WEEK 5   LEVEL 3

Please remember to keep practising your tables

TUESDAY

L.I.   add and subtract whole numbers.

Complete these equations. Remember to show your working out.

Addition

1. 2+6=   2. 5+3=   3. 8+4=   4. 3+9=   5. 9+5=   6.   10+5=

7.   7+9=   8. 9+0=   9. 10+10=   10. 8+8=

Subtraction

11. 7-4=   12. 10-3=   13. 14-8=   14. 14-6=   15. 15-6=   16. 17-10=

17. 19-9=   18. 16-9=   19. 18-9=   20. 9-0=

Word Problems.

Work out these word problems. Remember to write out the equation and show any working out that you need to do.

1) In Mrs Winter's class there are10 boys and 11 girls. How many children are there altogether?

2)Harry has 3 cats,2 dogs,4 mice and3 goldfish as pets .How many pets does Harry have?

3) 15 children went to the movies. If only 9 children liked the movie, how many children did not?

4) Fiona has $25.00 in her money box. If she spends$10.00, how much money does she have left?

5)David has collected 56 golf balls and Jason has 79 golf balls. How many golf balls do they have altogether?

6) Karen has $75.00 in the money box. If she spends $37.00 how much does she have left?

7) At a school there are 61 children in the two Year 4 classes. If 29 of the children are girls, how many are boys.

WEDNESDAY

<u>Adding and Subtracting larger whole numbers.</u>

When adding or subtracting numbers, it is a good idea to set out your questions neatly.

Example   125   69   145   564

         +85   +246   -84   -246

         210   315   61   318

LOOK AT THESE ADDITION AND SUBTRACTION EXAMPLES.

They should help you when doing the rest of the work.

An **addition algorithm** (a list of steps for solving a problem) can be used when mental addition strategies are too complex.
Example: 9 453 + 984 = 10 437 (the working form is shown below in steps)

Ones	Tens	Hundreds	Thousands

9 4 5 3
+ 9 8 4

7

Line up place value columns
3 + 4 = 7 (record).

9⁴4 5 ⁵3
+ 9 8 4
----
3 7

5 + 8 = 13
Rename as
1 hundred (transfer)
3 tens (record)

¹9⁴4 5 3
+ 9 8 4
----
4 3 7

4 + 9 + 1 = 14
Rename as
1 thousand (transfer)
4 hundreds (record)

¹9¹4 5 3
+ 9 8 4
----
1 0 4 3 7

9 + 1 = 10
Rename as
1 ten thousand (record)
0 thousands (record)

Number/Algebra: The subtraction algorithm

A **subtraction algorithm** can be used for harder subtraction problems. This can involve **renaming**.
Example: 623 – 389 = 234 (the working form is shown below in steps)

When renaming, remember …
1 thousand = 10 hundred
1 hundred = 10 tens
1 ten = 10 ones

Ones	Tens	Hundreds

6 ¹2 ¹3
– 3 8 9

4

Line up place values.
9 cannot be subtracted from 3.
Rename 2 tens and 3 ones as 1 ten and 13 ones.
13 – 9 = 4 ones (record).

⁵6 ¹¹2 ¹3
– 3 8 9
----
3 4

8 cannot be subtracted from 1.
Rename 6 hundreds and 1 ten as 5 hundreds and 11 tens.
11 – 8 = 3 tens (record).

⁵6 ¹¹2 ¹3
– 3 8 9
----
2 3 4

5 – 3 = 2 hundreds (record).

You can check your answer using addition.
  3 8 9
+ 2 3 4
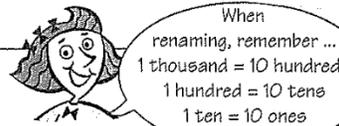
Carefully rewrite each question below so that it looks like the questions above. Make sure you have the numbers lined up correctly. Work out the answers.

A) 256 + 698 =   B) 697 + 365 =   C) 980 – 565 =

D) 635 – 586 =   E) 500 – 243 =   F) 504 + 969 =

Work out these word problems. Remember to set out the questions correctly, as above.

G) Linda bought a new CD player worth $195 and a camera worth $535. How much did she spend?

H) Mr Harding is building a fence that is 120 metres long. If he has already built 87 metres of fence, how much more does he have to build?

I) There are 314 children at Mairehau Primary School. If 168 children are boys, how many are girls?

J) If 358 people went to a circus on Friday night and 459 went on Saturday night, how many people have been to the circus so far?

EXTRA   FOR   EARLY   FINISHERS

Answer these but remember to show your working out.

