

Kim Freeman

Mighty Math, Advancing Mathematician Book 1, Ready to Learn Mathematics Author, Kim Freeman

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Kim Freeman

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 book covers shapes and patterns, graphs, ordinals and counting, adding and subtracting, multiplication tables and division. It reinforces the type of mathematics that children will be studying at school.

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.

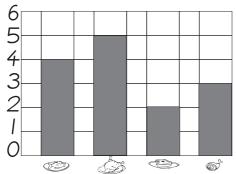
If your child does not understand or makes mistakes then don't worry! Some new concepts might be confusing at first. As work in this series progresses they will have many opportunities to learn that same concept in similar and different contexts. Therefore, go over the pages, praise what has been done 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.

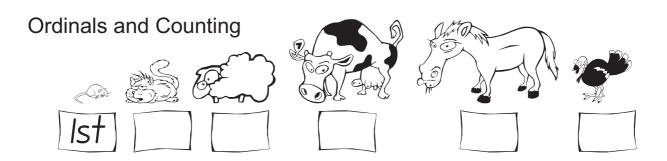
We hope that you and your child have fun with Mighty Maths. At Mahobe, we certainly had fun putting it all together for you.

What Is In This Book?

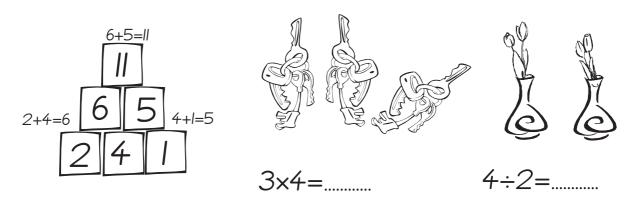
In this book you look at:







Addition, Subtraction, Multiplication and Division



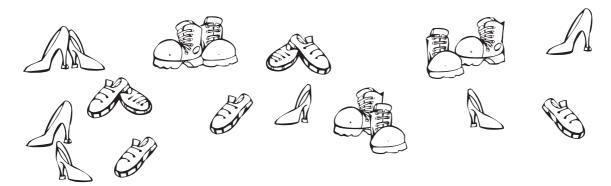
Shapes and Patterns

_	\wedge \wedge \wedge \wedge
	__\triangles
squares	
hexagons (
pentagons cir	rcles rectangles
000000	octagons
There are triangles. A tr	riangle has sides.
There are squares. A squ	uare has sides.
All sides of the square are the	same
There are rectangles. A	rectangle has sides.
There are pentagons. A	pentagon has sides.
There are hexagons. A h	exagon has sides.
There are octagons. An	octagon has sides.

There are circles. A circle is round.

Finding a Match

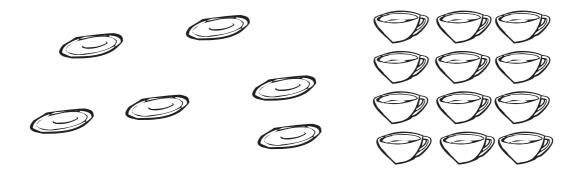
Colour the same shoes the same colour.



Put a cross through the car that does not match.



Colour as many cups as there are saucers.



Join the pictures to the corresponding number on the number line.













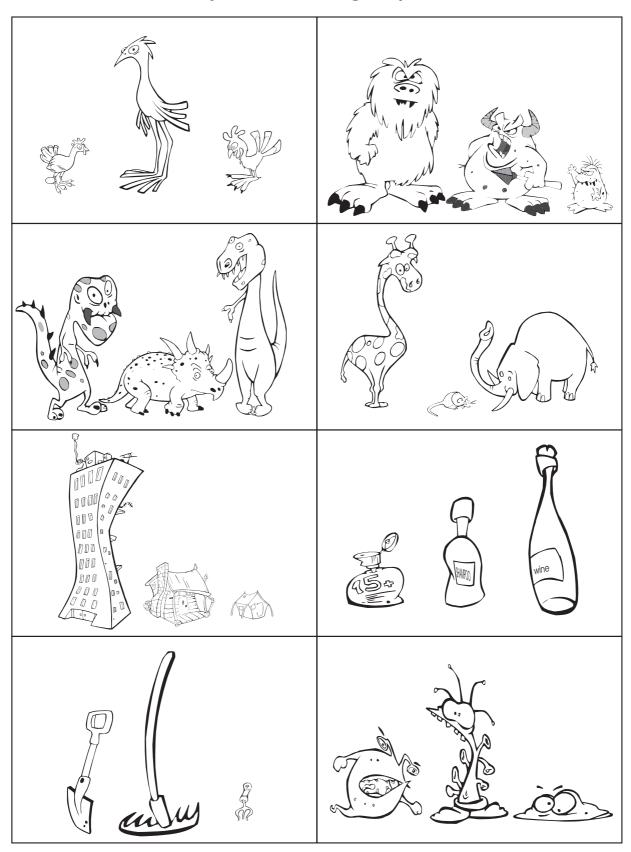
0 1 2 3 4 5 6 7 8 9 10

Recognising Shapes

A wedge is sliced out of a cake. The top of the wedge
is shaped like a
The top of this bench is shaped like
a
The top of this stool is shaped like
a
The top of your bed is shaped like
a
The sides of this picture frame are all
the same length. Therefore the shape of
the picture frame is a
The front of this torch is shaped like
(6) a

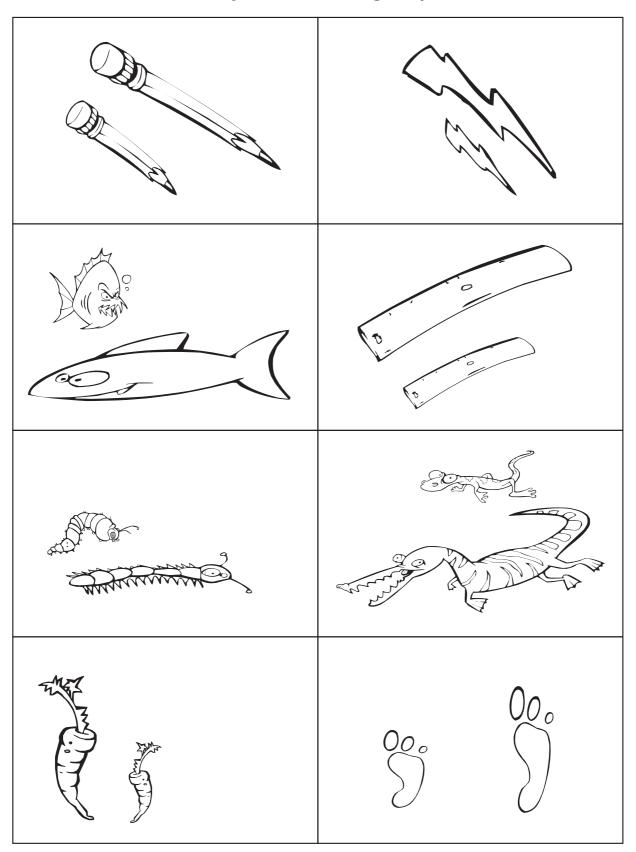
Estimating Height

Circle the tallest object in each group.



Length

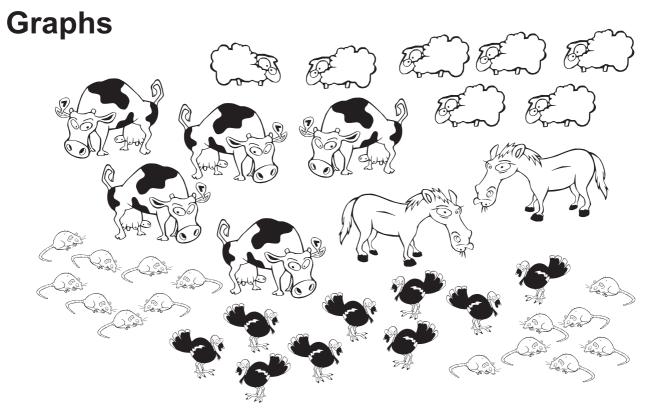
Circle the smallest object in each group.



