Here are two puzzles to do with your children.

HELP ZEB FIND THE MISSING NUMBERS

Work out the missing numbers. Try to look for fast ways of adding the numbers.

The numbers in the far right column are the total of the numbers from left to right. The numbers in the last row are the total of all the numbers above them.

5	1	8		8	32
1	9	5	2	8	
	2		8	10	29
4	6	4	6	2	
5		5	10	2	26
21	22	25	36	30	

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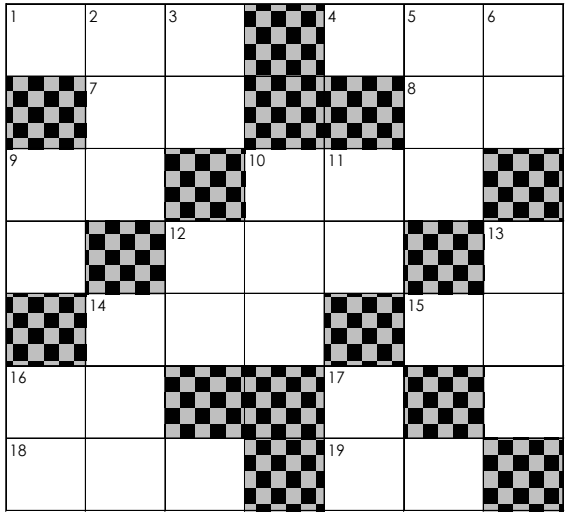
SOLUTION

5	1	8		8	32
1	9	5	2	8	
	2		8	10	29
4	6	4	6	2	
5		5	10	2	26
21	22	25	36	30	134

MATHS CROSS PUZZLE



CLUES

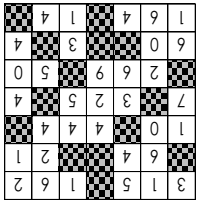
ACROSS

1 150 + 150 + 15
4 Double 80 + 2
7 Add 20 to 44
8 Half of 42
9 22 - 12
10 344 + 100
12 100 + 200 + 20 + 5
14 Take 100 away from 369
15 25 + 25
16 15 + 15 + 15 + 15
18 Double 80 + double 2
19 Double 7

DOWN

2 Add 100 to 60
3 74 - 20
5 Take 10 away from 634
6 30 - 9
9 1 ten and 7 ones
10 Add 10 to 419
11 Double 15; + 10 + 5
12 3 tens and 6 ones
13 Double 200 + double 2
14 Add 10 to 196
16 30 + 31
17 15 + 16

SOLUTION



FUN WITH MATHS -ADDITION CHARTS

We have sourced these addition charts from the addition page of Math-Drills.com. These charts are 10 by 10 grids for addition practice. In each square, write the sum of the column number and the row number. *(http://www.math-drills.com/addition.shtml)*

ACTIVITY 1:Numbers from 1 to 10 that give a range of answers up to 20.

Some examples have been done for you

+	1	5	6	4	10	2	7	9	8	3
9	10									
7								16		
4										
6					16					
1										
8									16	
10										
2										
5			11							
3										

ACTIVITY 2: Numbers from 11 to 20 that give a range of answers up to 40.

+	12	14	16	18	19	13	11	17	15	20
19	31									
17							28			
15										
20										
12										
16		30								
18										38
14										
13						26				
11										

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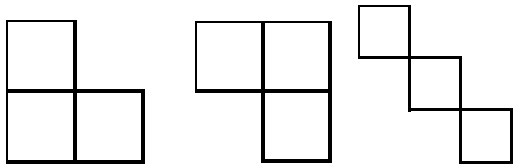
FUN WITH MATHS – NUMBER FACTS TO 30

This week we have activities that strengthen your child's number facts up to 30.

