

**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:

$682 = 6\ldots + 8\ldots + 2$

$597 = 5\ldots + 9\ldots + 7$

$2348 = 2\ldots + 3\ldots + 4\ldots + 8$

### **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)  $33 - (9 + 14) = 33$  □ 9 □ 14
- b)  $12$  □  $3 = 4$
- c)  $20$  □  $10 = 200$
- d)  $12$  □  $(4$  □  $5) = 3$

### **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)  $12 + 9 - 6$  □  $12 - 6 - 9$
- b)  $12 + 6 - 9$  □  $6 - 9 + 12$

### Level 13 Card 7

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

$$20 + 10 = 30$$

$$200 + 100 = 300$$

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

#### 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)  $26 = 20 + \square$

+ 32 = 30 +  $\square$

$50 + \square = \square$

Without  
bridging

b)  $35 = 30 + 5$

+ 58 = 50 + 8

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

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**

$$\begin{array}{r} a) 35 \\ + 27 \end{array} = (30 + 5)$$

$$= (20 + 7)$$

$$= 50 + 12 = \square + 2 = \square$$

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**

$$\begin{array}{r} a) 347 \\ + 234 \end{array} = 300 + 40 + 7$$

$$= 200 + 30 + 4$$

$$500 + 70 + 11 = 500 + 80 + 1 = \square$$

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)

$$\begin{array}{r} 63 \\ - 27 \\ \hline = 50 + 13 \\ - 20 + 7 \\ \hline \square + \square = \square \end{array} \quad \begin{array}{r} 5 \\ \times 3 \\ \hline 27 \\ 36 \end{array}$$

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) ◊◊◊◊  $\square \times \square = \square$   
◊◊◊◊  $\square \div \square = \square$

#### 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)

4	4	4	4
---	---	---	---

b)

6	6	6
6	6	6

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:  $1485 = 1\dots + 4\dots + 8\dots + 5$
- k)  $16 - (8 \div 2) =$
- l)  $25 - 5 - 5 - 5$  is the same as  $(\square \times \square) = \square$
- m)  $45 = \square + \square$   
 $\underline{+ 28} = \square + \square$   
 $= \square + \square = \square + \square = \square$
- n)  $52 - 36 = (\square + \square) - (\square + \square)$   
 $\underline{\quad\quad\quad} = \square + \square = \square$

**Level 14 Card 1** Times tables this term: x2, x5, x10, x3, x4

**1. Counting**

- a) Count by threes from 0 to 72. (Use a number chart and colour in every third number)
- b) Use the same number chart and colour in every 6<sup>th</sup> number.
- c) Write your 6 times tables.

**2. Doubling and halving**

- a) Double 280. (If I double 200 I will get .  
If I double 80 I will get .) Answer =
- b) Double 370 the same way.
- c) Half of 300. ( $200 + 100$ )  
(Find half of 200 and half of 100. Add them together)
- d) Half of 500. ( $400 + 100$ )
- e) Half of 780. ( $600 + 180$ )

**3. Write the next number in the pattern:**

- a) 2596, 2597, 2598, \_\_\_\_\_
- b) 2342, 2344, 2346, 2348, \_\_\_\_\_
- c) 6, 12, 18, \_\_\_\_\_

**4. Write the even number**

- a) between 546 and 550
- b) between 1023 and 1025
- c) between 999 and 1001

**Level 14 Card 2**

**1. Write in figures:**

- a) Seven hundred and thirty-five
- b) Five thousand nine hundred and forty-seven
- c) Twenty-seven thousand six hundred and fifty-two

**2. What number is...?**

- a) 300 more than 7,596
- b) 600 more than 43,270
- c) 700 more than 24,108
- d) 200 less than 27,846
- e) 700 less than 12,760
- f) 3000 more than 46,142

**3. Put = or ≠ in the boxes**

- a) 4,300   $400 + 3,000 + 0 + 0$
- b)  $3 + 300 + 30 + 3,000$   3,333
- c) 32,462   $3,200 + 400 + 60 + 2$
- d)  $500 + 600 + 900$   2,000
- e)  $80 + 9 + 7,000 + 200$   7,298
- f)  $40 + 800 + 3 + 80,000$   88,403

**Level 14 Card 3****1. Place value**

- a) What is the 6 worth in the number 763?
- b) What is the value of the 8 in the number 1852?
- c) In which of these numbers does the 2 have the greatest value? ... 162, 624, 462