Graphs

Stock at an electrical store. Each picture represents an item held in the store.

Irons	Ma Ma Ma Ma Ma Ma Ma
Kettles	
Mixers	ALALALA TALA
Phones	
Alarm Clo	ocks
	# # # # # # # # # # # # # # # # # # #
Radios	DENO DENO DENO DENO DENO
How many i	irons?
The are	kettles and mixers.
The item w	ith the greatest number is
There are .	more alarm clocks than radios.
There are .	less mixers than kettles.
The shop bu	uys 5 more radios. How many radios does it
have in stor	re now?

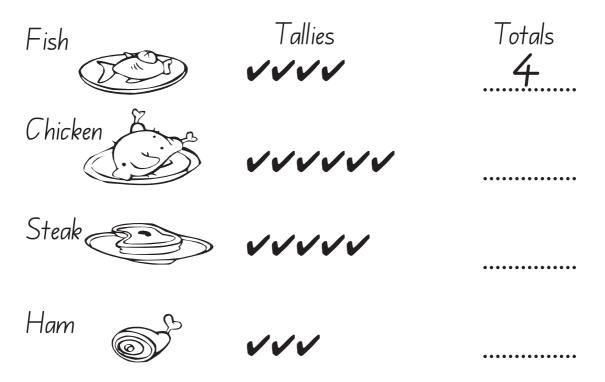


Mahobe Farm has all the animals above. Draw a circle in the list below to represent each animal.

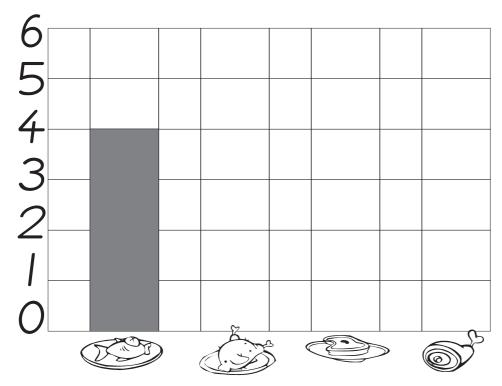
Turkeys	00000000
Cows	
Sheep	
Mice	
Horses	
	••••••••••••
Altogeth	er there are horses, cows and sheep.
There ar	e a total of animals on Mahobe Farm.

Graphs

A survey is taken to work out 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.



Combinations

Below are different choices for a meal. You must chose 1 item from each group. Write the different meals that can be chosen.

Group 1	Group 2	Group 3
Fish Chicken	Fries	Ice Cream Cake Grapes
••••••	•••••	••••••
•••••••	••••••	••••••
•••••••	••••••	••••••
••••••••	•••••	••••••

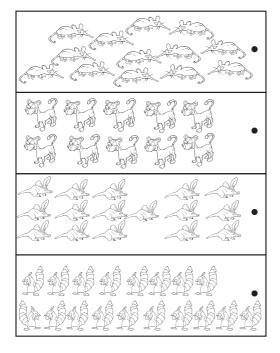
Counting to 20

Match each set with the correct number word.

	five	
	nine	
	fourteen	
	twenty	
	eight	
	sixteen	
	eighteen	GARAGARAGARAGA
	twelve	
14 15 14 15 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	thirteen	
A SA	seventeen	
	seven	FKKKKKK KKKKK
	fifteen	PKKKKKKKK

Equal Sets

Draw a line between the sets that contain the same number of objects.



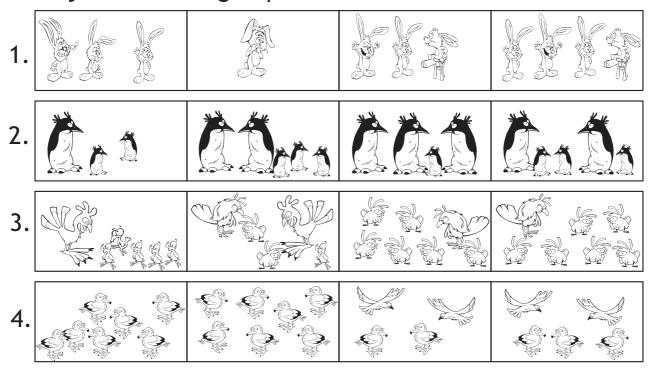
00

Circle the correct number of objects.

1	
3	99999
7	
10	
12	
13	000000000000000000000000000000000000000
15	222222222222222222222222222222222222222
17	9999999999999999
19	***************************************
20	6555555555555555555

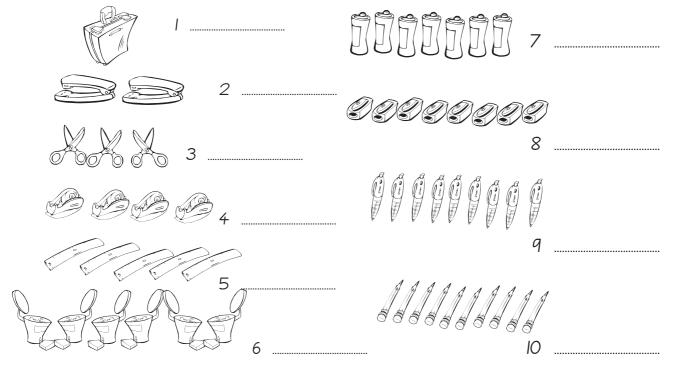
Equal Sets

Put a circle around the sets that contain the same number of objects in each group.



Numbers and Number Words

Write the number word beside each number.



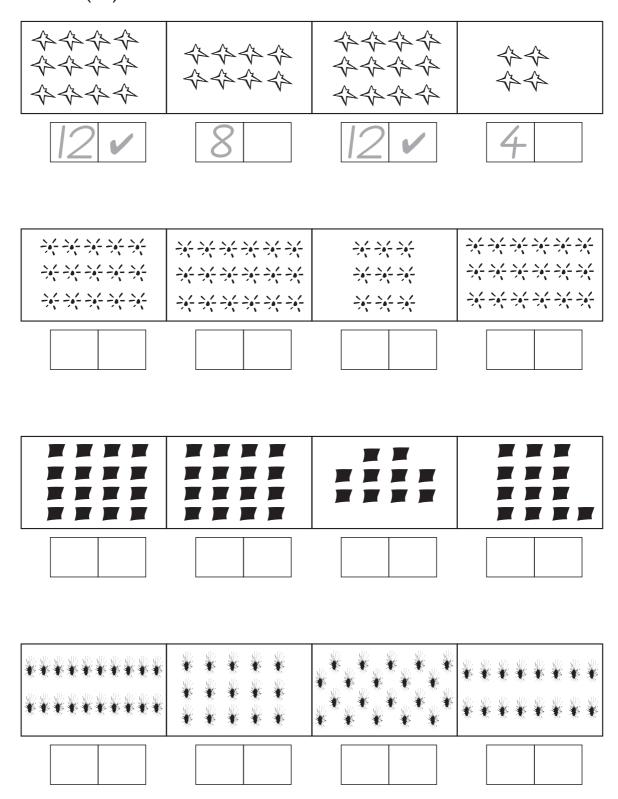
Comparing Numbers

Write the number of objects in each row. Compare each row and tick (\checkmark) the row that has less items.

	8	
QQQQQQ	6	/
22222		

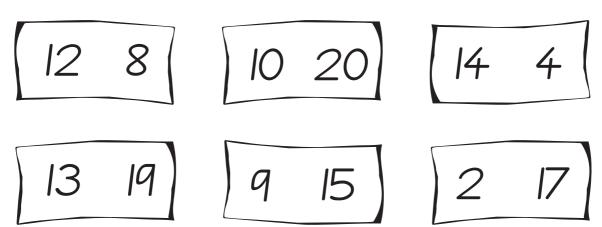
Comparing Numbers

Write the number of objects in each set. Compare each set and tick (\checkmark) the sets that have the same number of items.