ACTIVITY 1: Find 2 numbers which add up to **30**. The numbers must touch each other. One has been done for you

19	11	10	6	13	17	15	15
22	6	14	23	7	20	10	24
8	18	12	4	26	0	30	6
0	30	23	7	29	19	22	8
13	14	16	10	1	16	14	9
15	15	11	19	12	8	29	21
13	11	3	10	20	25	28	13
17	19	12	26	4	5	2	17

ACTIVITY 2: When you have found all the pairs of numbers in ACTIVITY 1, see if you can find 3 or more numbers that add to 30 in different shapes. *For example:*



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ACTIVITY 3: Look at each sum. If the sum adds up to **EXACTLY 30**, shade the box. What shape do you have?

17+7	13+15	11+13	15+15	5+21	6+23	15+14
19+3	10+10	10+5+15	12+12	17+13	19+7	21+8
16+11	5+5+20	9+9+2	3+17+4	7+7+7	20+10	6+6+6
8+8+14	2+18+6	19+1+5	8+8+8	12+6	20+5	9+21
25+2	12+12+6	17+3+7	6+14	6+6+6	19+11	19+6
18+4	13+12	2+28	3+3+4	22+8	10+14	9+9+2
7+14	19+10	8+16	14+16	13+4	22+7	9+12

DICE GAME: BONDS TO 30

- Throw 1 dice many times. Keep adding each time to get to **EXACTLY 30**. If your score adds to more than 30 you are bust! Start again.

VARIATIONS:

- Add to 50 or 100.

SOLUTION

17+7	13+15	11+13	15+15	5+21	6+23	15+14
19+3	10+10	10+5+15	12+12	17+13	19+7	21+8
16+11	5+5+20	9+9+2	3+17+4	7+7+7	20+10	6+6+6
8+8+14	2+18+6	19+1+5	8+8+8	12+6	20+5	9+21
25+2	12+12+6	17+3+7	6+14	6+6+6	19+11	19+6
18+4	13+12	2+28	3+3+4	22+8	10+14	9+9+2
7+14	19+10	8+16	14+16	13+4	22+7	9+12

FUN WITH MATHS – JOINING NUMBERS

Work on your own or with a friend

If you work with a friend, take turns

- Join any four numbers. Find their total.
- Joins can go up, down, across and diagonally.
- The score for the example is **9 + 4 + 9 + 14 = 36.**
- Find the highest possible score with 4 numbers
- Find the lowest possible score with 4 numbers

GRID 1

9	14	4	10
4	17	12	19
9	7	3	13
20	10	18	2

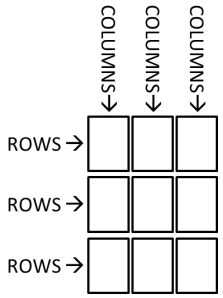
GRID 2

1	20	5	10
4	17	12	13
15	8	3	7
6	10	18	2

- Now try joining five numbers up, down, across and diagonally.
- The score for the example: **15 +10 + 3 + 5 + 14 = 47**

GRID 3

9	12	4	10	14
4	7	6	5	8
1	15	3	12	13
20	10	11	2	10
15	8	21	5	2



OTHER VARIATIONS

- Add all the numbers in a row
- Add all the numbers in a column
- Add all the numbers around the edge of the grid

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FUN WITH MATHS - MULTIPLCATION CHARTS

Adapted from the multiplication page of Math-Drills.com, these multiplication charts have been changed to suit Foundation Phase learners who are working mostly with multiplication tables of 2, 3, 4, 5 and 10. Do the grids that best suit your level. *(http://www.math-drills.com/addition.shtml)*

[1] Up to 5 times tables

Two examples have been done for you

2 x 5 = 10
or
5 x 2 = 10

x	5	4	1	2	3
2	**10**				
1					
0					
3					
5					**15**

3 x 5 = 15
or
5 x 3 = 15

[2] Up to 5 times table with 10 times table

x	2	3	5	4	1
0					
3		**9**			
5					
10				**40**	
2					

[3] Up to 5 times table with 10 times table

x	4	5	2	3	5	10
5						
3		**15**				
1						
0						
2						
10					**50**	

[4] All tables up to 10 times table

x	4	5	2	3	8	10	9	7	6	0
1										
2										
3									**18**	
4					**32**					
5										
6					**48**					
7										
8										
9										**0**
10										

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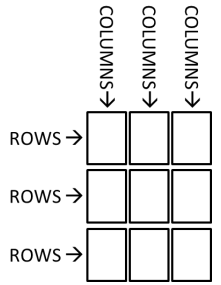
FUN WITH MATHS – NUMBER SENSE BOARDS

Use these boards to practice skills such as halving, doubling, estimation, strategies as well as addition and subtraction. Talk to your child about each question and discuss the answers.