**2. Addition with bridging**

a) 
$$\begin{array}{r} 354 \\ + 248 \\ \hline \end{array} = \square + \square$$
  
$$\begin{array}{r} 354 \\ + 248 \\ \hline \square + \square = \square \end{array}$$

b) 
$$\begin{array}{r} 1504 \\ + 79 \\ \hline \end{array}$$

**3. Subtraction with bridging**

a) 
$$\begin{array}{r} 76 \\ - 49 \\ \hline \end{array} (60 + 16)$$
  
$$\begin{array}{r} 76 \\ - 49 \\ \hline - (40 + 9) \end{array}$$

Set these out in the same way:

- b)  $84 - 26$
- c)  $98 - 39$
- d)  $42 - 18$
- e)  $24 - 19$
- f)  $82 - 78$
- g)  $66 - 27$

**Level 14 Card 4****1. Place value**

- a) 4,298 The 2 is worth \_\_\_\_\_
- b) 8,739 The 3 is worth \_\_\_\_\_
- c) 2,482 The 4 is worth \_\_\_\_\_
- d) 1,876 The 6 is worth \_\_\_\_\_

**2. Multiplication**

$$\begin{array}{r} 43 \\ \times 2 \\ \hline 6 \\ 80 \\ \hline 86 \end{array}$$

Now set out these in the same way:

- a)  $53 \times 3$
- b)  $82 \times 4$
- c)  $71 \times 6$
- d)  $91 \times 5$
- e)  $64 \times 2$
- f)  $21 \times 9$
- g)  $92 \times 4$
- h)  $27 \times 4$
- i)  $36 \times 8$

**Level 14 Card 5****1. Place value**

- a) Rearrange the digits in 48,063 so that the 48 is 48 tens and the 63 is 63 thousand.
- b) Make the smallest possible number using the digits 5,8,2,4,7.
- c) Make the smallest possible number using the digits 4,5,0,8,9

**2. Problem solving**

- a) Find the difference between 242 and 6.
- b) Subtract 14 from 286.
- c) Take 12 from 153.
- d) Multiply 7 by 4.
- e) Find the product of 6 and 7.
- f) Increase 133 by 5.
- g) Find the sum of 428 and 131.

**3. Equations**

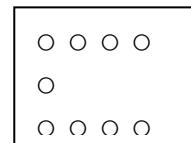
- a)  $6 \times 5 + 15 =$
- b)  $7 \times 3 = 11 =$
- c)  $7 \times 5 - 2 =$
- d)  $36 \div 6 - 4 =$
- e)  $42 \div 6 + 5 =$
- f)  $32 \div 4 - 7 =$

**Level 14 Card 6****1. Place value**

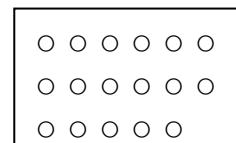
- a)  $23,428 - 2,000 =$
- b)  $43,163 - 100 =$
- c)  $54,392 - 50,000 =$
- d)  $74,318 - 10 =$
- e)  $68,439 - 6,000 =$
- f)  $92,687 - 300 =$

**2. Fractions: Draw the circles.**

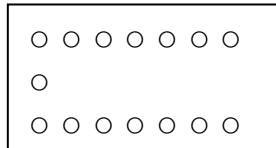
- a) Divide them into 5 parts and colour  $\frac{2}{5}$  of them.



- b) Divide them into 3 parts. Colour  $\frac{2}{3}$  of them.



- c) Divide them into 8 parts. Colour  $\frac{5}{8}$  of them.

**3. What change would I get?**

- a) I had \$2 and I spent \$1.30.
- b) I had \$5 and I spent \$2.25.
- c) I had \$10 and spent \$5.35.
- d) I had \$20 and spent \$10.30.
- e) I had \$30 and spent \$24.50

## Level 14 Card 7

### 1. Write the figures for:

- a) Five thousand, nine hundred and forty-seven.
- b) Twenty-seven thousand, six hundred and fifty-two.
- c) Two hundred and forty-seven thousand three hundred and nine.

### 2. Problem solving

- a) If  $\Delta = \frac{1}{10}$  what does  $\Delta \Delta \Delta \Delta \Delta$  equal?
- b) If  $\Delta \Delta = 2$  what does  $\Delta \Delta \Delta \Delta \Delta \Delta$  equal?
- c) If  $\Delta = 3$  what does  $\Delta \Delta \Delta \Delta$  equal?
- d) If  $\Delta = 200$  what does  $\Delta \Delta \Delta \Delta \Delta$  equal?