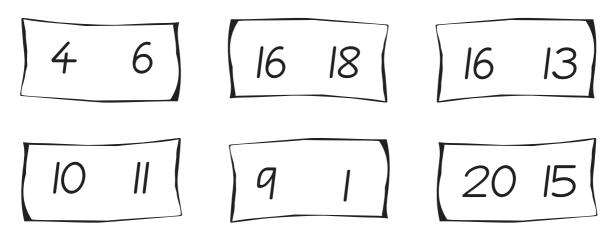


Comparing Numbers - Greater and Smaller

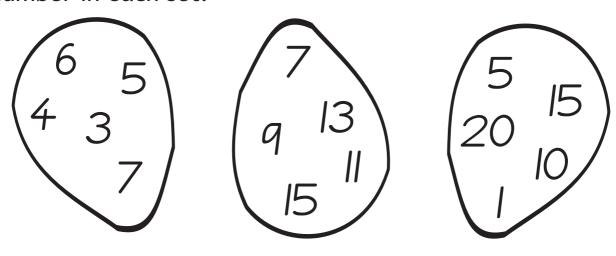
Circle the greater number in each set.



Circle the smaller number in each set.



Circle the greatest number and cross (X) the smallest number in each set.



Ordinal Numbers

Shade the 6th circle from the right. Shade the 2nd triangle from the left. Shade the 5th square. Shade the 4th rectangle. Shade the 8th pentagon from the left. Shade the 10th hexagon from the right. Shade the 3rd star.

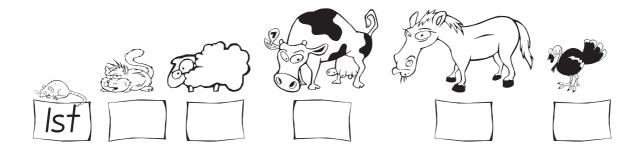
19

Ordinal Numbers



Fill in the blanks below with 1st, 2nd, 3rd, 4th or 5th.

Fill in the blanks below with 1st, 2nd, 3rd, 4th, 5th or 6th.



The sheep is from the left.

The horse is from the left.

The cow is from the left and from the right.

The turkey is from the right and from the left.

Ordinals and Counting

Colour in 6 circles.

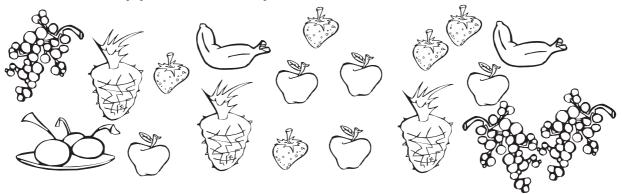
Put a tick in the 3rd circle from the left.

What is its position from the right?

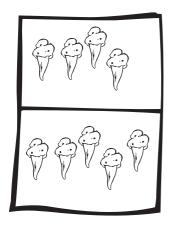


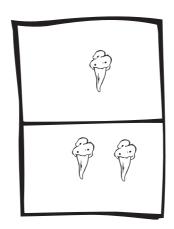


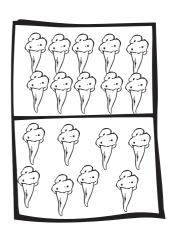
Find all the apples in the picture and colour them red.



Each card below contains two groups of ice creams. Circle the group on each card that has the most ice creams.

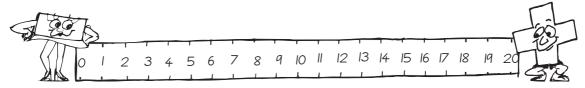




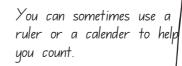


Numbers and Their Positions

Use the number line to find the correct numbers.



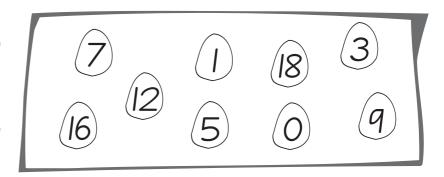
- 1. is one after 15.
- 2. 12 is one after
- 3. is two before 6.
- 4. 7 is three before



- 5. The numbers on either side of 1 are and
- 6. The numbers on either side of 12 are and
- 7. 19 is two after
- 8. Continue the sequence 10, 9, 8,
- 9. Continue the sequence 0, 2, 4,,
- 10. Continue the sequence 1, 3, 5,,

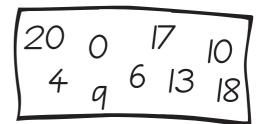
Colour the numbers greater than 7 red.

Colour the numbers less than 7 blue.



In Order

Write the numbers in order, then answer the questions.





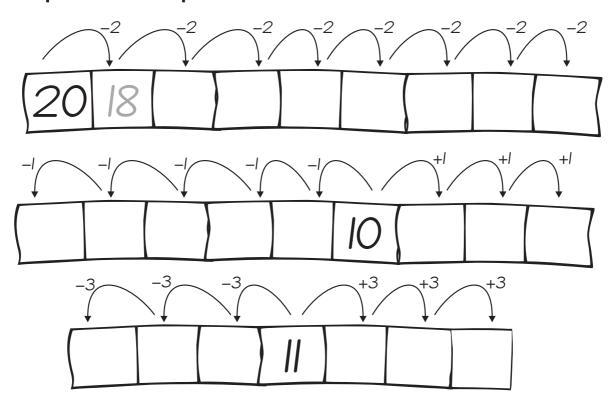
The biggest number is

The smallest number is

The odd numbers are

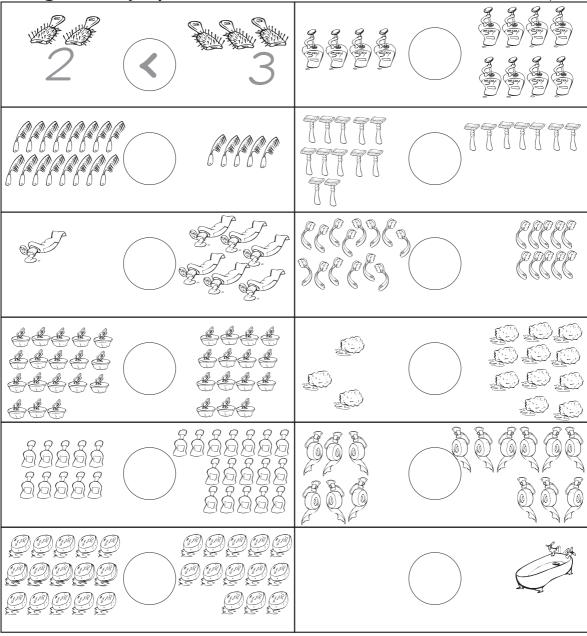
The even numbers are

Complete the patterns



Greater or Less Than

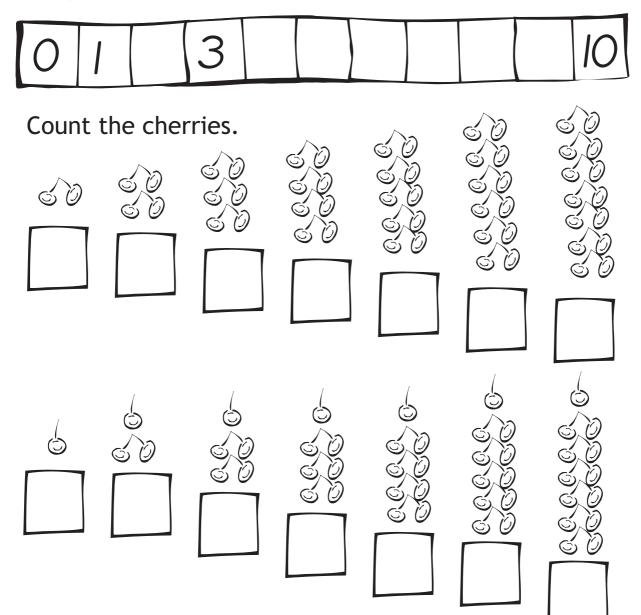
In the circle put a greater than (>) or less than (<) sign. (The sign always points towards the smaller number.)