ACTIIVTY 1:

15	35	20
6	14	8
12	40	10

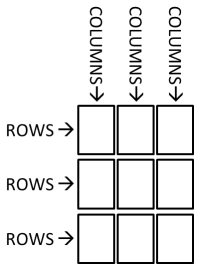
- Which is the **largest** number?
- Which is the **smallest** number?
- Can you **predict / guess** which row has the highest total? Why? Check!
- Add together the numbers in first row. What strategy did you use?
- Which three numbers total 38?
- Are there other numbers that add to 38? You can add together as many numbers as you like to get 38.
- What is the difference between the largest and the smallest number?
- Find one number that is **half** of another? Are there any others?
- Make each number in column 1 **bigger by 9**. How did you do that?



ACTIIVTY 2:

25	45	30	40
8	18	9	3
16	28	21	75

- Which is the **largest even** number?
- Which is the **smallest odd** number?
- **Estimate** which row has the lowest total? Why? Check!
- Which numbers are **multiples** of 5? Why?
- Find one number that is **double** another
- Find two numbers that have a **total smaller than 20**.
- **Subtract** the smallest number from the largest number.
- Add together **3 odd numbers**. Is the answer odd or even? Why do you think this is?
- Find the **smallest** number. Add 10 to this number. Add 100 to this number.
- Find the **largest** number. Take 10 away from this number.



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FUN WITH MATHS – ALPHABET NUMBER WORDS

INSTRUCTIONS

- The goal is to find as many words as you can that add up to EXACTLY 20, 30, 40 or 50
- Choose a word
- Use the chart below to work out the numeric value for each letter
- Add together the letters that make up a word
- **FOR EXAMPLE: TOE = 40 (20 + 15 + 5)**
- If you work with a friend, see if they agree with your adding for each word

VARIATIONS

- Use your own iXhosa words and find their value
- See if you can make up a **sentence** that adds to EXACTLY 100
- See if you can make up a **sentence** that adds to a number between 100 and 120.

ALPHABET AND CORRESPONDING NUMBERS CHART

a	b	c	d	e	f	g	h	i	j	k	l	m
1	2	3	4	5	6	7	8	9	10	11	12	13
n	o	p	q	r	s	t	u	v	w	x	y	z
14	15	16	17	18	19	20	21	22	23	24	25	26

TRY THESE: write the value after each word. **Circle** the words that that add up to EXACTLY 20, 30, 40 or 50

TOE = 40	**HIM =**	**MAP =**	**DIG =**	**KIT =**
WEB =	**GO =**	**BED =**	**WAX =**	**LION =**
MAN =	**EAT =**	**SAT =**	**JAM =**	**DRAG =**

- What is the value of your name?
- What is the highest value word you can find?

TOE = 40
WEB = 30
MAN = 28
HIM = 30
GO = 22
EAT = 26
MAP = 30
BED = 11
SAT = 40
DIG = 20
WAX = 48
JAM = 24
KIT = 40
LION = 50
DRAG = 30

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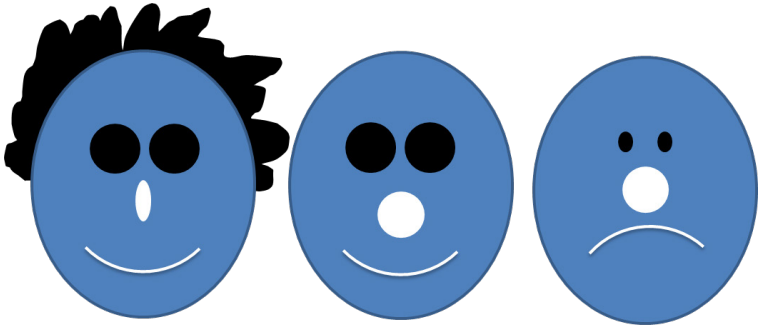
FUN WITH MATHS – LOGIC PUZZLES

These puzzles encourage logical thinking.

