

Mighty Math, Advancing Mathematician Book 3, Ready to Advance With Mathematics Author, Kim Freeman

eBook Version First Published in 2007 by: Mahobe Resources (NZ) Ltd P.O. Box 109-760 Newmarket, Auckland 1149 New Zealand.

www.mahobe.com

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ISBN10: 1877216860 ISBN13: 9781877216860



HOW CAN YOU HELP YOUR CHILD IN MATHEMATICS?

Don't just give this book to your child and expect them to learn by themselves. Any activity is fun when done with others or when there is reinforcement and encouragement. Praise and attention to what they are doing will help towards getting them to sit down to learn next time.

This blue Mighty Maths series, Advancing Mathematician, reinforces the work covered in the previous Mighty Maths series (Beginning Mathematician and Developing Mathematician). The work is progressively more challenging and new concepts are introduced in each book at various points. To help reinforce mathematical skills as well as to maintain motivation, the same type of question is asked in different ways and contexts.

This specific book covers number sequences, arithmetic, fractions, measurement and statistics. This book not only reinforces the type of mathematics that children will be studying in school but helps prepare them for the type of mathematics that they will face over the next two years.

For best results:

- Get your child into a routine for study. This is best done after they have come home from school and had a snack.
- Sit down and explain each of the concepts. To achieve this, parents may have to read ahead to know what will be covered.
- Reinforce concepts in the book by giving extra examples and testing your child on his or her times tables.
- Practise correct writing and spelling of number words. Give extra examples. Don't just rely on this book. A dozen questions on a piece of paper at a later date will reinforce the work covered and will help consolidate the concepts involved. It all adds to giving your child an advantage at school.

If your child does not understand or makes mistakes then don't worry! Some new concepts might be confusing at first. As work in this series progresses they will have many opportunities to learn that same concept in similar and different contexts. Therefore, go over the pages, praise what has been done right and talk about what has gone wrong. Rub out their answers and let them try that page again. The work in this series of books will become increasingly more challenging. With some children the learning process will take time, however practice and repetition will lead to increased confidence in mathematics.

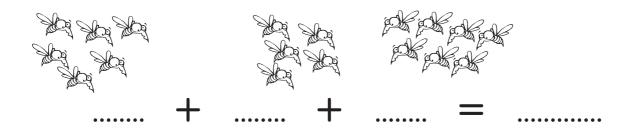
We hope that you and your child have fun with Mighty Maths. At Mahobe, we certainly had fun putting it all together for you.

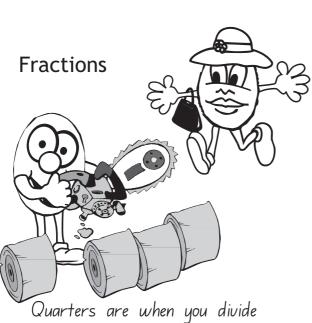
What Is In This Book?

In this book you look at:

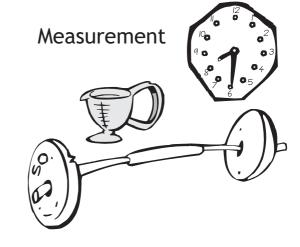
Numbers 0 to 100 (10) (10) (10) (10) (10) (10) (10)

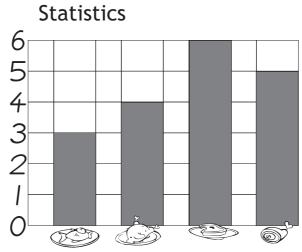
Arithmetic Combinations





an object into 4 equal bits.





Position



Draw a flower on the right of the tree



Draw a bee on the flower



Draw a sun above the tree



Draw a cat under the tree.



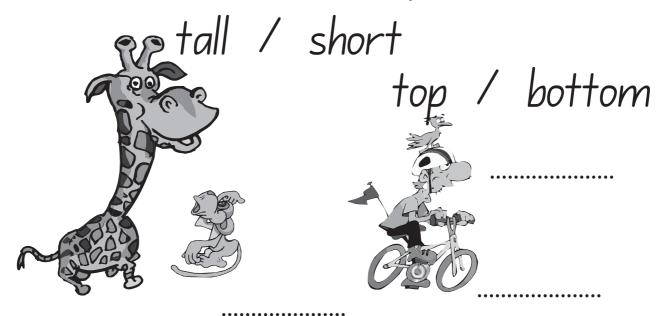
Draw clouds on the left and above the tree.

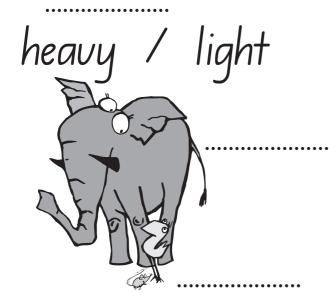


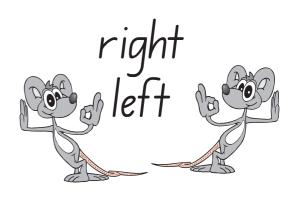
Draw a bird on top of the tree.

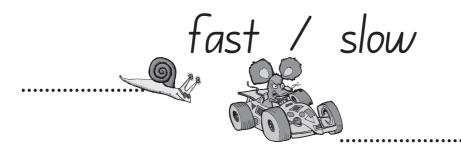
Opposites

Write the correct word beside each picture.



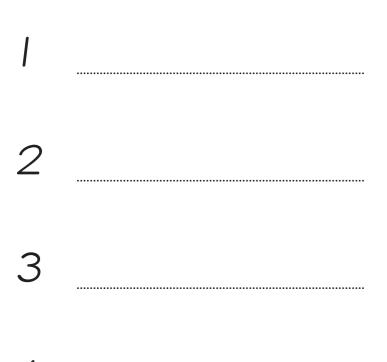




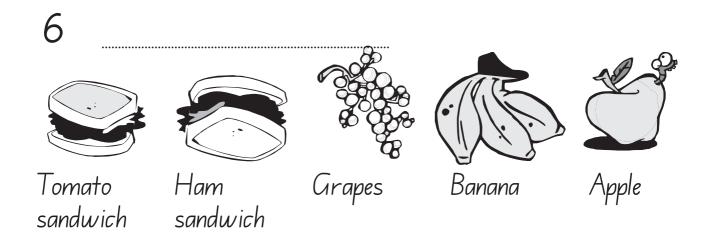


Combinations

Choose one sandwich and one kind of fruit for lunch. There are 6 different options.

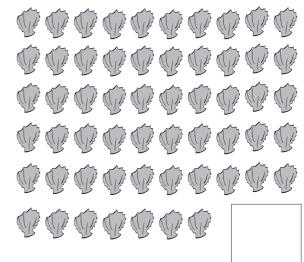


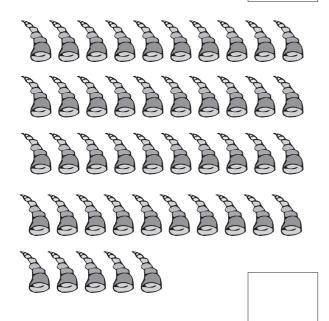
5

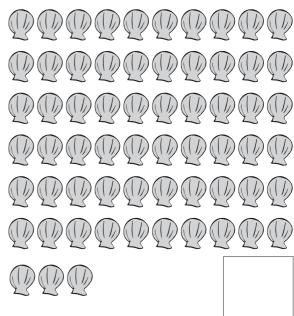


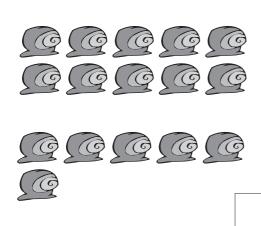
Count how many of each shell.