Put a circle around all the numbers less than 15. Put a cross through all the numbers greater than 12.

Numbers and Number Sequences

Complete the numbers in the number line.



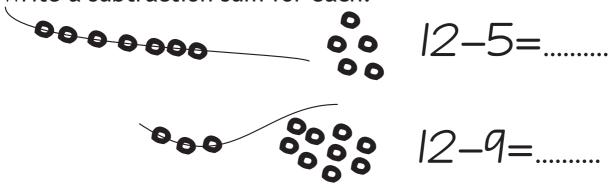
There were 12 beads on each piece of string. Some beads have fallen off.

Write a subtraction sum for each.

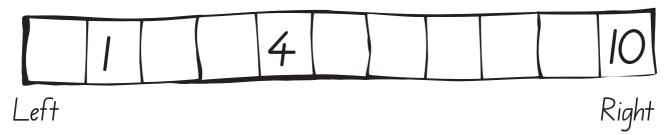
Adding and Subtracting

There were 12 beads on each piece of string. Some beads have fallen off.

Write a subtraction sum for each.



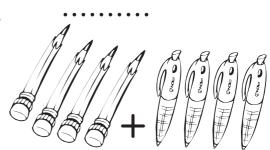
Complete the numbers in the number line.

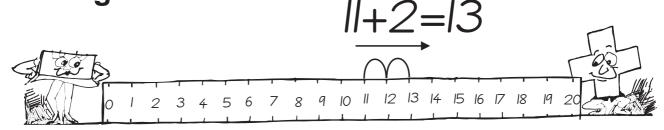


Use the number line to show where you end up if:

- from 9, you move 3 to the left.
- from 3, you move 2 to the right.
- from 7, you move 5 to the left.
- from 2, you move 8 to the right.
- from 6, you move 6 to the left.
- from 5, you move 4 to the right.

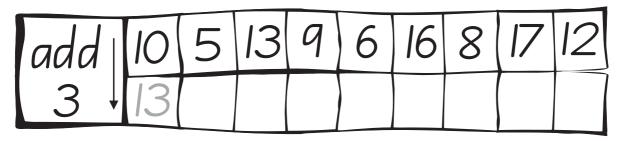
Write an addition sum for the number of pens and pencils.

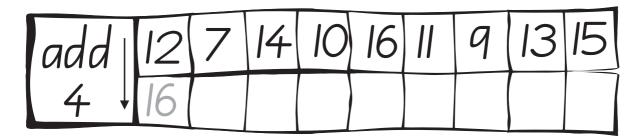


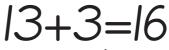


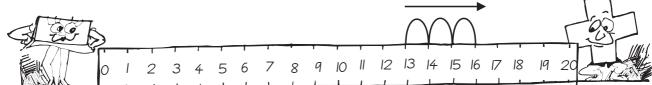
Add 2 to these numbers.

Complete these addition strips.



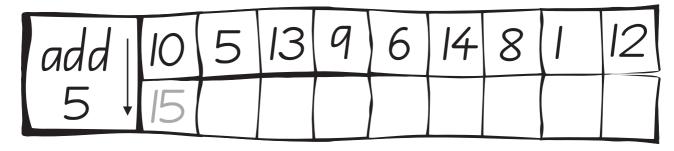


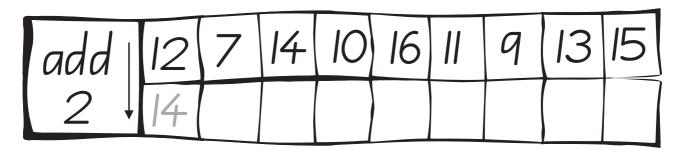




Complete these additions.

Complete these addition strips.





8+6=14



Complete these additions.

Write down the total of the numbers on each pair of cards.



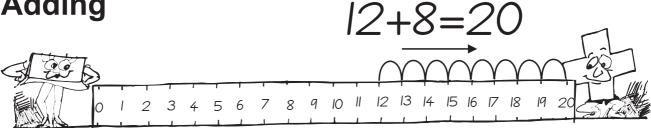




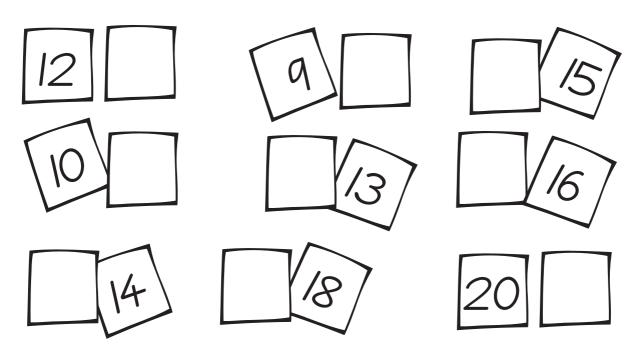






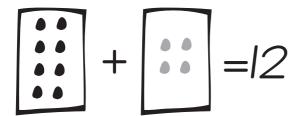


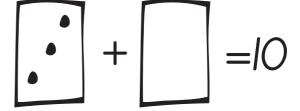
Each pair of cards should sum to total 20. Write down the missing numbers.

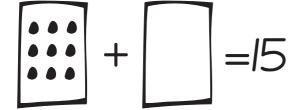


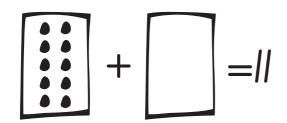
Complete these additions.

Draw spots on the blank cards to make the totals.







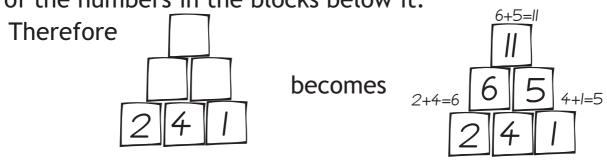


Complete these additions.

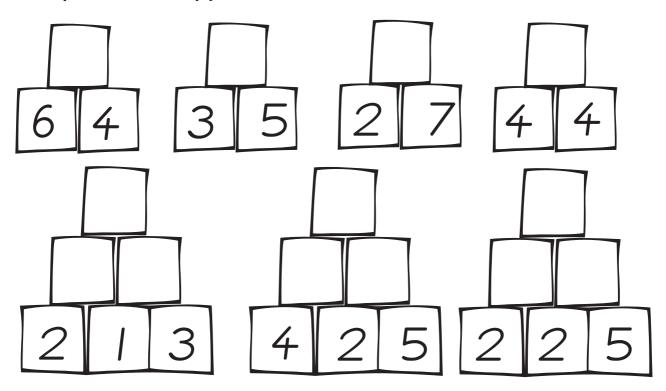
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Addition

The following pyramids are formed by adding each of the numbers in the blocks below it.



Complete these pyramids.



Complete these additions.

Arithmetic

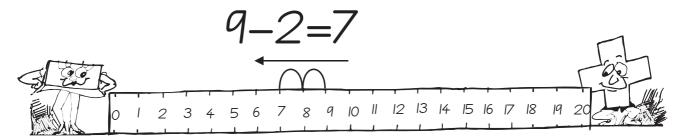
													10	10	17	IE	16	17	10	10	20
C)	1	2	3	4	5	6	7	8	9	10	ll .	12	13	14	15	10	17	18	14	20

Use the number line to show where you end up if:

- from 14, you move 2 to the left.
- from 17, you move 2 to the right.
- from 16, you move 5 to the left.
- from 8, you move 8 to the right.
- from 19, you move 6 to the left.
- from 11, you move 4 to the right.