Give each face a name

These are the faces of **SAM, SINO AND SIYA**.



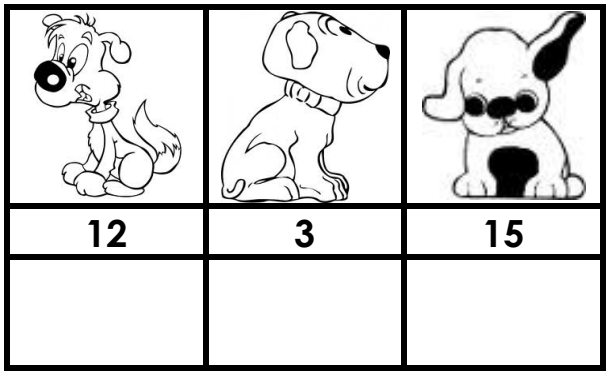
Use the clues to work out which name goes with each face.

Clues

- Sino and Siya are smiling
- Siya and Sam have big noses
- Sam is sad
- Sino has hair

What are the puppies names?

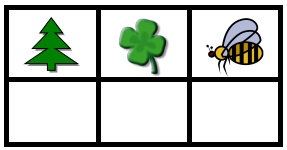
JET, REX AND ZEB don't have names. Use the clues to help give each puppy a name.

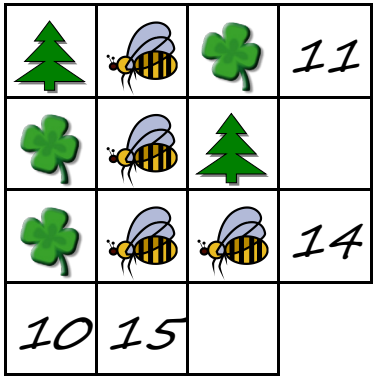


Clues

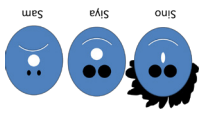
- All the dog's numbers are in the 3 times table
- Zeb's number is even
- Rex's number is bigger than 10

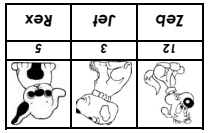
- In this grid, each shape stands for a number.
- The numbers shown are the totals of the line of three numbers in the row or column.
- Find the remaining totals.
- Say what number each shape stands for





SOLUTIONS





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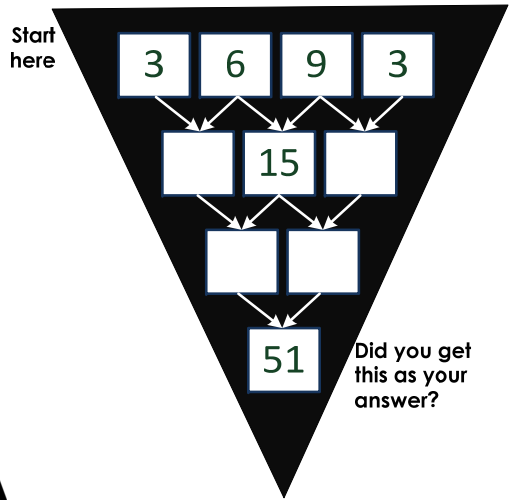
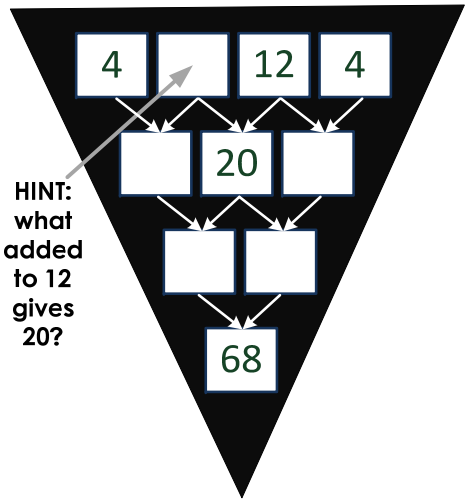
FUN WITH MATHS – FUNNEL SUMS

