 5 = 0$   
is the same as:  $25 - (\square \times \square) = \square$
- b)  $24 - 4 - 4 - 4 - 4 - 4 - 4 = 0$   
is the same as:  $24 - (\square \times \square) = \square$
- c)  $16 - 4 - 4 - 4 - 4 = 0$   
is the same as:  $16 - (\square \times \square) = \square$
- d)  $20 - 5 - 5 - 5 - 5 = 0$   
is the same as:  $20 - (\square \times \square) = \square$

#### 3. Equals (=) or not equals ( $\neq$ )

- a)  $12 + 9 - 6 \square 12 - 6 - 9$
- b)  $12 + 6 - 9 \square 6 - 9 + 12$

### Level 13 Card 7

#### 1. Halve each of the numbers in these equations

$20 + 10 = 30$

$200 + 100 = 300$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

#### 2. Equations (distributive law)

a)  $5 \times 9 = 5 \times (\underline{\quad} + \underline{\quad}) = \square$

b)  $5 \times 9 = 5 \times (\underline{\quad} \times \underline{\quad}) = \square$

c)  $7 \times (2 + 3) = 7 \times \underline{\quad} = \square$

d)  $7 \times (\underline{\quad} + \underline{\quad}) = 7 \times 12 = \square$

e)  $7 \times 8 = 7 \times (4 \times \underline{\quad}) = \square$

#### 3. Equations (Associative law)

a)  $3 \times 2 \times 5 = 5 \times \square \times 2$

b)  $3 \times 2 \times 5 = 3 \times \square$

c)  $4 \times 3 \times 6 = 6 \times \square \times \square$

d)  $4 \times 3 \times 6 = 3 \times \square$

#### 4. Opposites

a)  $7 + 9 = 16$  so  $16 - \square = 9$

b)  $7 + 9 = 16$  so  $16 - \square = 7$

c)  $8 \times 7 = 56$  so  $\square \div 7 = 8$

d)  $8 \times 7 = 56$  so  $\square \div 8 = 7$

### Level 13 Card 8

#### 1. Counting

a) 700, 750, 800, .....1200

b) 900, 920, 940 .....1020

#### 2. Serial addition

a)  $7 + 5 = \square$

b)  $27 + 5 = \square$

c)  $187 + 5 = \square$

#### 3. Serial subtraction

a)  $10 - 1 = \square$

b)  $100 - 1 = \square$

c)  $1000 - 1 = \square$

#### 4. Addition

a)  $26 = 20 + \square$

$$\begin{array}{r} + 32 \\ \hline \end{array} = \begin{array}{r} 30 + \square \\ \hline \end{array}$$

$50 + \square = \square$

Without  
bridging

b)  $35 = 30 + 5$

$$\begin{array}{r} + 58 \\ \hline \end{array} = \begin{array}{r} 50 + 8 \\ \hline \end{array}$$

$80 + 13 = 90 + 3 = \square$

With  
bridging

Now try:

c)  $78 + 25$

### Level 13 Card 9

#### 1. Counting

- a) 210, 200, 190, ..... 90  
b) 1040, 1020, .....960

#### 2. Serial addition (add 10 and take away 1)

$$15 + 9 =$$
$$55 + 9 =$$
$$125 + 9 =$$
$$1025 + 9 =$$

#### 3. Serial subtraction

$$10 - 5 =$$
$$100 - 5 =$$
$$1000 - 5 =$$

#### 4. Addition with bridging

$$\begin{array}{r} \text{a) } 35 \\ + 27 \\ \hline \end{array} = (30 + 5)$$
$$\begin{array}{r} \text{=} \\ + 27 \\ \hline \end{array} = (20 + 7)$$
$$= 50 + 12 = \square + 2 = \square$$

Now set these one out in the same way:

- b)  $46 + 55$   
c)  $28 + 54$   
d)  $26 + 49$   
e)  $77 + 95$   
f)  $63 + 28$

### Level 13 Card 10

#### 1. Serial addition

- a)  $8 + 2 =$   
 $98 + 2 =$   
 $998 + 2 =$   
b)  $6 + 4 =$   
 $96 + 4 =$   
 $996 + 4 =$   
c)  $8 + 6 =$   
 $98 + 6 =$   
 $998 + 6 =$