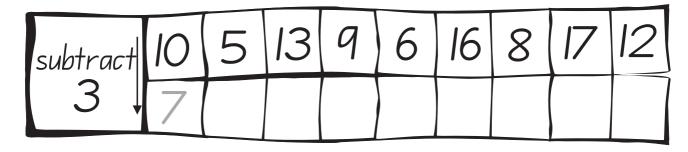
Complete the additions by writing in the missing numbers.

Subtraction

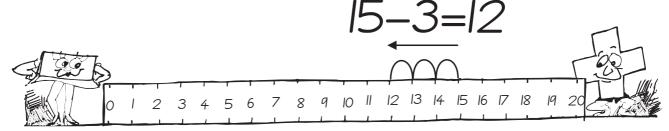


Complete these subtractions.

Complete these subtraction strips.



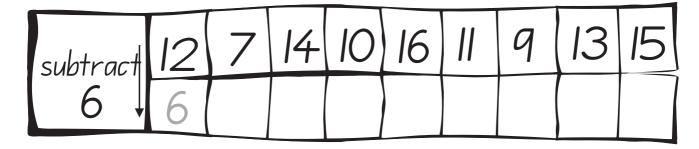
Subtraction



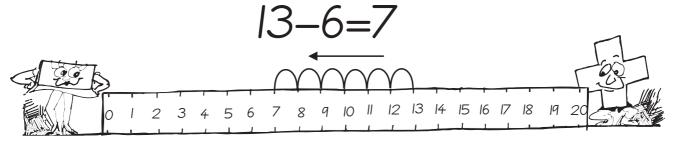
Complete these subtractions.

Complete these subtraction strips.

subtract	10	5	13	9	6	14	8	11	12
5 +	5								



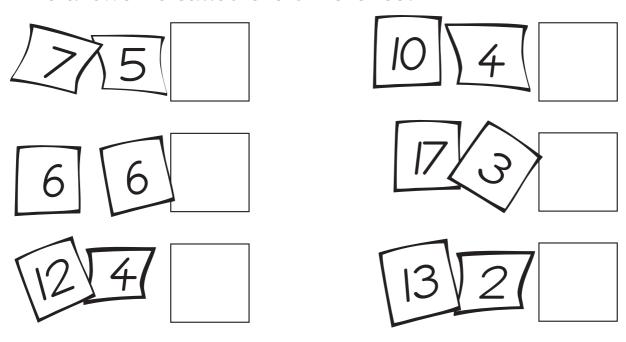
Subtraction



Complete these subtractions.

17-5=

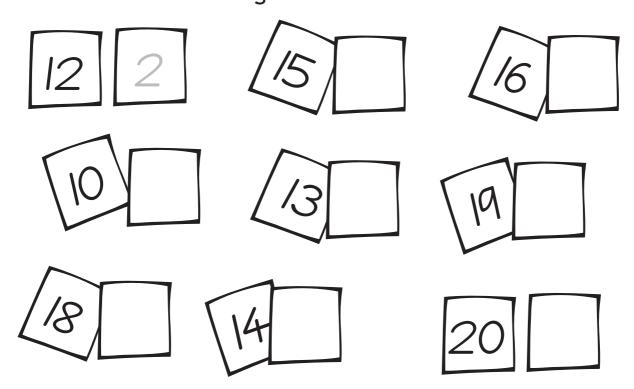
Subtract the smaller number from the bigger. The answer is called the difference.



11-6=....

Subtraction 12-2=10

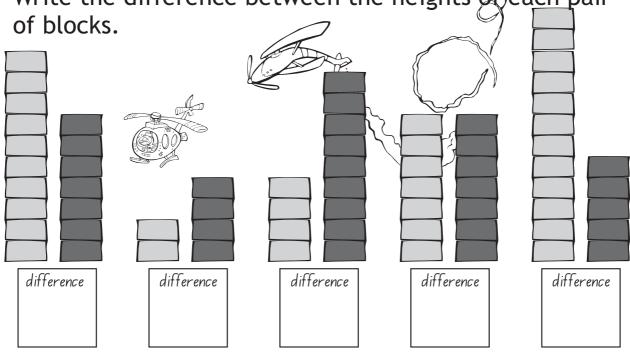
The difference between each pair of cards should be 10. Write down the missing numbers.



Complete these subtractions.

Subtraction

Write the difference between the heights of each pair



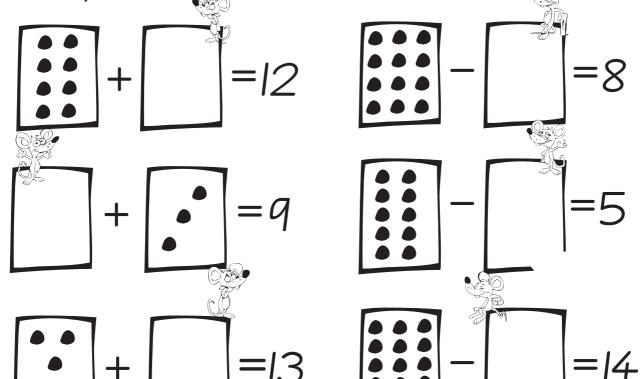
Complete the subtractions by writing in the missing numbers.

5 6 7

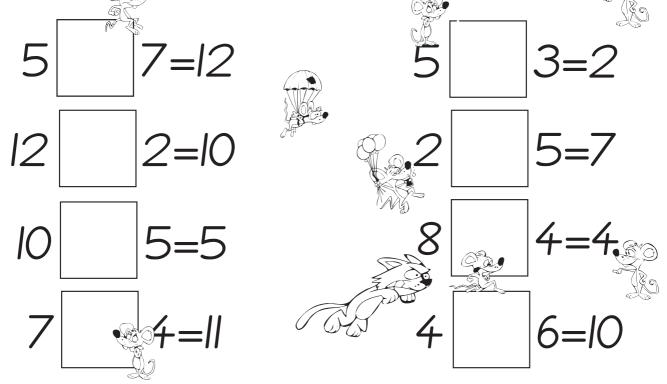
8 9 10 11 12 13 14 15 16 17 18

Subtraction

Draw spots on the cards to make these totals.

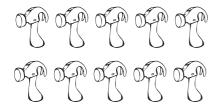


Complete these sums by writing in the missing sign.

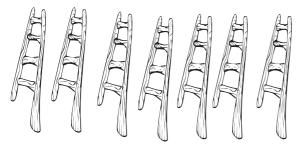


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Describing Groups of Objects







..... row of

Total =.....



..... rows of

Total =.....



..... rows of

Total =.....



..... rows of

Total =.....



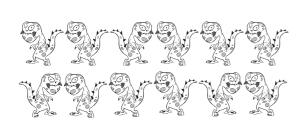
..... rows of

Total =.....

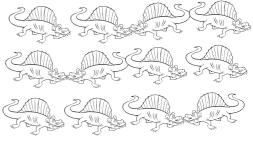
..... rows of

Total =.....

Describing Groups of Objects



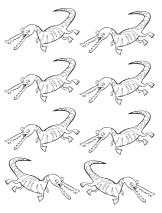
..... rows of



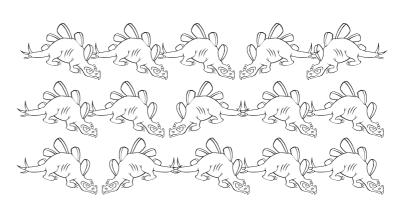
..... rows of

Total =.....

Total =.....