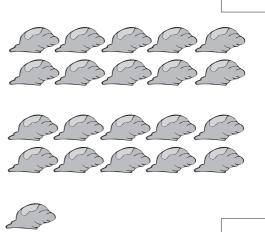




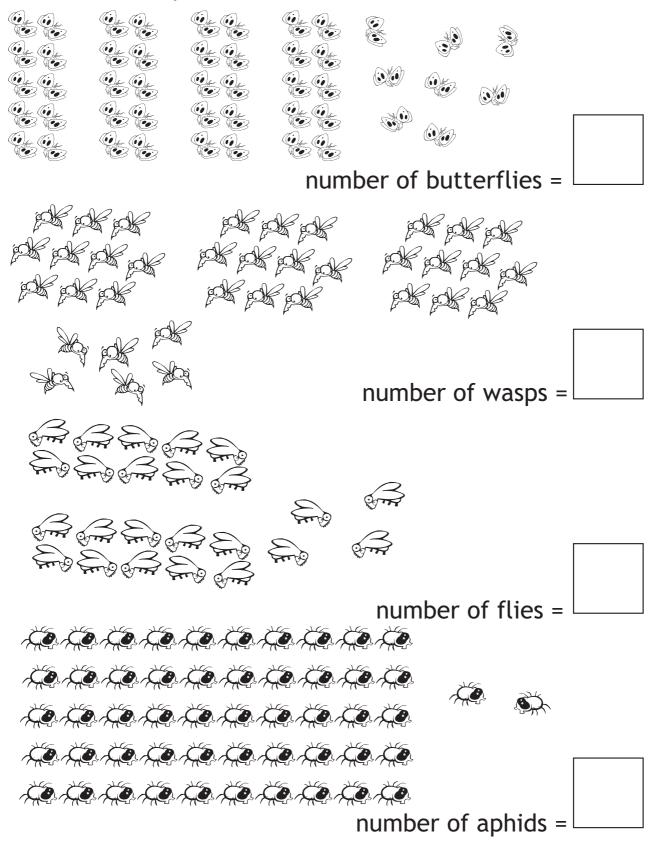




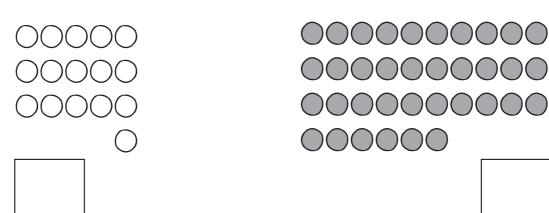


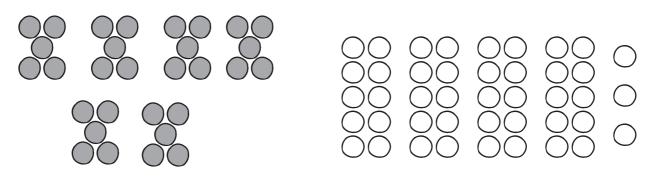


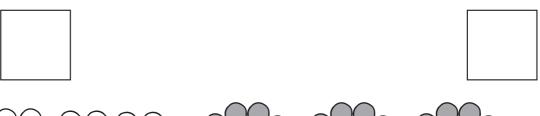
Count how many of each insect?

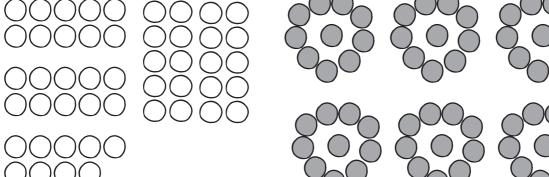


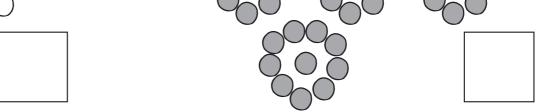
Write the number of circles in each group.



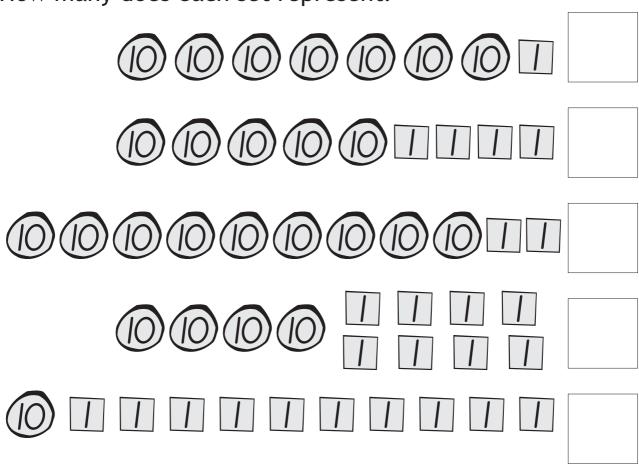








The circles represent 10. The squares represent 1. How many does each set represent?



Draw 22 ticks in Box A and 17 crosses in Box B.

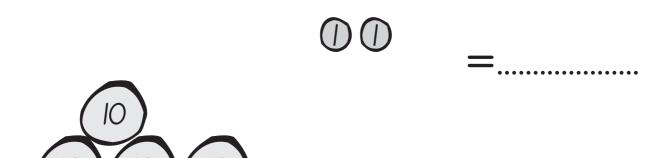
Box A

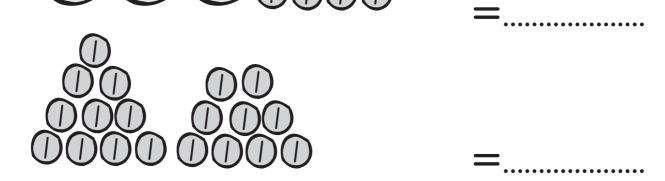
How many crosses and ticks have you drawn altogether?

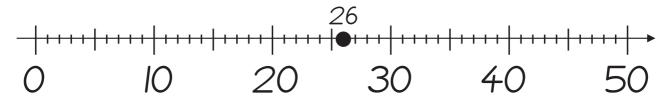
Write the numbers being represented. Show all the numbers on the number line below.

$$=$$
 26



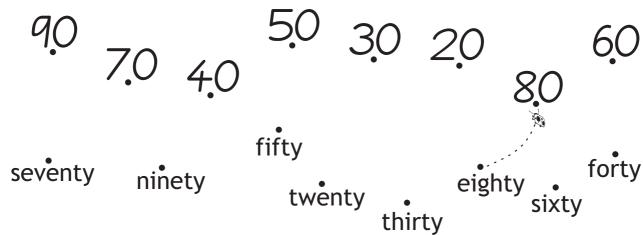




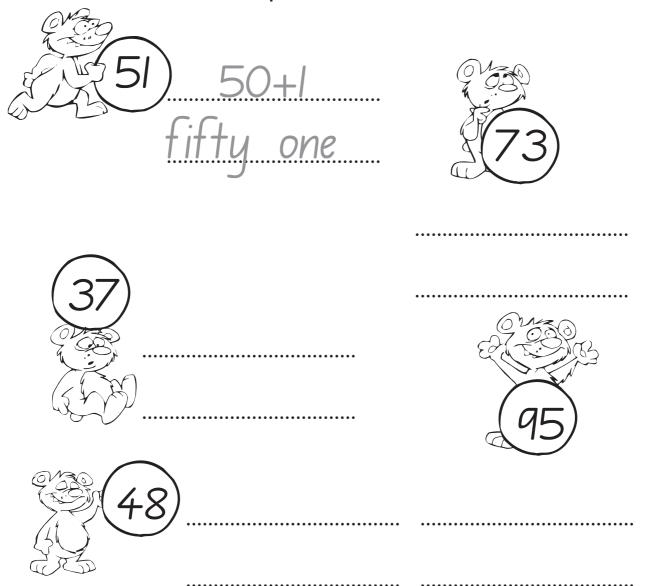


Write the numbers being represented. Show all the numbers on the number line below.

Draw a line between the number and the word.



Write an addition and spell the number words.



Write an addition and spell the number words.







....





•••••

.....







.....

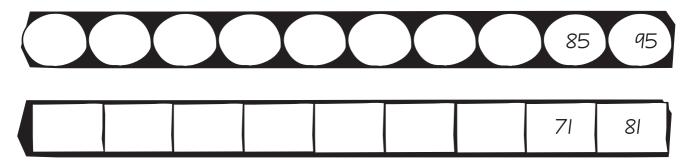
.....

Continue the pattern by counting on in tens.





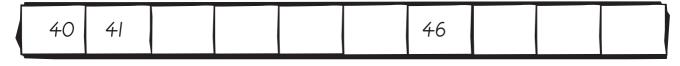
Continue the pattern by counting back in tens.



Continue the pattern by counting in fives.

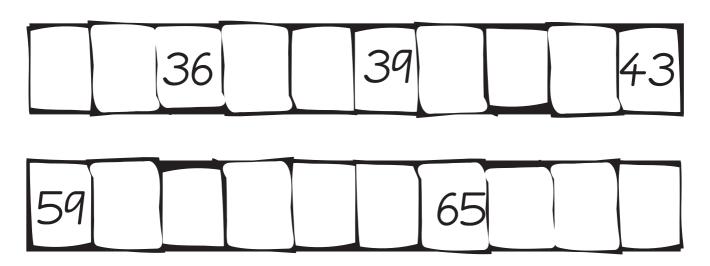


Complete the rest of the numbers on each number line.





Complete these number sequences.



Complete these number sentences.

Arithmetic





Use a + or - sign

Write the sum below each of the pictures..













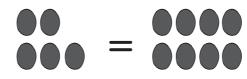




Arithmetic

Use a + or - sign

Write the sum below each of the pictures..