### 3. Equations (Brackets first)

- a)  $17 - 4 - 3 =$
- b)  $20 - (4 \times 3) =$
- c)  $(4 \times 6) + (2 \times 9) =$
- d)  $\square - 9 = 2$
- e)  $34 - \square + 5 = 24$
- f)  $20 - 2 - 9 - 4 =$
- g)  $30 \div (4 + 2) =$
- h)  $7 \times 5 \times 0 =$
- i)  $\frac{1}{2} \text{ of } 240 + 56 =$
- j)  $2 \times 2 \times 2 =$

## Level 14 Card 8

### 1. Multiplication and adding zeroes

#### Learn these rules:

To multiply by 10, add a zero, e.g.  $5 \times 10 = 50$

To multiply by 100 add 2 zeroes, e.g.  $5 \times 100 = 500$

To multiply 2 numbers in the tens, add 2 zeroes, e.g.  $30 \times$

20. Multiply  $3 \times 2$  and add 2 zeroes = 600

#### Now try these:

- a)  $28 \times 10 =$
- b)  $33 \times 100 =$
- c)  $50 \times 60 =$
- d)  $80 \times 30 =$
- e)  $14 \times 10 =$
- f)  $5 \times 200 =$

### 2. Equations

Do these in this order: Brackets; Of; Multiply;  
Divide; Add; Subtract (BOMDAS)

- a)  $16 - 9 + 5 =$
- b)  $2 \times 2 \times 2 =$
- c)  $\frac{1}{5} \text{ of } (20 + 5) =$
- d)  $15 - 9 \div 3 =$
- e)  $2 \times 4 + 2 \times 3 = 2 \times \square$
- f)  $240 - 118 - 118 =$
- g)  $217 \div 0 =$

### **Level 14 Card 9**

#### **1. Doubling and halving**

What happens if I double one factor and halve the other:

- a) If  $4 \times 6 = 24$  then  $2 \times \square = 24$
- b) If  $3 \times 20 = 60$  then  $\square \times 40 = 60$
- c) If  $12 \times 6 = 72$  then  $\square \times 3 = 72$
- d) If  $30 \times 30 = 900$  then  $60 \times \square = 900$

#### **2. Double**

247     $200 + 200$      $40 + 40$      $7 + 7$

316     $300 + 300$      $10 + 10$      $6 + 6$

532

489

501

739

#### **3. Halve**

170     $\frac{1}{2}$  of 100     $\frac{1}{2}$  of 70

246     $\frac{1}{2}$  of 200     $\frac{1}{2}$  of 40     $\frac{1}{2}$  of 6

362

529

530

### **Level 14 Card 10**

#### **1. Write the words for these numbers:**

- a) 60,048
- b) 62,408
- c) 60,248

#### **2. What number is exactly half way between?**

- a) 0 and 500
- b) 200 and 800
- c) 30 and 90
- d) 500 and 1000

#### **3. Make the largest number possible using these digits:**

7 0 3 1 2

#### **4. Working with half points on a number line**

Draw your own number line like this:



- a) How many parts between 0 and 1?
- b) What is the point between 0 and 1 called?
- c) What is  $3\frac{1}{2}$  and 2 more?
- d) What is 4 plus  $4\frac{1}{2}$ ?
- e) What is 7 take away  $2\frac{1}{2}$ ?
- f) What is  $2\frac{1}{2} \times 2$ ?

**Level 14 Card 11****1. Fill in the missing numbers:**

- a)  $40 - 38 = 50 - \square$
- b)  $74 - 21 = 84 - \square$
- c)  $31 - 19 = \square - 29$
- d)  $24 + 21 = 34 + \square$
- e)  $62 + 27 = 52 + \square$
- f)  $55 + 29 = \square + 19$

**2. = or ≠**

- a)  $1478 + 9 \square 1487 + 11$
- b)  $8503 + 12 \square 5084 + 9$
- c)  $2083 + 11 \square 1982 + 12$
- d)  $7324 - 9 \square 7234 - 12$
- e)  $5400 - 8 \square 4500 - 9$

**3. Subtraction in your head. Work these out without setting them out.**

- a)  $1135 - 923 =$
- b)  $2597 - 1982 =$
- c)  $5772 - 4761 =$
- d)  $3392 - 2081 =$
- e)  $2556 - 2035 =$
- f)  $4352 - 3902 =$
- g)  $500 - 360 =$
- h)  $1000 - 680 =$