#### 2. Addition with bridging

$$\begin{array}{r} \text{a) } 347 \\ + 234 \\ \hline \end{array} = 300 + 40 + 7$$
$$= \underline{200 + 30 + 4}$$
$$500 + 70 + 11 = 500 + 80 + 1 = \square$$

Now set out these in the same way:

- b)  $455 + 327$   
c)  $136 + 259$   
d)  $174 + 352$   
e)  $242 + 388$   
f)  $436 + 157$

### Level 13 Card 11

#### 1. Counting

- a) 985, 990, 995, ..... 1015
- b) 1017, 1015, 1013, ..... 97

#### 2. Quick addition

- a)  $81 = 70 + \square$
- b)  $74 = 60 + \square$
- c)  $56 = 40 + \square$
- d)  $88 = 70 + \square$

#### 3. a) Subtraction without bridging

$$88 = 80 + 8$$

$$\begin{array}{r} -27 = 20 + 7 \\ \hline = \square + \square = \square \end{array}$$

#### b) Subtraction with bridging (Do this with bundles of straws/sticks first)

$63$	$= 50 + 13$	$\begin{array}{r} 5 \phantom{0} \overset{1}{3} \\ -27 \\ \hline 36 \end{array}$
$- 27$	$\begin{array}{r} -20 + 7 \\ \hline \end{array}$	
	$\square + \square = \square$	

Now do the same for these:

- c)  $84 - 36$
- d)  $92 - 47$
- e)  $53 - 28$
- f)  $75 - 69$
- g)  $46 - 39$

### Level 13 Card 12

#### 1. Times tables

- a)  $7 \times 4 =$
- b)  $8 \times 3 =$
- c)  $6 \times 5 =$
- d)  $9 \times 4 =$
- e)  $12 \times 2 =$
- f)  $7 \times 3 =$

2. What **multiplication and division stories** can you write about these drawings?

a) || || ||       $\square \times \square = \square$   
                           $\square \div \square = \square$

b)  $\diamond \diamond \diamond$        $\square \times \square = \square$   
 $\diamond \diamond \diamond$        $\square \div \square = \square$

#### 3. Write equations for these:

- a) There are 35 books on 5 shelves, shared equally. How many books on each shelf?
- b) Ten books on 5 shelves. How many altogether?
- c) Five sets of pencils with 12 in each set: How many pencils?
- d) Seven pies on 3 plates. How many pies?

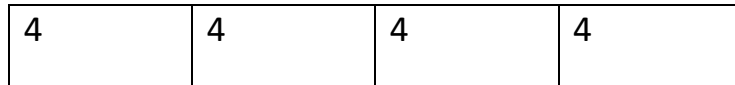
### Level 13 Card 13

1. Use your times tables to solve these:

- a)  $16 \div 4 =$
- b)  $21 \div 3 =$
- c)  $18 \div 2 =$
- d)  $45 \div 5 =$
- e)  $27 \div 3 =$
- f)  $32 \div 4 =$

2. What equations can you see in these diagrams?

a)



b)



3. Fractions

- a) Draw a circle and shade  $\frac{3}{4}$
- b) Draw another circle the same size and shade two-thirds.
- c) Which is bigger...  $\frac{2}{3}$  or  $\frac{3}{4}$ ?
- d) Draw a rectangle and shade seven-twelfths
- e) Draw a rectangle and shade six-tenths.

### Level 13 Card 14 Test (Also test times tables: 2,3,4,5,10)

- a) Write in words: 6279
- b) Write in figures: eight thousand, five hundred and two
- c) Ten more than 759
- d) One hundred more than 991
- e) Count backwards by twos from 524 to 394.
- f) Double 24
- g) Half of 400
- h)  $8 + 4 =$   
 $48 + 4 =$   
 $480 + 4 =$
- i) Which odd number is between 378 and 380?
- j) Add zeroes:  $1485 = 1... + 4... + 8... + 5$
- k)  $16 - (8 \div 2) =$
- l)  $25 - 5 - 5 - 5$  is the same as  $(\square \times \square) = \square$
- m)  $45 = \square + \square$   
 $\quad \underline{+ 28} = \square + \square$   
 $\quad = \square + \square = \square + \square = \square$
- n)  $52 \quad (40 + \square)$   
 $\quad \underline{- 36} \quad \underline{-(\square + \square)}$   
 $\quad \quad \quad \square + \square = \square$