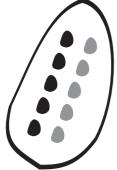
.....**=**

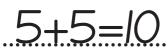


..... =

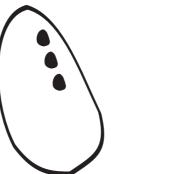
Addition Combinations

Draw more to make 10, then write the addition statement.







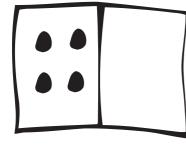


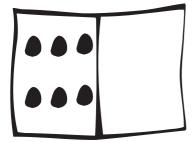


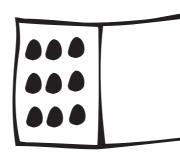


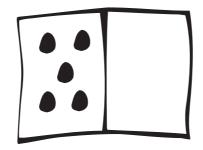


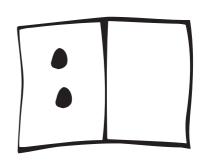
Draw more to make 12.

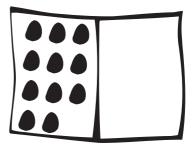






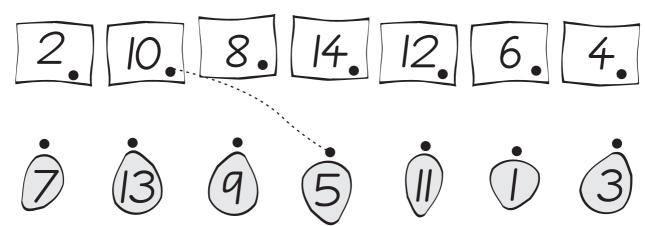






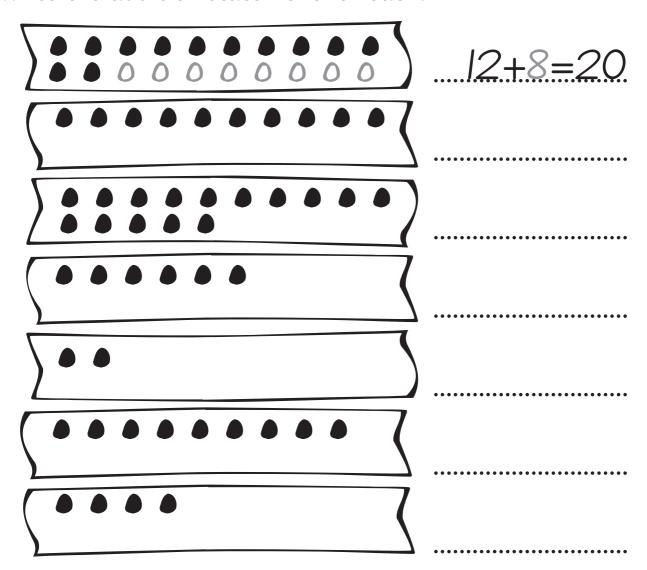
Addition Combinations

Draw a line between all the combinations that make 15.

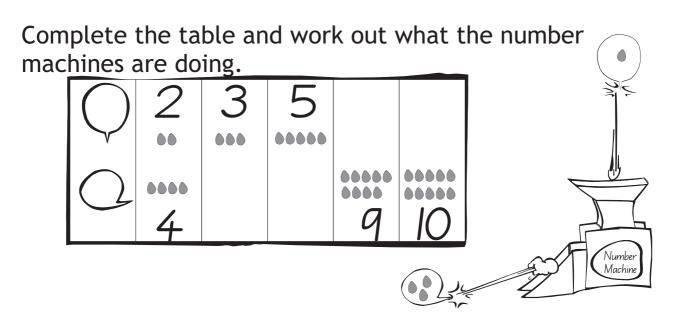


Draw more to make 20.

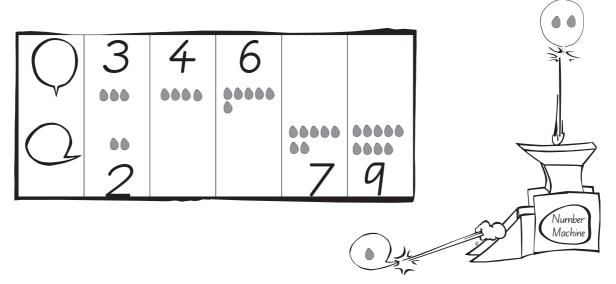
Write the addition statement for each.



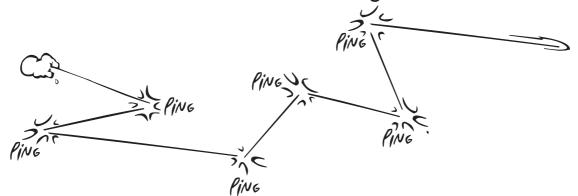
Adding and Subtracting



What is the Number Machine above doing?



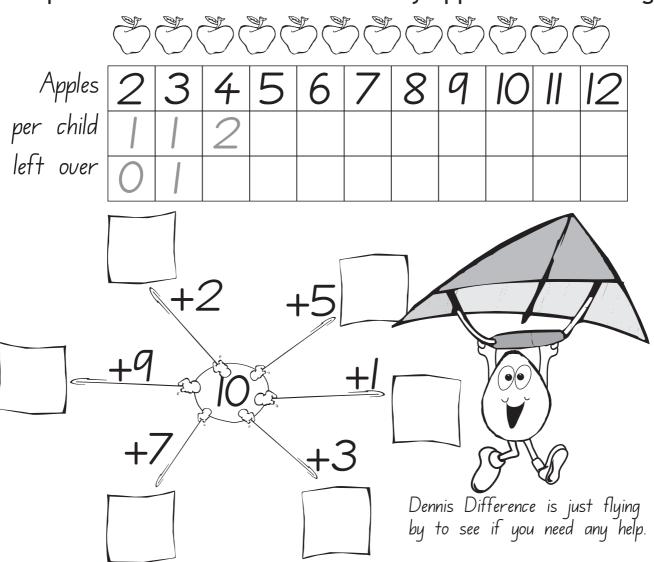
What is the Number Machine above doing?



How many times does the missile ping off the wall?

Write the Right Number

Apples are shared between 2 children. Complete the table to show how many apples each would get.

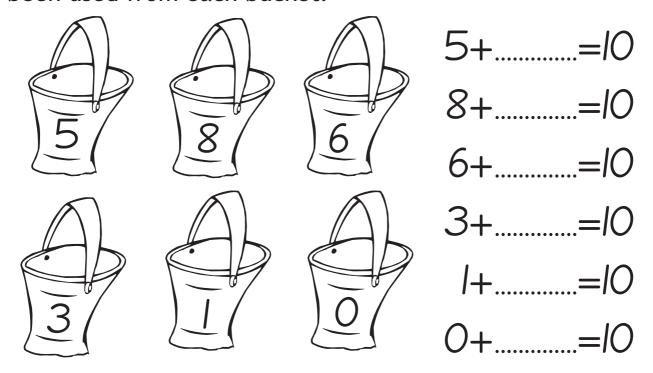


The cricket starts at 0 and jumps two spaces. Write below all the numbers the cricket would land on.

0 1 2 3	4 5 6 7 8	8 9 10 11 12	13 14 15 16 1/	18 19 20
•••••	•••••	•••••) • • • • • • • • • • • • • • • • • • •	••••••
•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •

Write the Right Number

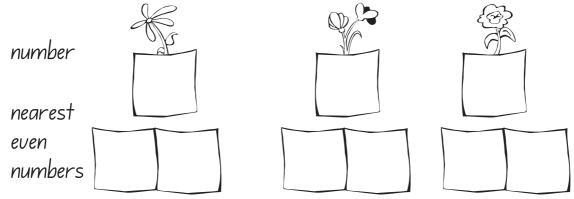
Below are 6 buckets. Each bucket holds 10 litres of water. The number on the side of the bucket represents the amount of water left in the bucket. How much water has been used from each bucket?



Complete the number line.

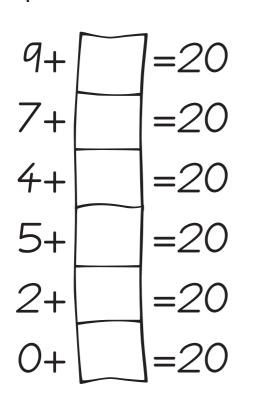


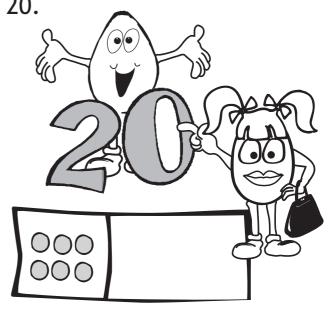
Write the number that the flowers are growing on then write the nearest even numbers.