**Level 14 Card 12****1. Write the number that is the nearest ten:**

- a)  $46 \underline{\hspace{2cm}} (50)$
- b)  $29 \underline{\hspace{2cm}}$
- c)  $82 \underline{\hspace{2cm}}$
- d)  $36 \underline{\hspace{2cm}}$
- e)  $71 \underline{\hspace{2cm}}$
- f)  $68 \underline{\hspace{2cm}}$

**2. Write the number that is the nearest hundred:**

- a)  $182 \underline{\hspace{2cm}} (200)$
- b)  $529 \underline{\hspace{2cm}}$
- c)  $137 \underline{\hspace{2cm}}$
- d)  $782 \underline{\hspace{2cm}}$
- e)  $489 \underline{\hspace{2cm}}$
- f)  $686 \underline{\hspace{2cm}}$

**3. Addition in your head. Work these out without setting them out:**

- a)  $12,042 + 50 + 100 =$
- b)  $2,1241 + 2000 + 40 =$
- c)  $3,154 + 600 + 30 =$
- d)  $4,324 + 5 + 300 =$
- e)  $72,124 + 300 + 40 =$
- f)  $19,826 + 50 + 100 =$
- g)  $32,764 + 4 + 20 =$

### Level 14 Card 13

#### 1. Double these:

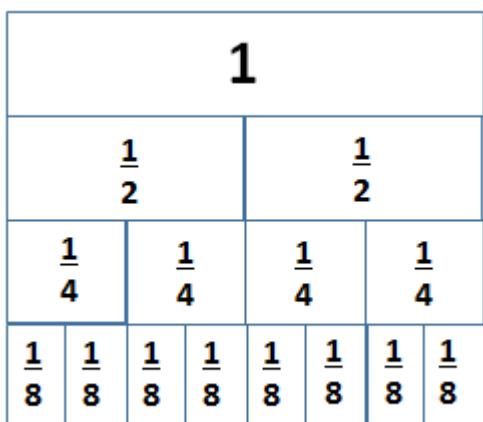
a) 347  $(300 + 300) + (40 + 40) + (7 + 7)$

Answer =

b) 529  $(500 + 500) + (20 + 20) + (9 + 9 +$

Answer =

#### 2. Draw the fractions mat.



- a) How many halves = 1?
- b) How many quarters = a half?
- c) How many eighths = a quarter?
- d) How many eighths = a half?
- e)  $\frac{1}{8} + \frac{1}{8} =$
- f)  $\frac{1}{4} + \frac{1}{4} =$

### Level 14 card 14

### Test

(Also test times tables: 2,3,4,5,6,10)

a) Write the next number in the pattern:

3596, 3597, 3598, \_\_\_\_\_

b) Write the even number between 1035 and 1037.

c) Write in figures: Four thousand eight hundred and thirty-six

d) Write in words: 2,352

e)  $334 = \square + \square + \square$

+ 248  $= \square + \square + \square$

$\square + \square + \square = \square$

f)  $84 = (70 + 14)$

- 59  $= (\underline{\quad} + \underline{\quad})$

g)  $54$

X 2

h)  $20 - 5 \times 10 =$  (Use BOMDAS)

i)  $30 \times 50 =$

j) Double 362

k) Add this in your head:  $1,425 + 40 + 100$

l) I had \$10 and spent \$3.50. How much do I have left?

m)  $75 + 39 = \square + 29$

n) If  $4 \times 20 = 80$ , then  $\square \times 40 = 80$

**Level 15 Card 1** Times tables this term: x2, x5, x10, x3, x4, x6**1. Counting and ordering numbers**

- a) What is the largest number in this list: 804, 840, 408, 84, 48  
b) What is the second largest number in this list: 309, 390, 93, 369  
c) Fill in the signs: < (less than) or > (greater than)  
964 □ 946  
857 □ 875  
690 □ 609

**2. Place value**

- a) If  $9 - 6 = \square$ , then  $900 - 600 = \square$   
b) If  $12 - 4 = \square$ , then  $120 - 40 = \square$   
c) If  $45 - 8 = \square$ , then  $450 - 80 = \square$

**3. Double these**

- a)  $247 (200 + 200 + 40 + 40 + 7 + 7)$   
b)  $539 (500 + 500 + 30 + 30 + 9 + 9)$