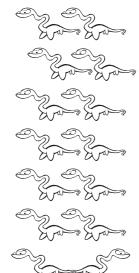


..... rows of



..... rows of

Total =.....



..... rows of

Total =....

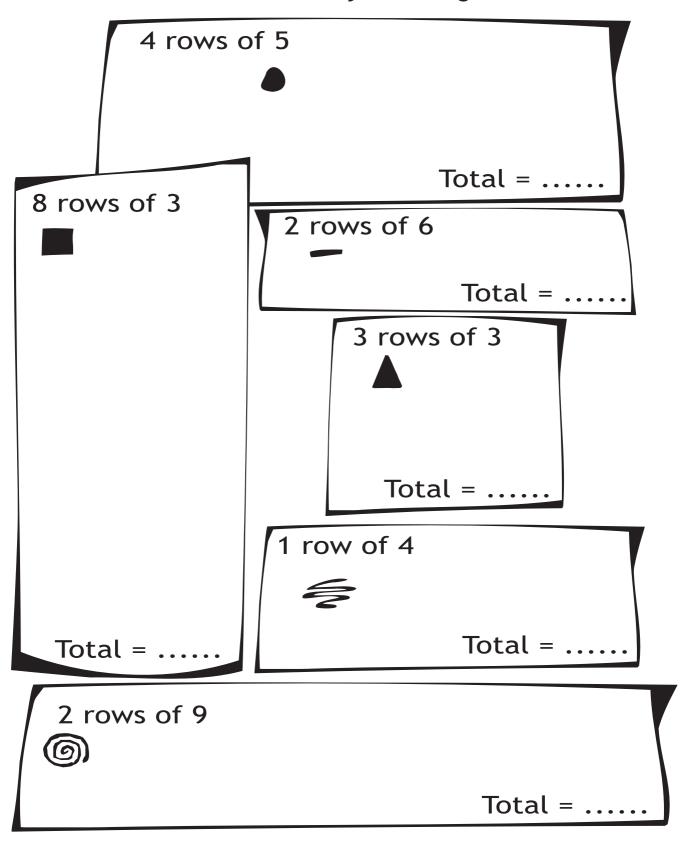
..... rows of

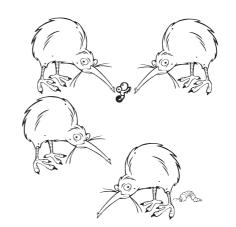
Total =.....

Total =.....

Describing Groups of Objects

Draw the correct number of objects and give the totals.





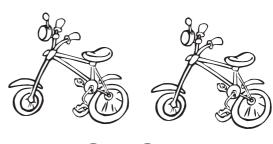
Write in the missing numbers.

I kiwi $\mid 2 \mid$ 1



2 wheels on each bicycle.



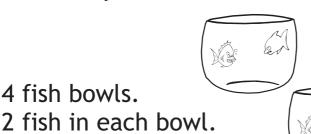




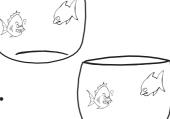
3 cakes.

2 candles on each cake.

How many candles?











$$4\times2=...$$

How many fish?

4 fish bowls.















5 bucket and spade sets.

2 spades in each set.

How many spades?











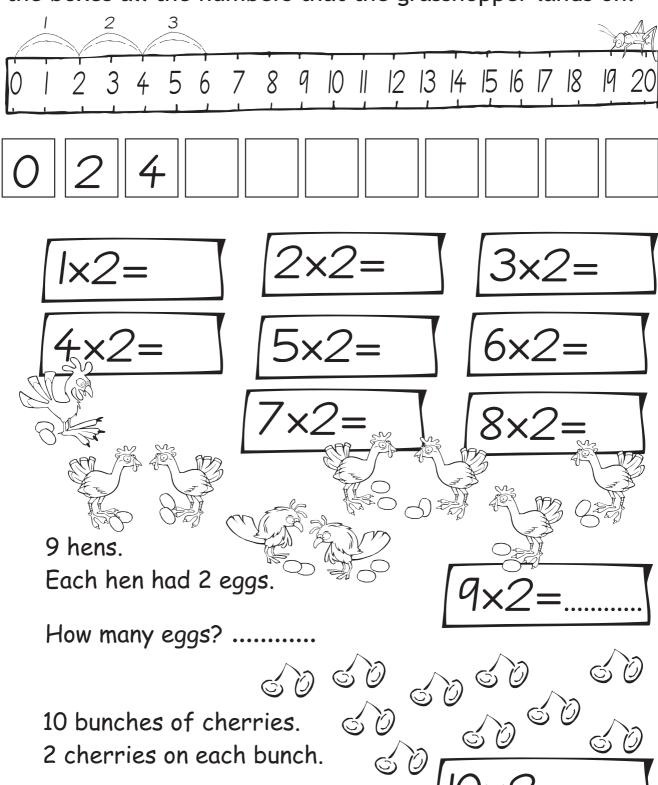
How many eggs?







The grasshopper jumps along the number in 2's. Write in the boxes all the numbers that the grasshopper lands on.

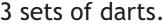


How many cherries?

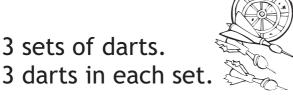


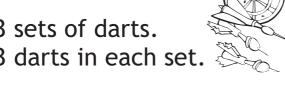
3 fish in each bowl.



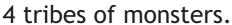


How many darts?





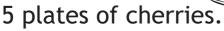




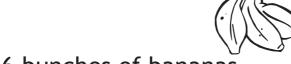
3 monsters in each tribe.

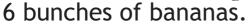




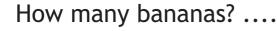


3 cherries on each plate.

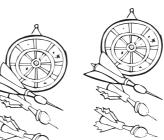




3 bananas in each bunch.



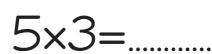










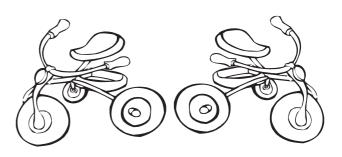




2 tricycles.

3 wheels on each tricycle.

How many wheels?



2×3=.....

3 stools.

3 legs on each stool.

How many legs?



3×3=.....

4 key rings rings.

3 keys on each ring.

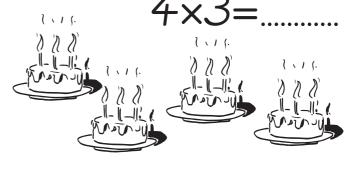
How many keys?



5 cakes.

3 candles on each cake.

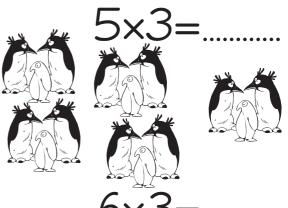
How many candles?



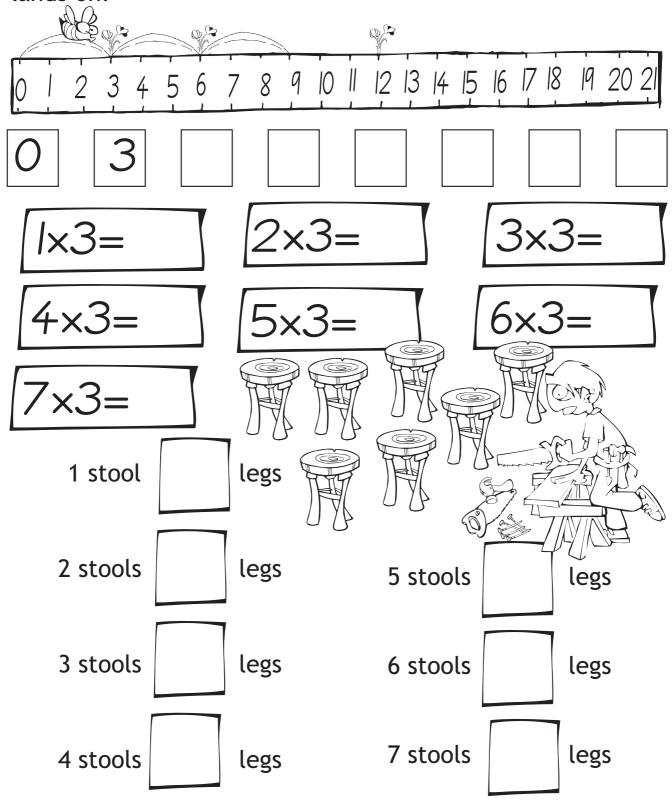
6 families of penguins.