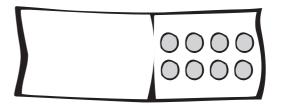


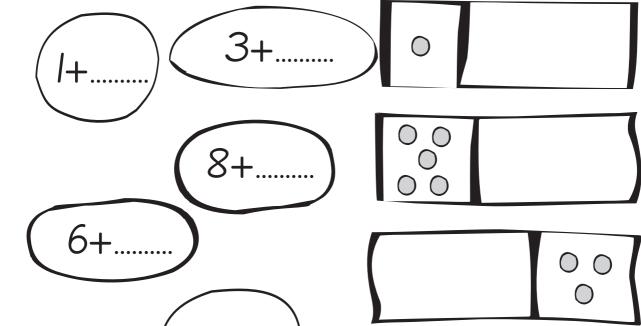
Addition Combinations to Twenty

Complete all the sums to equal 20.





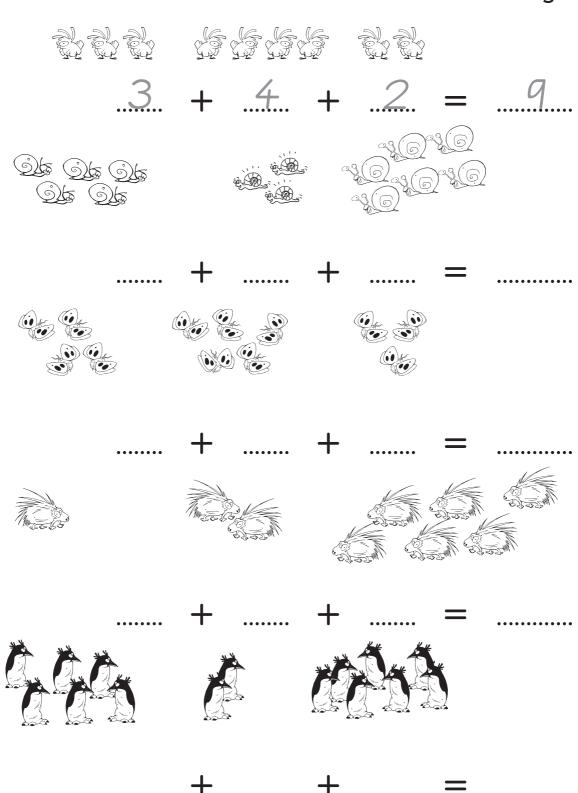




Draw more dots so that each card has a total of 20 dots.

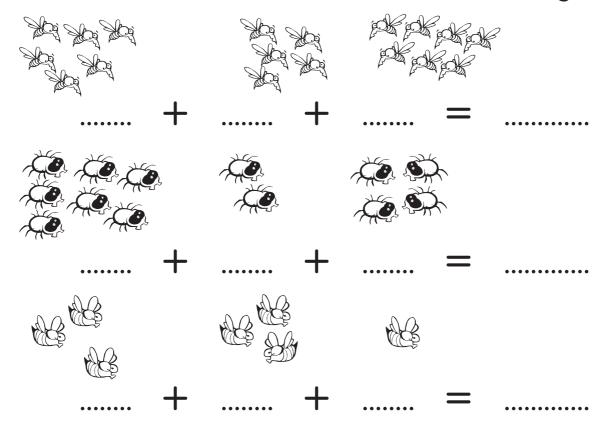
Addition with Three Numbers

Write an addition statement for each of the following.

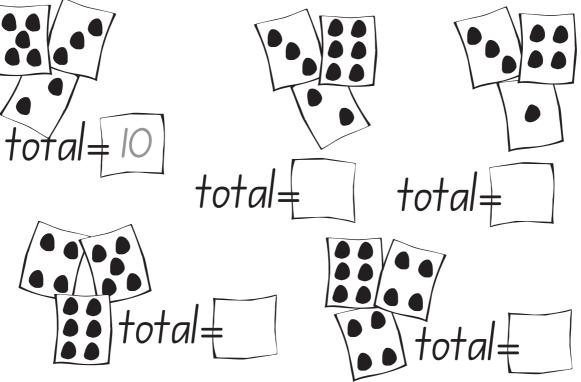


Addition with Three Numbers

Write an addition statement for each of the following.

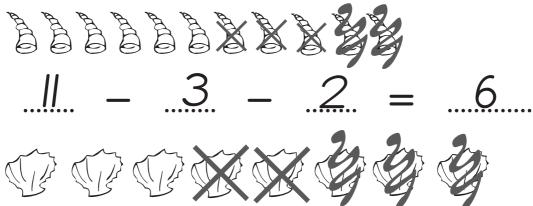


Write down the totals of each set of cards.



Subtracting Two Numbers

Write a subtraction statement for each of the following.





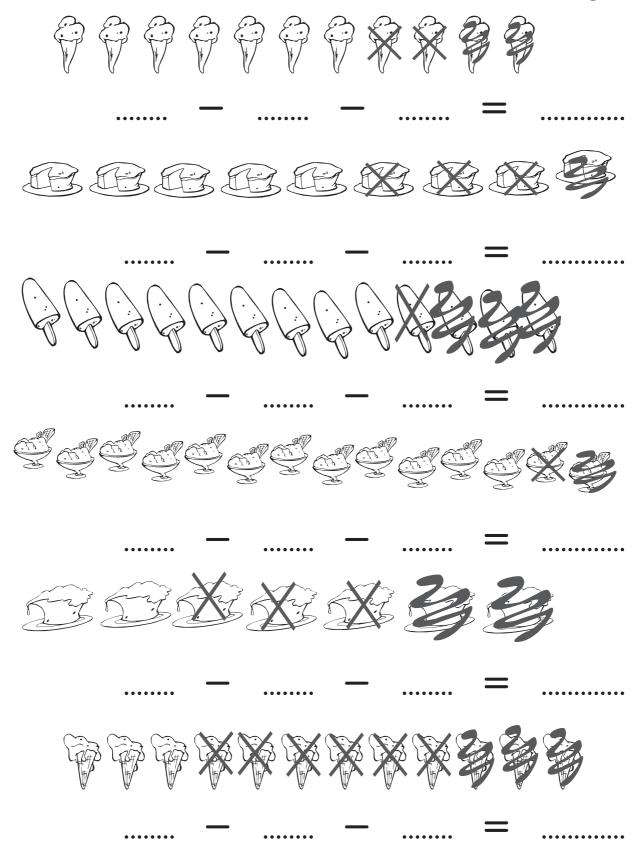
..... – =



..... – – =

Subtracting Two Numbers

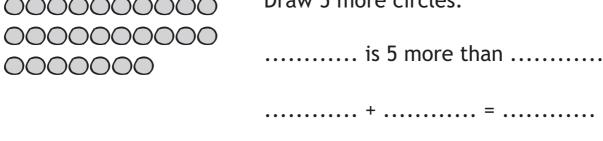
Write a subtraction statement for each of the following.



Addition

Draw more circles, then count and fill in the blank spaces.

000000000	Draw 1 more circle.
00000	is 1 more than
	+ =
000000000	Draw 3 more circles.
	is 3 more than
00	+ =
000000000	Draw 5 more circles.



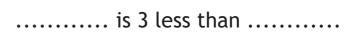
000000000	Draw 4 more circles.	
000000000	Diaw 4 more circles.	
000000000	is 4 more than	
000000000		
0000000	+ =	

00000000	000000000	Draw 2 more circles.
is 2 more than	000000000	is 2 more than

Subtraction

Cross out the correct number of circles then count and fill in the blank spaces. Cross out 3 circles.

000000000
000000000
00000



..... =

000000000)
000000000)

Cross	out	1	circ	le.

00000000	
00000000	

• • • • • • • • • • • • • • • • • • • •	is 1	less	than	• • • • •	• • • •	•

..... =

000000000)
000000000)
000000000)
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..... =

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000000000	
000000000	
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..... =

0000000	000
0000000	000
000000	000

• • • • • • • • • • •	is 2	less	than	••••	• • • •	• • •

	• • • • • • • • • • • •		=
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Draw a line between the numbers that sum to equal 9 then complete the sums below.











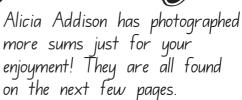












Draw a line between the numbers that sum to equal 7.











Complete the sums.

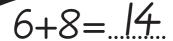
Draw a line between the numbers that sum to equal 8.





Complete the sums below.

Complete the sums_below.