**4. Subtraction (in your head or number chart)**

- a)  $2000 - 200 = \square$   $2000 - 220 = \square$   $2000 - 226 = \square$   
b)  $3000 - 400 = \square$   $3000 - 460 = \square$   $3000 - 465 = \square$   
c)  $5000 - 600 = \square$   $5000 - 620 = \square$   $5000 - 627 = \square$   
d)  $7000 - 300 = \square$   $7000 - 350 = \square$   $7000 - 354 = \square$   
e)  $9000 - 500 = \square$   $9000 - 570 = \square$   $9000 - 572 = \square$

**Level 15 card 2****1. Counting and ordering numbers**

- a) Fill in the blanks:

345, 337, 329, \_\_, \_\_, \_\_, \_\_, \_\_  
52, 43, 34, \_\_, \_\_, \_\_  
339, 401, 403, 405, \_\_, \_\_, \_\_, \_\_  
756, 749, 742, 735, \_\_, \_\_, \_\_, \_\_

- b) Arrange these numbers in correct order when counting by 9s: 54, 27, 45, 63, 36

**2. Fill in the signs: < (less than) or > (greater than)**

- a)  $3 \times 40 + 7 \square 2 \times 30 + 9$   
b)  $7 \times 800 + 40 \square 6 \times 700 + 90$   
c)  $9 \times 50 + 39 \square 8 \times 60 + 42$   
d)  $4 \times 300 + 13 \square 3 \times 500 + 21$

**3. Subtraction (use the number chart or in your head)**

- a)  $1000 - 4 =$   
b)  $2000 - 20 =$   
c)  $4000 - 15 =$   
d)  $3000 - 12 =$   
e)  $5000 - 6 =$   
f)  $7000 - 21 =$

**4. Multiplication using times tables**

- $7 \times 20 =$        $4 \times 30 =$        $7 \times 30 =$        $8 \times 20 =$   
 $6 \times 50 =$        $9 \times 40 =$        $3 \times 80 =$        $9 \times 30 =$

### **Level 15 Card 3**

#### **1. Counting**

- a) There is a wrong number in the next group, when counting by 12s. What should it be?

12, 24, 36, 49, 60, 72

- b) Which numbers are missing?

136, 130, \_\_, \_\_, 112, 106

#### **2. Arrange these numbers from largest to smallest:**

a) 2202, 2022, 2220, 2222

b) 4905, 4950, 5904, 5940

c) 26090, 2690, 26900, 29600

#### **3. Fill in the missing figures in these equations:**

a)  $24 + 9 = \underline{\quad} + 4 + 9$

b)  $33 - 8 = 20 + \underline{\quad} - 8$

c)  $3 \times 40 = 3 \times \underline{\quad} \times 4$

d)  $3 \times 10 \times 6 = 18 \times \underline{\quad}$

e)  $5 \times 4 \times 3 = \underline{\quad} \times 5$

f)  $18 \times 9 = \underline{\quad} \times 8 - 1 \times 8$

g)  $22 \times 6 = (\underline{\quad} + 2) \times 6$

#### **4. Renaming**

- a) Rename 15 as an addition sum of 3 numbers:

\_\_ + \_\_ + \_\_

- b) Rename 14, using the minus sign.

\_\_ - \_\_ - \_\_ = 14

### **Level 15 Card 4**

#### **1. Counting**

- a) 2035, 2040, 2045, \_\_. \_\_. \_\_. \_\_. 2070

- b) 9999, 9996, 9993, \_\_, \_\_, \_\_, \_\_, 9978

#### **2. Multiplication and Division are opposite. Fill in the missing signs or numbers:**

- a) If  $6 \times 7 = 42$  then  $\square \times 6 = 42$

- b) If  $9 \times 8 = 72$  then  $72 \square 8 = 9$

- c) If  $6 \times 5 = \square$  then  $\square \div \square = \square$

- d)  $9 + 9 + 9 + 9 + 9 = \square \times \square = \square$

#### **3. Number stories**

- a) At the market they are selling oranges with 5 on each plate. How many oranges would I have if I bought 4 plates? Draw this and write it as a sum. (x)

- b) If I share 16 cakes between 8 children, how many cakes do they get each? Draw this and write it as a sum. (÷)

#### **4. Addition using bundles of 10 (100 straws or sticks).**

Make these. Use rubber bands to bundle the tens.

Example:  $37 + 58 = \square$  (This is 8 bundles of 10 and 15 ones.)