1. 215 + 27=   2. 9 + 502 +69 =   3. 512 – 98=

4. 26 + 2368 =   5. 6325 – 84 =   6.   865 + 7 + 1025 =

7. 63900 – 695 =   8. 3 + 9853 + 65 + 357 =   9. 36985 – 6841 =

10. 60000 – **1365** =

THURSDAY

L.I. To correctly use the   ORDER OF OPERATIONS

When there is more than one *operation* (+, -, x, /) in a calculation, you must follow the correct **order of operations**. Otherwise you will get a different (incorrect) answer

   e.g. $3 + 4 \times 5 = 3 + 20 = 23$ (NOT $3 + 4 \times 5 = 7 \times 5 = 35$)

Rules for order of operations

Brackets   ( )

Exponents   squares, cubes, etc.

Division   ÷ } do in order from
Multiplication × } left to right

Addition   + } do in order from
Subtraction   − } left to right

The first letters spell BEDMAS – that can help you remember the right order.

Example: $40 - 2^2 \times 8 + (3 + 7) \div 2$

$= 40 - 2^2 \times 8 + 10 \div 2$ brackets first: $3 + 7 = 10$

$= 40 - 4 \times 8 + 10 \div 2$ exponents next: $2^2 = 4$

$= 40 - 32 + 5$ multiplying (4×8) then dividing $(10 \div 2)$ left to right

$= 8 + 5$ subtracting $(40 - 32)$ then adding $(8 + 5)$ left to right

Practising Order of Operations

1. Fill in the gaps to simplify these expresssions.

   $2 \times 7 + 3 \times 5$ a) $3 + 4 \times 5$ b) $9 - 2 \times 3$

   $= 14 + 15$ =   =

   $= 29$ =   =

c) $8 \times 5/2$ d) $(3 + 4) \times 5 + 7$ e) $(2 + 1) \times (7 - 5)$

   =   =   =

   =   =   =

f) $8 - 2 \times 3 + 1$ g) $16/4 + 9/3$

   =   =

   =   =

2. Fill in the gaps with +, -, x or / to make each statement true. Use brackets if necessary.

   7 _ 5 _ 2 = 17   7 _ 5 _ 2 = 4   44 _ 5 _ 6 = 4

   16 _ 4 _2 = 6   3 _ 18 _ 3 = 9   5 _ 6 _ 7 _ 8 =39

PRACTISING WORD PROBLEMS WITH WHOLE NUMBERS
Please show your working out.

1.Mum shares a bag of 50 sweets equally among her 3 children and eats the leftover sweets herself. How many sweets did mum get?

2. At sports a class of 25 students joins another class of 20 students. The teacher divides them into 9 groups. How many students in each group?

3. Fred carries 5 blocks at 2 kg each and Joe carries 6 blocks at 3 kg each.
    How many kilograms have they carried altogether?

4. Each night Matty spends 40 minutes doing homework and Nala spends 45 minutes. After 5 nights, how many more minutes has Nala done than Matty?

5. Andy could buy 6 gob-stoppers at 12 cents each. How many lollipops could he buy at 9 cents each for the same amount of money?

6. A shop has 38kg of apples and 65kg of oranges. The apples are displayed on 2 equal trays. The oranges are displayed in 5 equal containers. What is the total weight of 1 tray of apples and 2 containers of oranges?

FRIDAY

Tasty Treats
To raise money for a class trip, Room 6 decided to make honey crunch bars to sell from the school tuck shop.
The first day, they double the recipe and make 48 bars. These sell out so quickly that they decide to make 10 times the recipe.

HONEY CRUNCH BARS.

125g   butter
1/3 cup   honey
½ cup brown sugar
¾ cup wholemeal self-raising flour
¾ cup plain flour
¼ tsp coriander
½ tsp cinnamon
¼ tsp nutmeg
1 pinch ground cloves
¼ cup raisins
¼ cup almonds

Gently bring sugar and honey to the boil, then cool.

Mix flour and spices and rub in butter.
Add honey and sugar mixture and then the almonds and raisins. Press into a hallow tin.
Prick well with a fork and bake at 160 degrees C for 30 minutes.

1. Write out the quantities for double the recipe.(Do not write out the method)
2. What quantities would Room 6 use for 10 times the recipe?

The ingredients for double the recipe cost $4.50, and Room 6 sold the bars for 50 cents each.
 A) What profit did they make from the double batch?
B) What profit would they make from the next batch?(10 times the recipe)