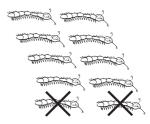


$$16+8=.24$$

Complete the sums below.







$$10-3=...7$$

Fill in the missing numbers.

$$\bigcirc \stackrel{-2}{\leftarrow} 50^{+2} \bigcirc$$

$$\bigcirc \xrightarrow{-6} 80 \xrightarrow{+6} \bigcirc$$

$$-9$$
 30+9

$$\bigcirc \stackrel{-4}{\leftarrow} 20 \stackrel{+4}{\rightarrow} \boxed{}$$

$$\bigcirc -3 q0 + 3 \bigcirc$$

$$-860 + 8$$

Complete the addition and subtraction sums below.

Add 5



7+5=.....

17+5=.....

27+5=.....

37+5=.....

47+5=.....

Add 3



8+3=....

18+3=

28+3=.....

38+3=.....

48+3=.....

Add 8



4+8=.....

14+8=.....

24+8=.....

34+8=....

44+8=.....

Subtract 2



5-2=

15-2=.....

25-2=.....

35-2=.....

45-2=.....

55-2=....

Subtract 6



9-6=

19-6=....

29-6=.....

39-6=.....

49-6=.....

59-6=.....

Subtract 4



6-4=....

16-4=.....

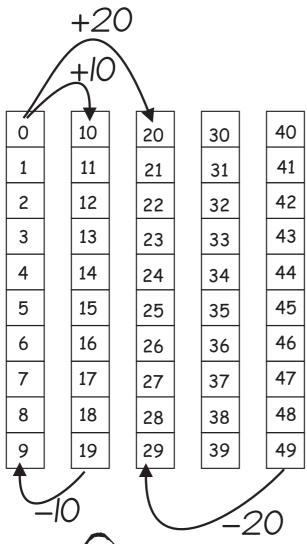
26-4=

36-4=

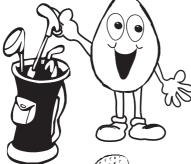
46-4=....

56-4=.....

Use the number diagram to answer the sums below.

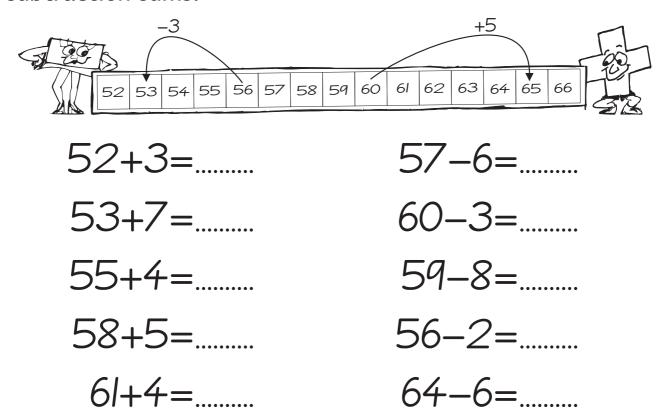




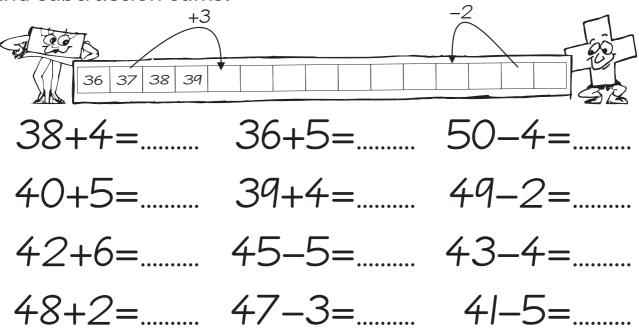


While you work out all the answers on this page, Dennis 33-10= 31-20=Difference is going to have a quick game of golf.

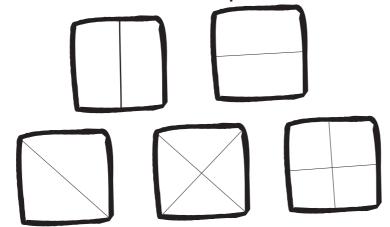
Use the number line to answer the addition and subtraction sums.

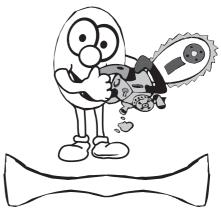


Complete the number line then answer the addition and subtraction sums.



Colour in half of each square.





Half is when you split something in two.

Colour half the circles in each group.





Fill in the missing numbers.



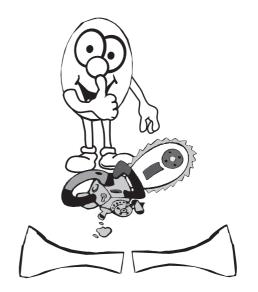












Fractions Colour in a quarter of each shape. Quarters are when you divide an object into 4 equal bits. How much of each shape is shaded? one half one quarter or three quarters?

Choose the correct word (part, half or a pattern).

A fraction is.....of something.

Write the number that is half of these numbers.



60

50

30

10



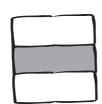
40

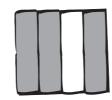
70

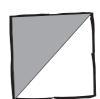
90

Write the fraction that is shaded.



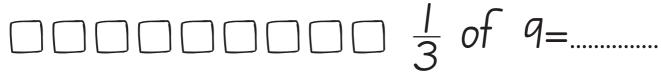






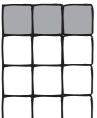
Colour one half of the circles.

Colour one third of the squares.

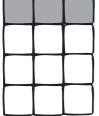


Colour one quarter of the triangles.

$$\frac{1}{4}$$
 of 12=.....



Colour three quarters of the circles.



$$\frac{1}{4}$$
 of 12=.....

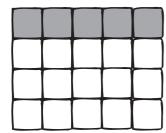


$$\frac{3}{4}$$
 of 8=.....



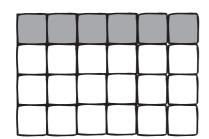
$$\frac{1}{4}$$
 of 16=.....

$$\frac{3}{4}$$
 of 12=.....

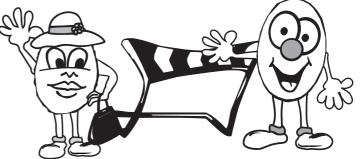


$$\frac{1}{4}$$
 of 20=....

$$\frac{3}{4}$$
 of 16=....



$$\frac{1}{4}$$
 of 24=....



Fractions are no hurdle for Dana Divisor or B. J. Product.

Write the number that is one quarter of.

8

20

16

12

4

24

Shade one third of these shapes.

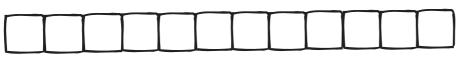
 $\frac{1}{3}$ of 3 =.....



 $\frac{1}{3}$ of 6 =



f 9 =....



 $\frac{1}{3}$ of 12 =

Now shade two thirds of the shapes.









How many whole ones in:

4 halves \bigcirc \bigcirc = $_$

16 quarters ⊞⊞ =

15 thirds [] = _____

How many in each team if you divided this group of 8 into two teams?

How many in each team if you divided this group of 9 into three teams?



How many in each team if you divided this group of 12 into three teams?



Measurement - length



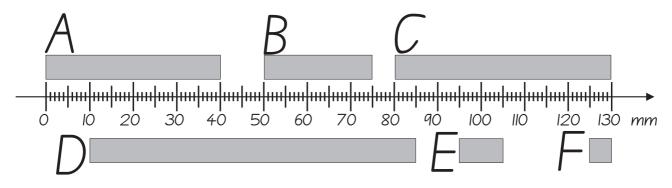
Chris is 2m tall. His son Richie is half as tall.

How tall is Richie?

Richie has a pet snake, Max, which is twice as long as Chris is tall.

How long is Max?

How long is each rectangle?



 $D = \dots \qquad E = \dots \qquad F = \dots \qquad \dots$

The abbreviation for millimetres is

The abbreviation for is cm

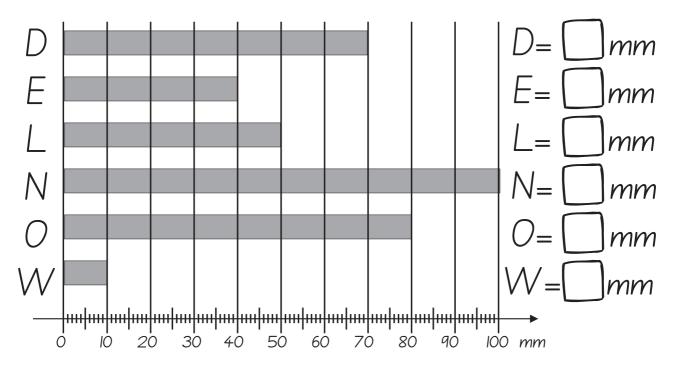
1 cm = mm 1m = cm

Put these lengths in order starting with the shortest.