Make the 15 into a bundle of 10 and 5 ones. Now you have 9 bundles of 10 and 9 ones.)

a)  $29 + 53 =$

b)  $18 + 57 =$

c)  $46 + 26 =$

d)  $37 + 25 =$

## Level 15 Card 5

### 1. Times tables

- a)  $4 \times 6 = \square$     $4 \times 60 = \square$     $4 \times 600 = \square$
- b)  $3 \times 7 = \square$     $3 \times 70 = \square$     $3 \times 700 = \square$
- c)  $5 \times 3 = \square$     $5 \times 30 = \square$     $5 \times 300 = \square$
- d)  $5 \times 4 = \square$     $5 \times 40 = \square$     $5 \times 400 = \square$
- e)  $6 \times 8 = \square$     $6 \times 80 = \square$     $6 \times 800 = \square$

### 2. Halve

- a) 252 ( $\frac{1}{2}$  of 200     $\frac{1}{2}$  of 50     $\frac{1}{2}$  of 2   ) =  $\square$
- b) 348 ( $\frac{1}{2}$  of 300     $\frac{1}{2}$  of 40     $\frac{1}{2}$  of 8   ) =  $\square$
- c) 584 ( $\frac{1}{2}$  of 500     $\frac{1}{2}$  of 80     $\frac{1}{2}$  of 4   ) =  $\square$
- d) 478 ( $\frac{1}{2}$  of 400     $\frac{1}{2}$  of 70     $\frac{1}{2}$  of 8   ) =  $\square$

### 3. Addition

$$\begin{array}{r} 568 & 729 & 432 & 684 & 1197 \\ + 394 & +623 & +150 & +436 & + 764 \\ \hline & & & & \end{array}$$

### 4. Money

- a) If I buy 3 packets of biscuits worth \$1.50 each, how much does it cost?
- b) Which 4 coins could I use to buy something worth 85 cents?
- c) Which notes could I use to buy something worth \$65?

## Level 15 Card 6

### 1. Subtraction in your head (or with number chart)

- a)  $1000 - 100 = \square$     $1000 - 120 = \square$
- b)  $2000 - 200 = \square$     $2000 - 250 = \square$
- c)  $3000 - 400 = \square$     $3000 - 430 = \square$
- d)  $4000 - 700 = \square$     $4000 - 720 = \square$
- e)  $5000 - 600 = \square$     $5000 - 640 = \square$
- f)  $6000 - 800 = \square$     $6000 - 860 = \square$

### 2. Subtraction with bridging, e.g.

3  
X<sup>1</sup>2  
- 27

Set out in the same way:

- a)  $85 - 39$
- b)  $48 - 29$
- c)  $56 - 27$
- d)  $64 - 46$

### 3. Money

- a)  $50 \text{ cents} - 20 \text{ cents} - 5 \text{ cents} =$
- b)  $\$1.00 - 45 \text{ cents} =$
- c)  $\$2.00 - 55 \text{ cents} =$
- d)  $\$5 - \$2.50 =$

## Level 15 Card 7

### 1. Counting

- a) Write all the odd numbers between 1234 and 1242.
- b) Show counting by 5s from 2425 to 2450

### 2. What numbers are equal to these?

- a)  $500 + 9000 + 60 + 8 =$
- b)  $5 + 17000 + 60 + 300 =$
- c)  $70 + 21500 + 200 + 9 =$

### 3. = or ≠

- a) 56 tens and 3 ones  5603
- b) Four thousand and five  4050
- c) 2 thousand, plus 20 tens  2200
- d) 34 thousand six hundred and thirty-two  34632

### 4. Fill in the empty spaces

- a)  $146 = \square \text{ hundred} + 46 \text{ ones}$
- b)  $146 = \square \text{ tens} + 6 \text{ ones}$
- c)  $2953 = \square \text{ hundreds} + 53$
- d)  $2953 = 295 \square + \square \text{ ones}$

### 5. Measurement

- a)  $\frac{1}{2} \text{ km} + 400 \text{ m} = \square \text{ m}$
- b)  $28 \text{ cm} + 42 \text{ cm} = \frac{1}{2} \text{ m} + \square \text{ cm}$
- c) How much longer is  $\frac{1}{2}$  a metre than 27 cm?
- d) Mum cut 42 cm off a 1 metre piece of ribbon. How long is it now?