Begin at the top. Add the 2 numbers shown by the arrows. Work downwards.

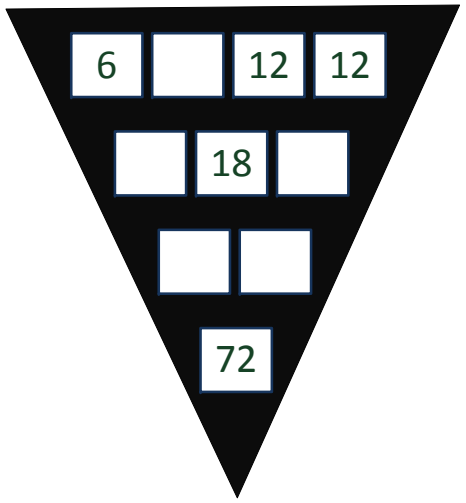
A



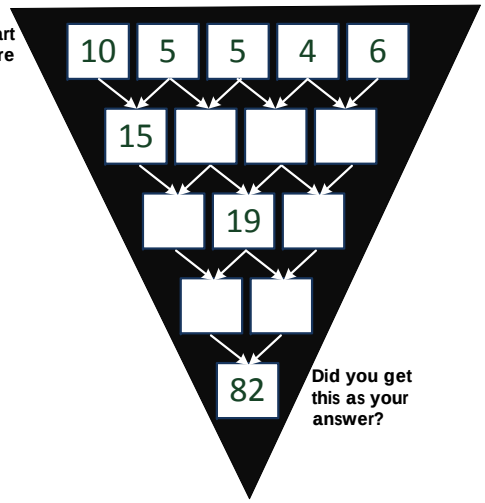
B



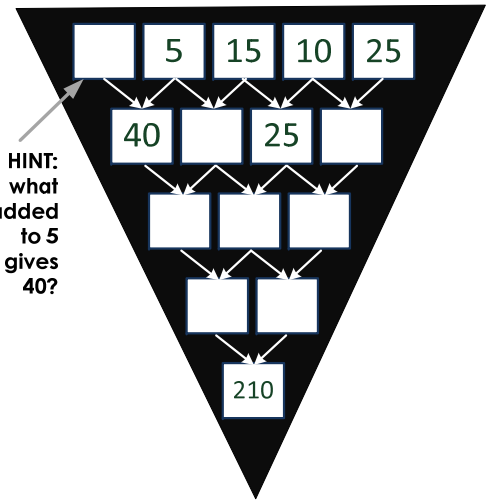
C



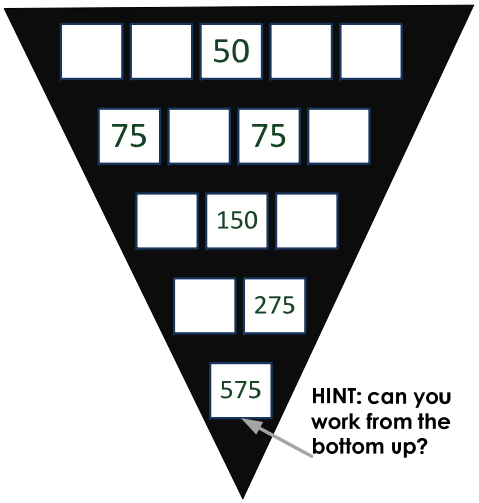
D



E



F



Make up a few funnel sums of your own to share with family and friends. When they're done, mark them to check they are right.