1m, 10cm 1mm, 50mm

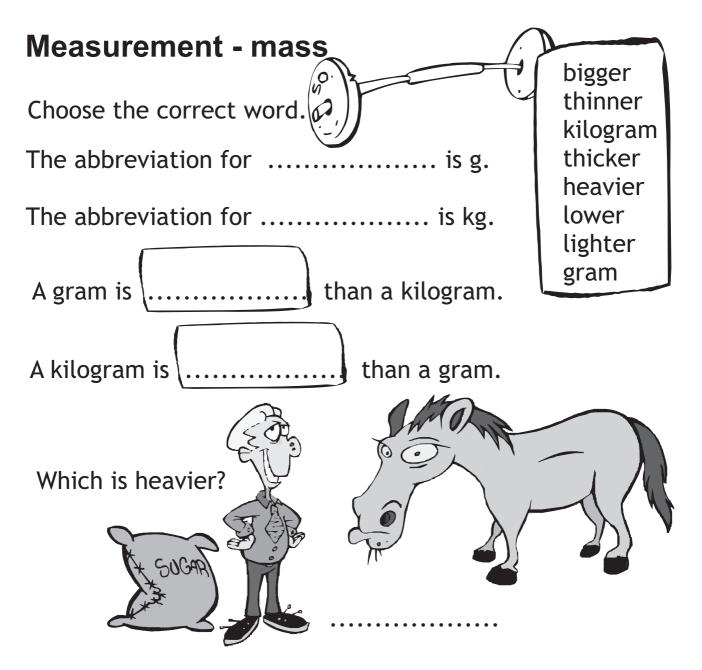
Measurement - length

How long is each rectangle?



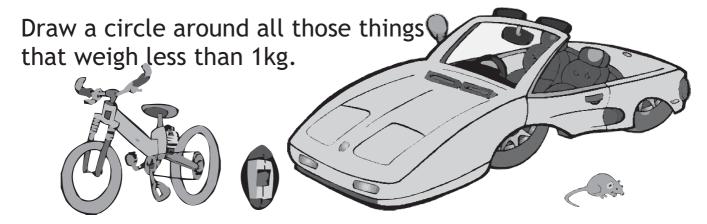
Now write down the letters in order from shortest to longest.

Use a ruler to measure the lengths of these rectangles in centimetres.



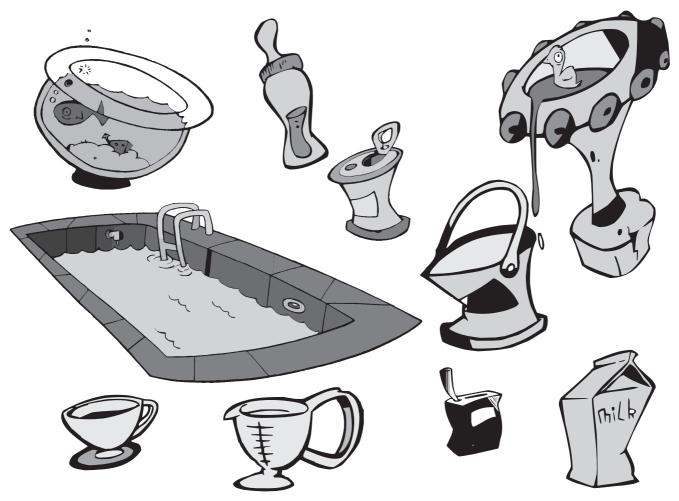
Put these masses in order starting with the lightest

20kg, 10g, 1kg, 1g, 50g.....

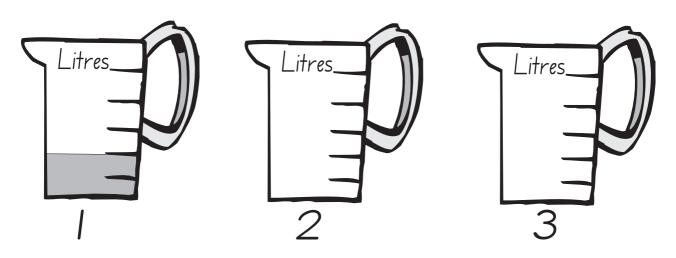


Measurement - capacity

Put a tick next to those items that contain 1 litre or less.



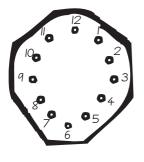
Jug 1 below has 1 litre of water in it.
Colour jug 2 so that it is holding 2 litres of water.
Colour jug 3 so that it is holding 2½ litres of water.

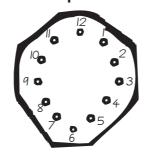


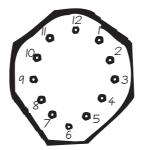
Measurement - time

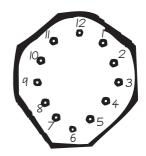
Show each time on the clock.

4 o'clock half past 9 quarter to 6 quarter past 12













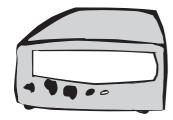




Write these times on the digital clock.

8 o'clock

half past 2 quarter past 11 quarter to 3







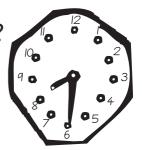


The movie started at.

The movie finished at.



How long does the movie last?



Put in the arrowhead.

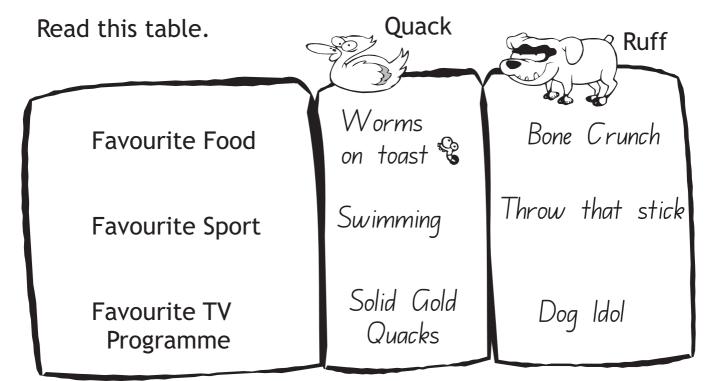
Clockwise.



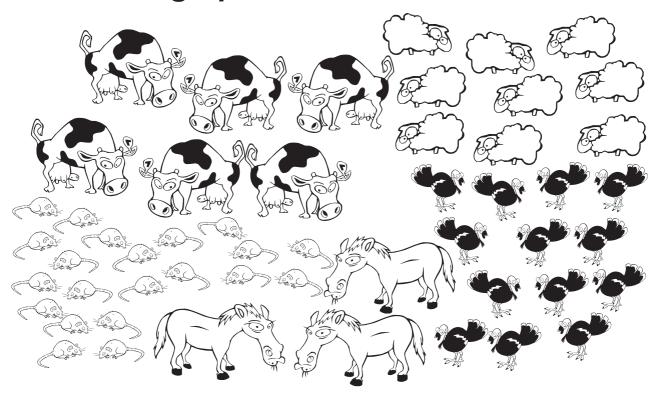
Statistics

Write the data under the correct heading.

Vehicle	Furniture	Food	boat
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • •	burger
• • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • •	car chair
			apple
•••••	••••••	• • • • • • • • • • • • • •	truck airplane
•••••	•••••	•••••	cake
••••	•••••	•••••	bed



Statistics - graphs



Mahobe Farm has all the animals above. Count the numbers of each animal.

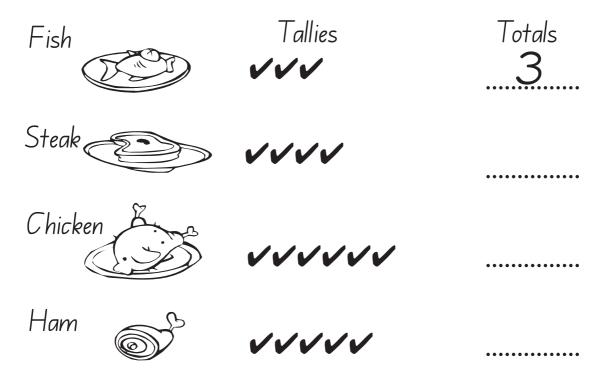
Turkeys	### ###	13
Cows		•••••
Sheep		•••••
Mice		• • • • • • • • •
Horses		• • • • • • •

There are more than turkeys

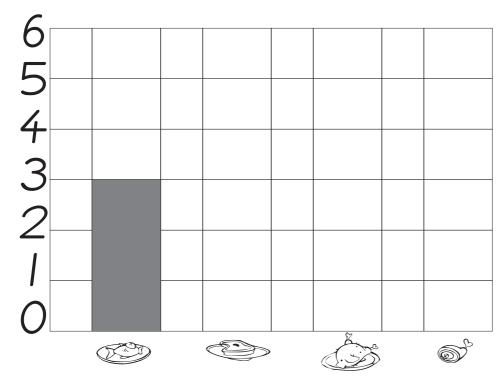
There are more sheep then there are horses.