## Level 15 Card 8

### 1. Look at these equations then fill in the missing figures:

- a)  $29 \times 8 = \underline{\quad} \times 8 - 1 \times 8$
- b)  $9 - \underline{\quad} = 9$
- c)  $17 = 17 \times \underline{\quad}$
- d)  $10 \times 1 + 20 = 30$

### 2. Rewrite these equations using a $\times$ sign:

- a)  $22 + 22 + 22 + 22 + 22 + 22 = 132$
- b)  $48 - 8 - 8 - 8 - 8 - 8 - 8 = 0$

### 3. Subtraction with bridging. Do these

in the same ways as the example  
shown:

$$\begin{array}{r} & & 1 \\ & 4 & 5 & 0 \\ - & 1 & 7 & 8 \\ \hline & & 1 & 7 & 2 \end{array}$$

- a)  $625 - 317$
- b)  $142 - 36$
- c)  $326 - 142$
- d)  $245 - 162$
- e)  $246 - 53$

### 4. What change would I get from \$2 if I bought...

- a) A drink for 95 cents?
- b) An apple for 40 cents and a banana for 30 cents?
- c) A pencil for 55 cents?
- d) A rubber for 65 cents?

**Level 15 Card 9****1. Product and factors. Fill in what's missing.**

<b>Product</b>	<b>Factor</b>	<b>Factor</b>
24	2	
10		5
18		9
36		6
48	8	
	4	7

(Work on all tables x 2 to x 11)

**2. Multiplication**

$$\begin{array}{r} 53 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 64 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 63 \\ \times 3 \\ \hline \end{array}$$

Set these out in the same way:

$31 \times 3$

$43 \times 2$

$21 \times 4$

**3. Multiplication with carrying figures**

$45 \times 6$

$73 \times 7$

$54 \times 8$

**Level 15 Card 10****1. Division**

- a) If 24 pencils are divided equally between 3 children, how many each?
- b) If there are 36 legs, how many chairs?
- c)  $56 \div \square = 8$
- d)  $42 \div \square = 6$

**2. Write in digital time:**

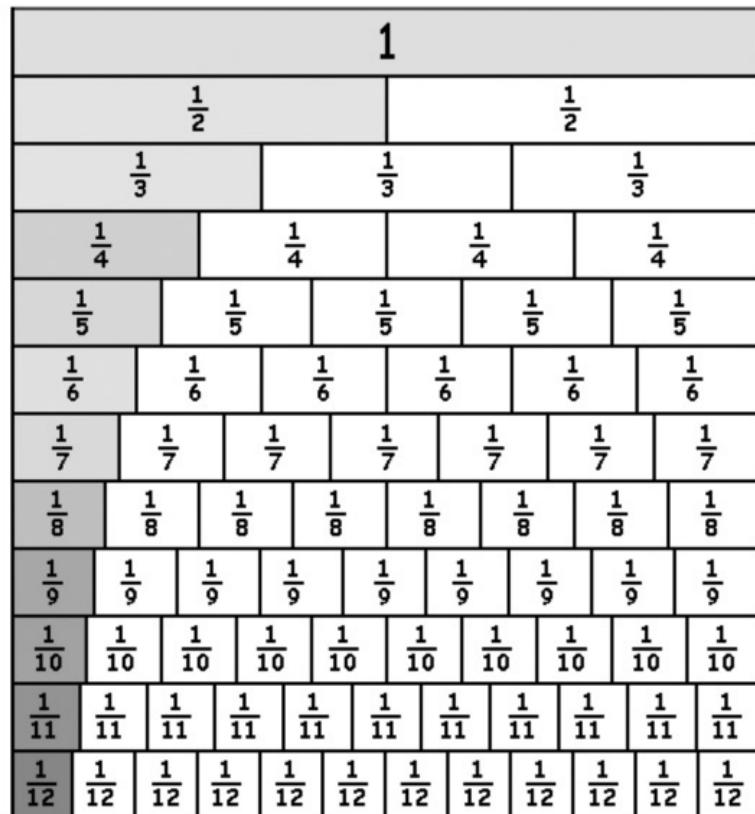
- a)  $\frac{1}{4}$  to 8
- b) 10 to 7
- c) 20 past 6
- d) 25 past 1

**3. On a clockface, how many minutes past the hour do these numbers stand for:**

- a) 5 =  $\square$  minutes
- b) 3 =  $\square$  minutes
- c) 9 =  $\square$  minutes
- d) 11 =  $\square$  minutes

**4. How many minutes altogether in these times:**

- a) 1 hour 20 minutes =  $\square$  minutes
- b) 3 hours =  $\square$  minutes
- c) 2 hours 15 minutes =  $\square$  minutes
- d)  $5\frac{1}{2}$  hours =  $\square$  minutes