3 penguins in each family.

How many penguins?

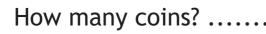


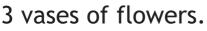
The bee flies along the number line and lands on every 3rd number. Write in the boxes all the numbers that the bee lands on.



2 piles of coins.

4 coins in each pile.





4 flowers in each vase.





4 penguins in each family.

How many penguins?



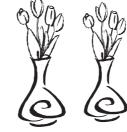
4 chicks with each hen.

How many chicks?

Cover up all your answers and try to remember the answers to these multiplications.











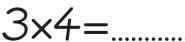
3 sets of keys.

4 keys in each set.













4 batteries for each torch.





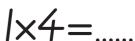


How many batteries?



1 table.

How legs on the table?



4 piles of coins.

4 coins in each pile.

How many coins?



2 bowls fish.

4 fish in each bowl.

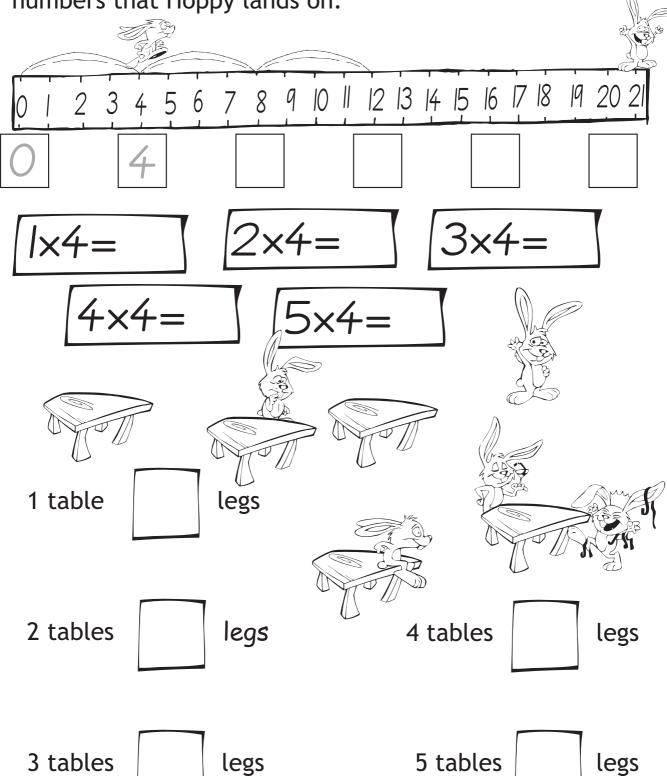


50

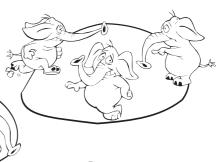


How many fish?

Hoppy the rabbit jumps along the number line and lands on every 4th number. Write in the boxes all the numbers that Hoppy lands on.

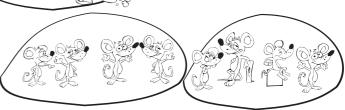


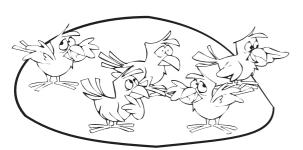
Write in the missing products.



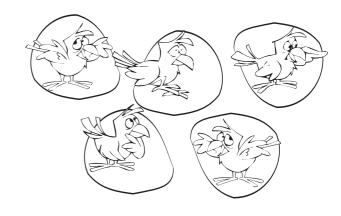








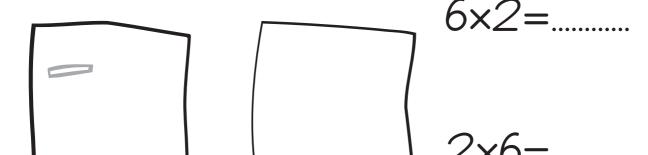






Complete the pictures then write the missing products.





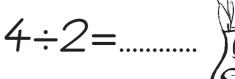
Dividing By Two



4 flowers in a vase.

Divide the flowers into 2 vases.

How many flowers in each vase?





6 fish in a bowl.

Divide the fish into 2 bowls.

How many fish in each bowl?





8 batteries.

Divide the batteries into 2 torches.

How many batteries in each torch?



10 coins.

Divide the coins into 2 piles.

How many coins in each pile?





Dividing By Two

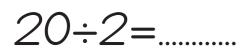


$$6 \div 2 = 3$$

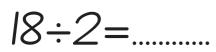




999999999

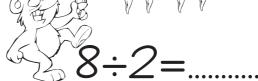
















Dividing By Three and Four







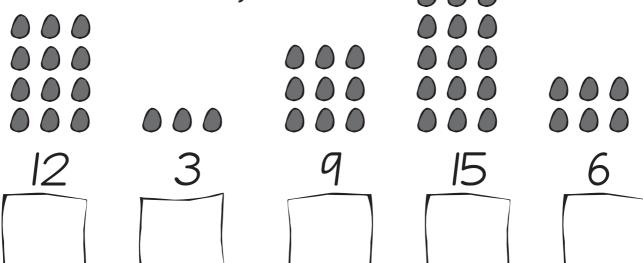




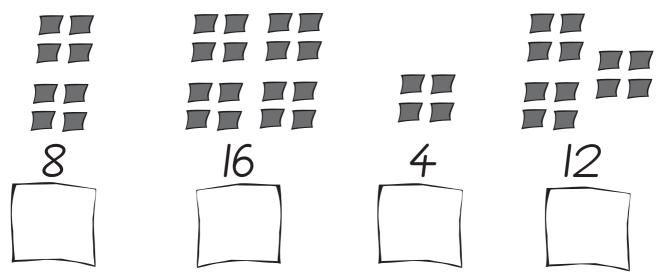


Dividing By Three and Four

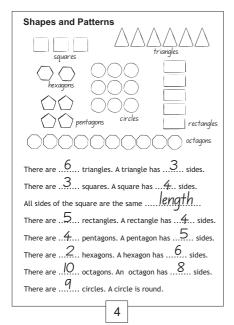
Divide each number by 3.

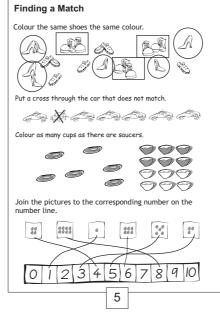


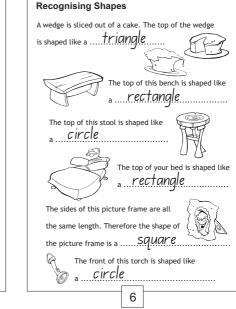
Divide each number by 4.

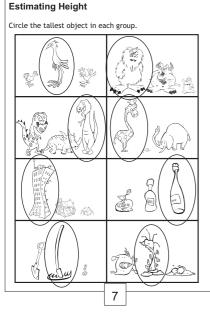


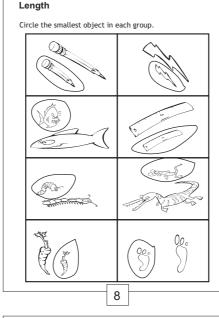
Can you remember these divisions?