Statistics - data

A survey is taken out to determine which is the most popular meal. Complete the totals column of the results.

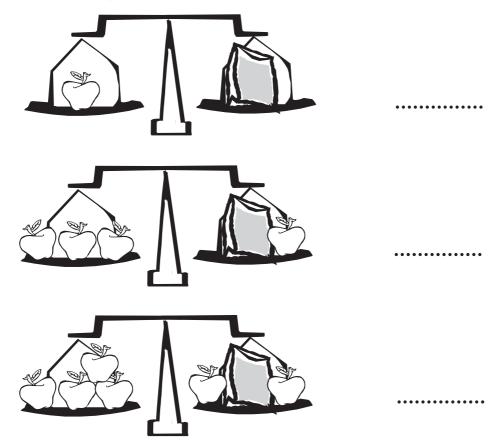


Use the grid below to draw a bar graph of the survey results.

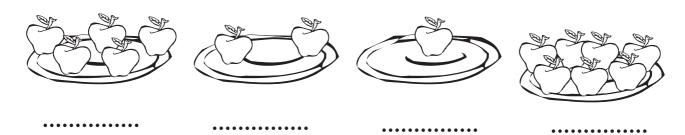


Finding the Right Number

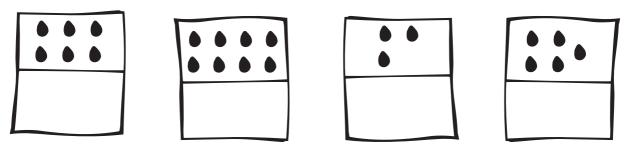
How many apples are in each bag?



Each of the plates below had 10 apples to begin with. How many were eaten.



Add more dots so that each card has 10 dots.



Arithmetic

Fill in the missing numbers.

$$\times$$
 4 = 12

$$3 \times ... = 6$$

$$\div 2 = 4$$

Add the + - \times or \div signs.

$$8 = 4$$

$$2 = 10$$

$$9 1 = 9$$

$$8 = 6$$

$$9 7 = 2$$

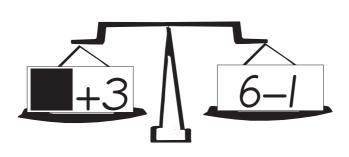
$$7.....6 = 13$$

A farmer has 75 sheep. He buys more sheep and now has double the amount. Later in the year the farmer sells half the sheep.

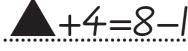
How many sheep does he now have?

Solving Equations

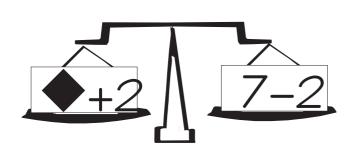
Find the missing number by completing the equations

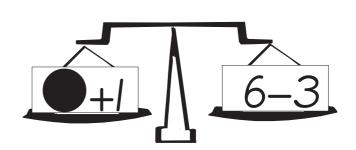












-THIS IS A MAGIC SQUARE

What is the total of each row?	3	10	5
••••••	8	6	4
What is the total of each column?	7	2	9

What does each diagonal add up to?

•••••

Why is it called a magic square?