**Level 15 card 11****Fractions**

**Fill in the signs: < (less than) or > (greater than)**

- a)  $\frac{7}{8}$  □  $\frac{3}{4}$
- b)  $\frac{2}{4}$  □  $\frac{1}{2}$
- c)  $\frac{5}{8}$  □  $\frac{2}{4}$
- d)  $\frac{1}{4}$  □  $\frac{3}{8}$

**Level 15 Card 12****1. Division without remainder**

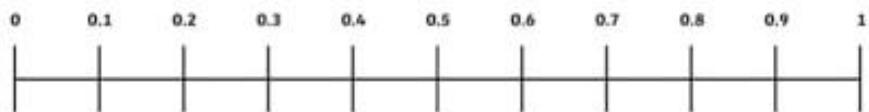
$$9 \overline{)18} \quad 4 \overline{)24} \quad 4 \overline{)32} \quad 9 \overline{)27}$$

$$4 \overline{)36} \quad 7 \overline{)14} \quad 7 \overline{)21} \quad 4 \overline{)28}$$

**2. Division with remainder**

$$3 \overline{)100} \quad 5 \overline{)451} \quad 7 \overline{)534} \quad 8 \overline{)490}$$

$$4 \overline{)234} \quad 7 \overline{)239} \quad 6 \overline{)463} \quad 6 \overline{)478}$$

**3. Decimals****Tenths Number Line**

. 1 =  $\frac{1}{10}$  Write the fractions for:

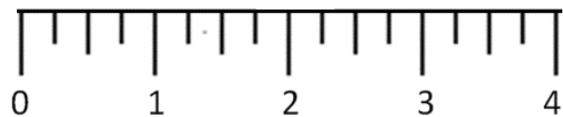
- a) .5
- b) .3
- c) .7

**Level 15 Card 13****1. Fractions (Division)**

a)  $\frac{1}{3}$  of 21 =        $\frac{2}{3}$  of 21 =

b)  $\frac{1}{6}$  of 42 =        $\frac{5}{6}$  of 42 =

c)  $\frac{1}{5}$  of 45 =        $\frac{3}{5}$  of 45 =



**2. Draw the number line above and write these numbers on it:**

$\frac{1}{4}, \frac{1}{2}, \frac{3}{4}, 1\frac{1}{4}, 1\frac{1}{2}, 1\frac{3}{4}, 2\frac{1}{4}, 2\frac{1}{2}, 2\frac{3}{4}, 3\frac{1}{4}, 3\frac{1}{2}, 3\frac{3}{4}, 4$

**3. Use the number line to work out these:**

a)  $2 - \frac{1}{4} =$

b)  $3 - \frac{3}{4} =$

c)  $1 - \frac{1}{2} =$

d)  $1\frac{1}{4} + \frac{3}{4} =$

e)  $2\frac{1}{4} + \frac{1}{2} =$

f)  $\frac{1}{4} + 1\frac{1}{2} =$

**4. Write the number for:**

a) 5 halves

b) 6 quarters

c) 8 halves

**Level 15 Card 14**

**Test (10 points) Also test all tables to x 11)**

a) Write the next number in the pattern:

129, 138, 147, 156, \_\_\_\_\_

b) Write the correct answer: If I start at 16 and count forwards by sixes, which number will I reach?

49, 51, 46, or 48

c) 10 less than 726 is \_\_\_\_\_ ?

d) 1 less than 9000 is \_\_\_\_\_ ?

e) Write the largest number you can using these digits:

8, 0, 9, 4, 6

f) Put in the correct signs: ( $\frac{1}{2}$  point each)

$$28 \square 4 = 7 \qquad \qquad 40 \square (12 \div 3) = 44$$

g) Put in the missing figures: ( $\frac{1}{2}$  point each)

$$7 \times (6+3) = \square \times 63 \qquad 12 + (3 \times \square) = 15$$

h) 
$$\begin{array}{r} 657 \\ + 280 \\ \hline \end{array} \qquad \begin{array}{r} 85 \\ - 67 \\ \hline \end{array}$$
 ( $\frac{1}{2}$  point each)

i) 
$$\begin{array}{r} 46 \\ \times 7 \\ \hline \end{array} \qquad \begin{array}{r} 6 \overline{) 463} \\ \hline \end{array}$$
 ( $\frac{1}{2}$  point each)

j) Write these as decimals:  $1\frac{1}{2}$       2 and 7 tenths