ANSWERS IN BOTTOM ROW:

b) 4, 8, 12, 4 c) 6, 6, 12, 12

e) 35, 5, 15, 10, 25 f) 50, 25, 50, 25, 25

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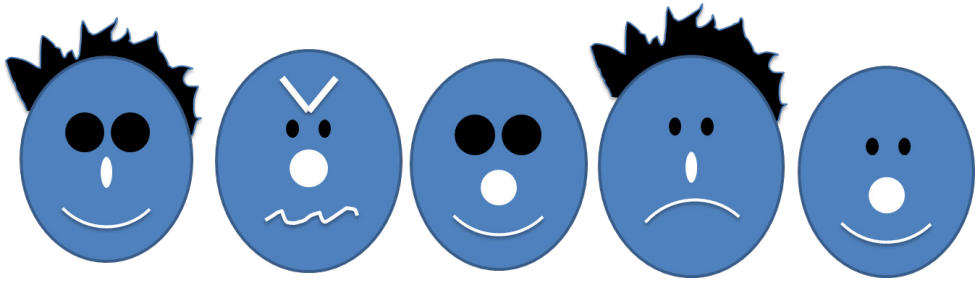
FUN WITH MATHS – LOGIC PUZZLES

More puzzles to build on those we have done before.

Give each face a name

These are the faces of **SAM, SINO, SIYA, SACHA and SALLY**.



Use the clues to work out which name goes with each face.

Clues

- **Sally** has hair and big eyes
- **Sam** has hair and is sad
- **Sino** is angry
- **Siya** has a big nose and big eyes
- **Sacha** is smiling and has small eyes

What are the puppies names?

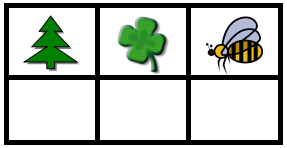
ROVER, SPOT, JET, REX AND ZEB don't have names. Use the clues and numbers to help give each puppy a name.

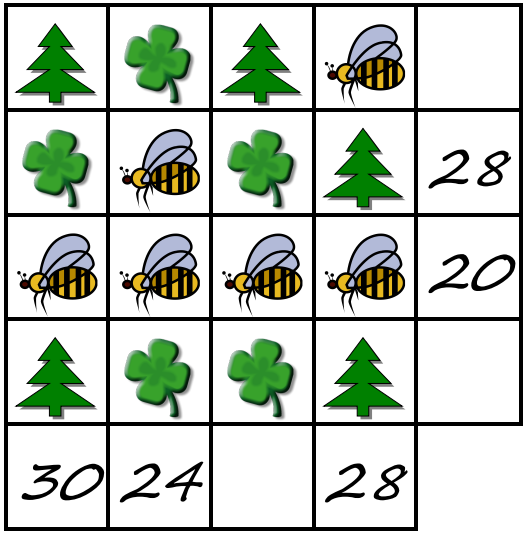
3	20	15	11	7

Clues

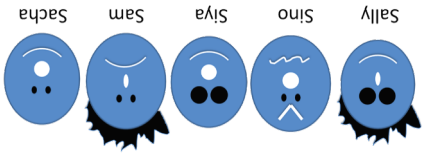
- **Zeb's** number is even
- **Rex's** number is a single digit number between 5 and 9
- **Rover's** number is a single digit in the 3 times table
- **Spot's** number is not in the 3 or 5 times table
- **Jet's** number is in the 3 qnd 5 times table

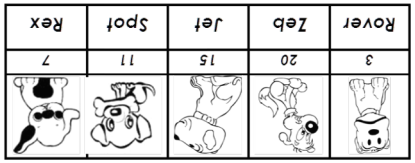
- In this grid, each shape stands for a number.
- The numbers shown are the totals of the line of three numbers in the row or column.
- Find the remaining totals.
- Say what number each shape stands for

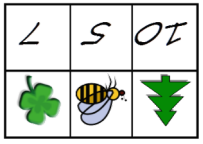




SOLUTIONS







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