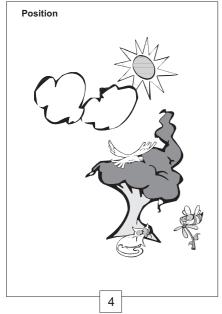


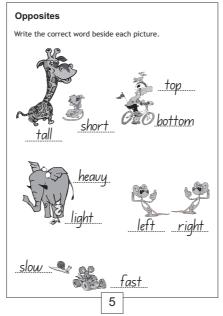
FINISH THESE MACIC SQUARES

3	8	7
10		2

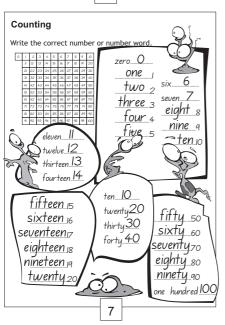
		8
2	9	4

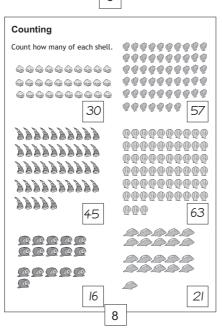
12	5	10
8		

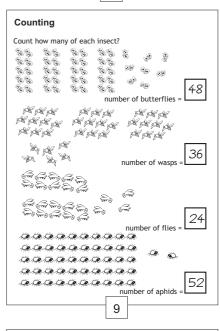


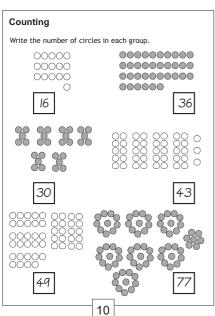


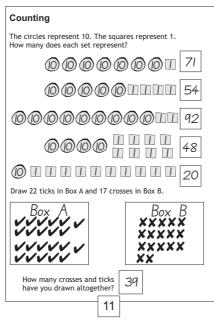


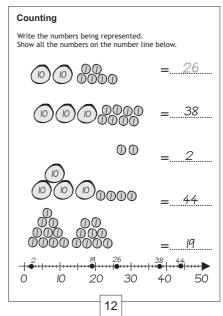


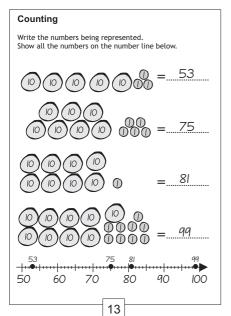


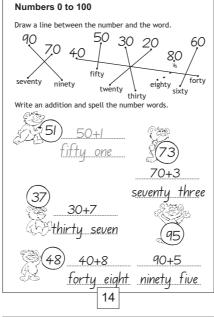


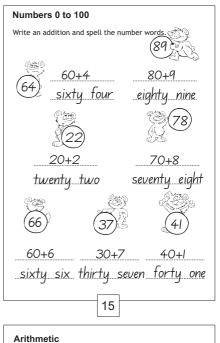


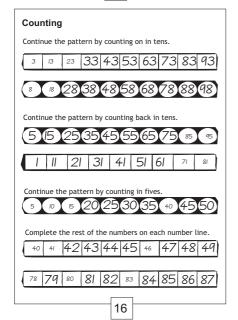


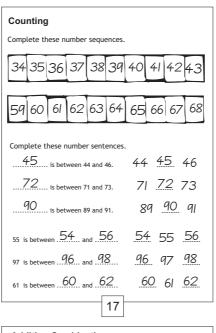


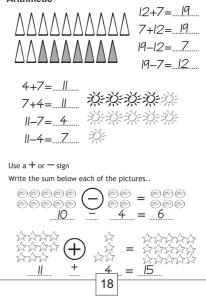


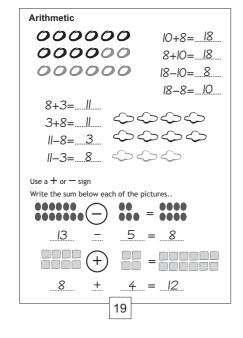


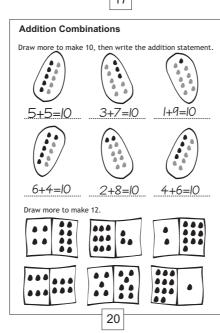


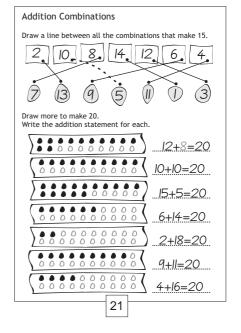


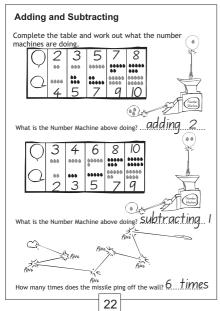


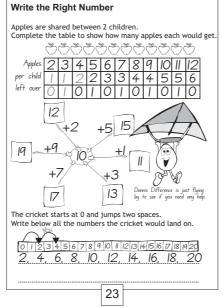


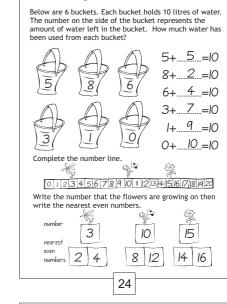




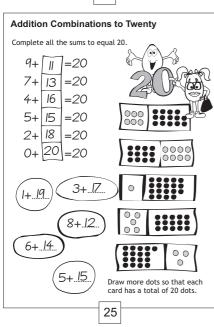


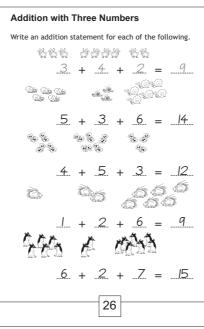


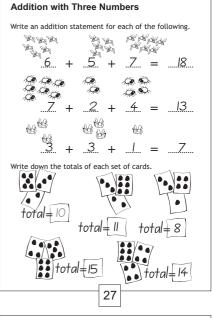


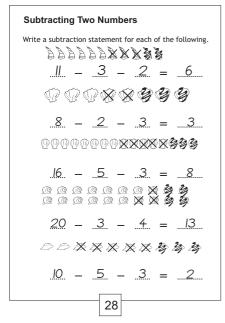


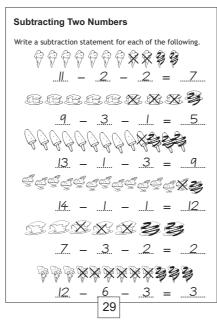
Write the Right Number

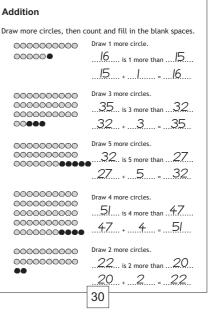


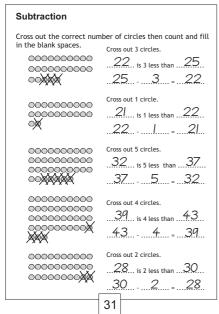


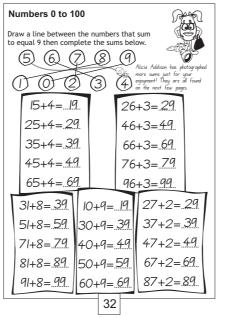


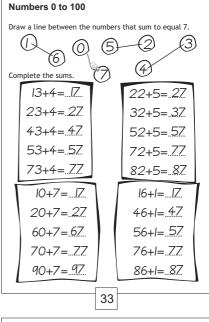


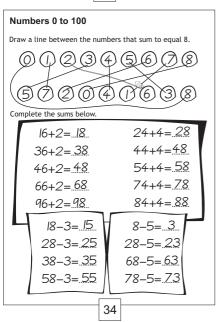


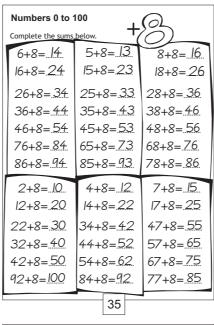


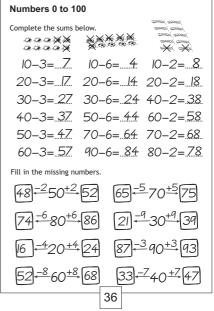


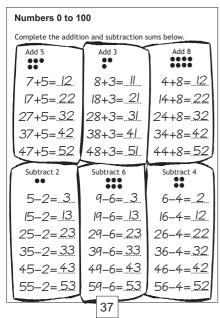


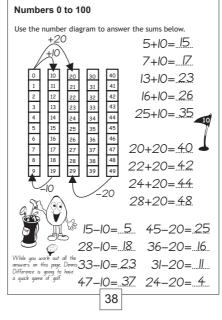


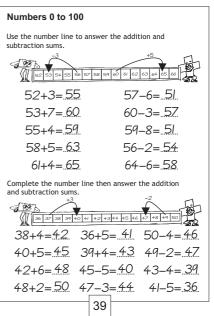


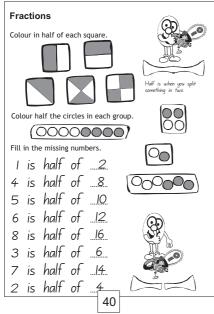


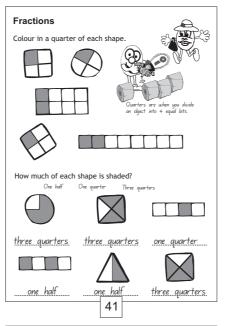


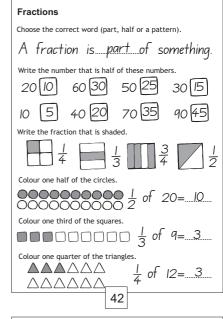


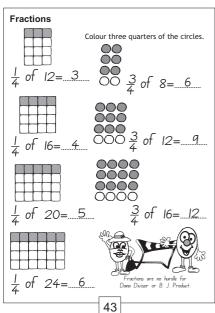


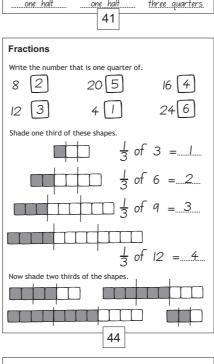


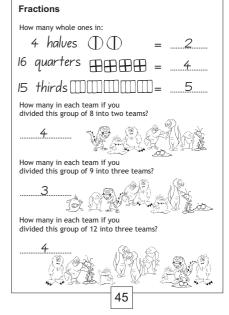


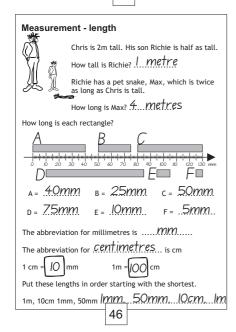


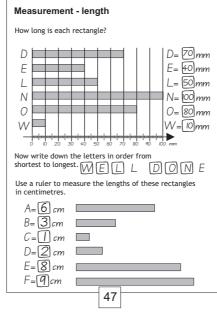


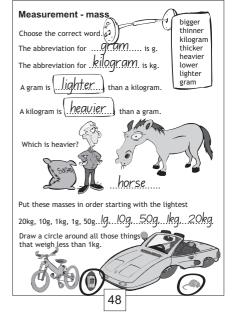


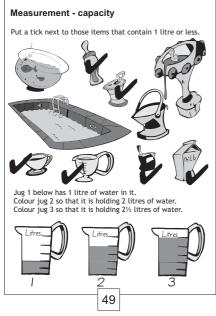


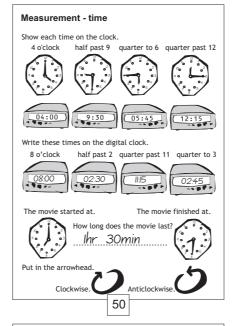


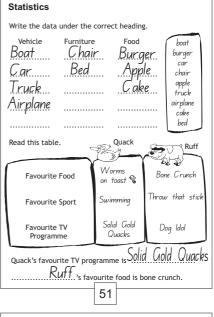


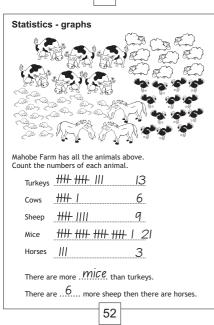


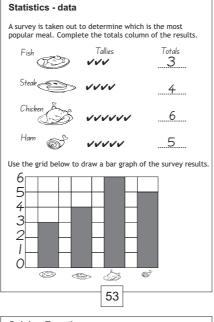


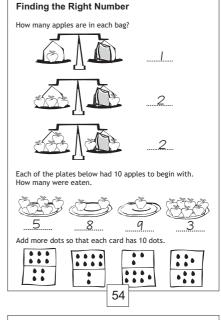


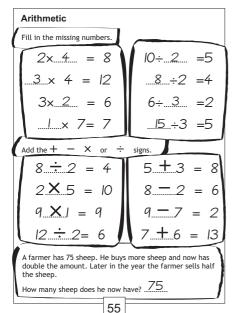


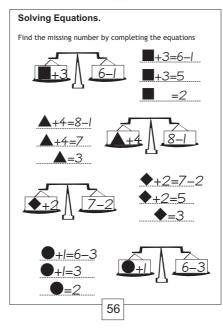


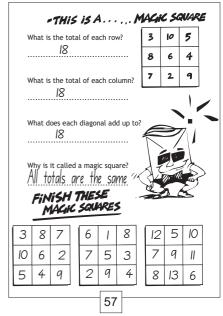














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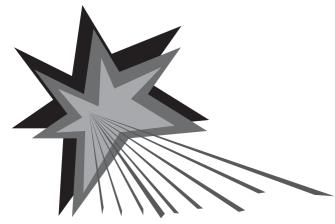
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