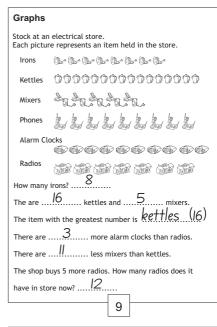




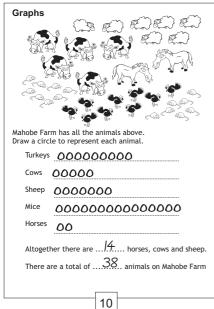


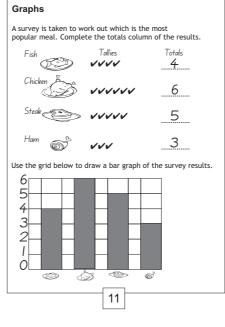


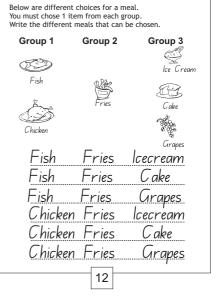


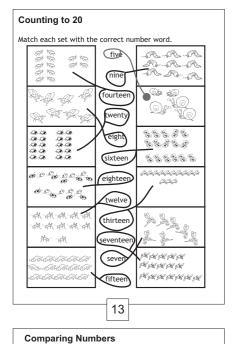


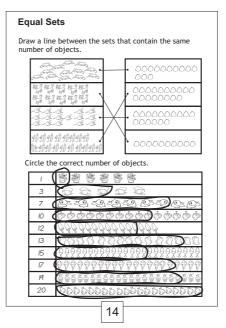
Combinations

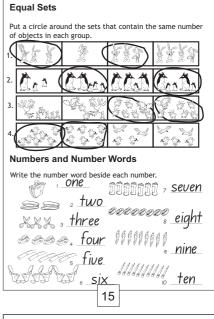


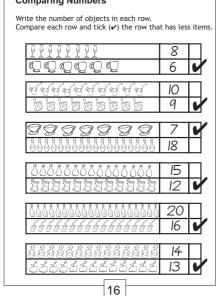


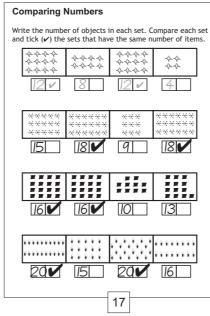




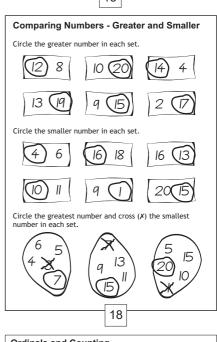


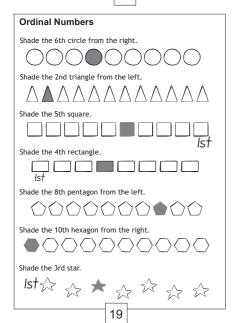


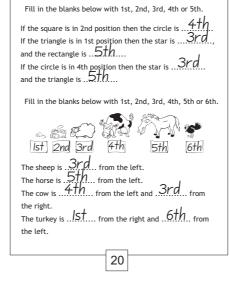


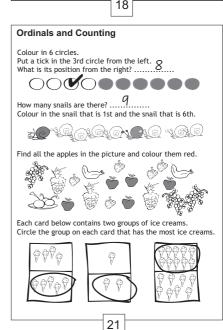


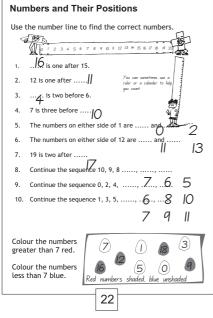
Ordinal Numbers

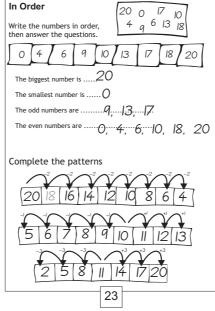


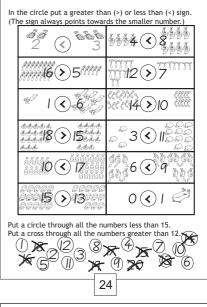




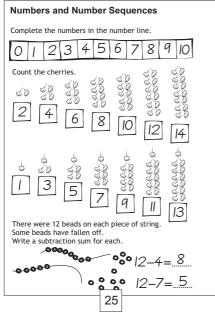


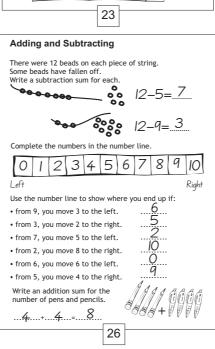


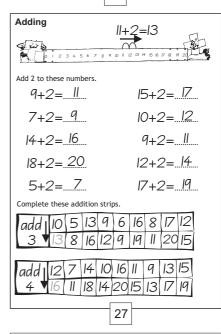


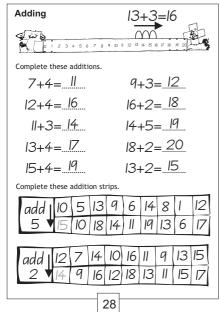


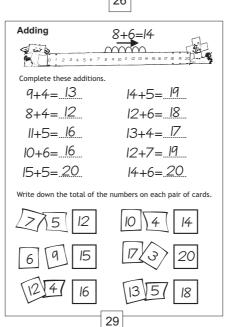
Greater or Less Than

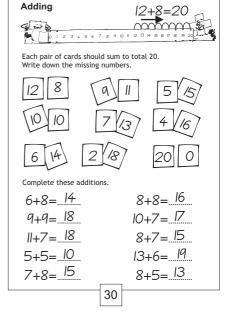


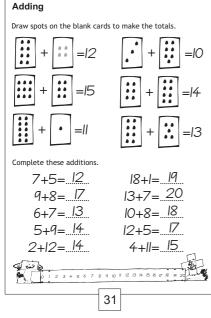










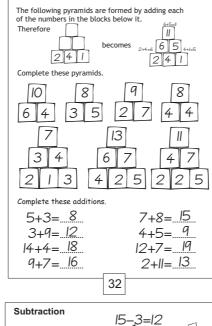


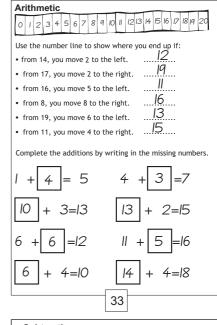
Subtraction

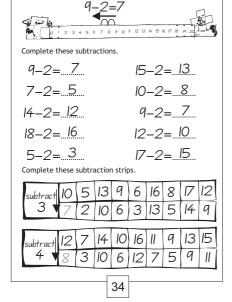


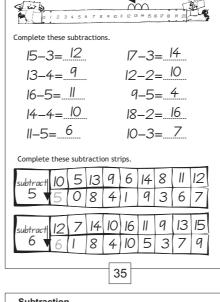


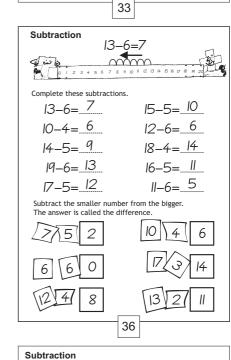
Addition

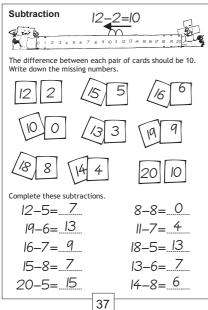


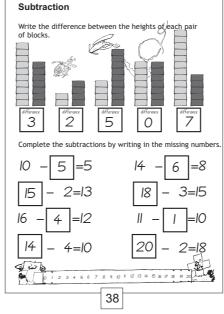


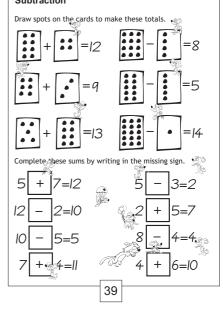


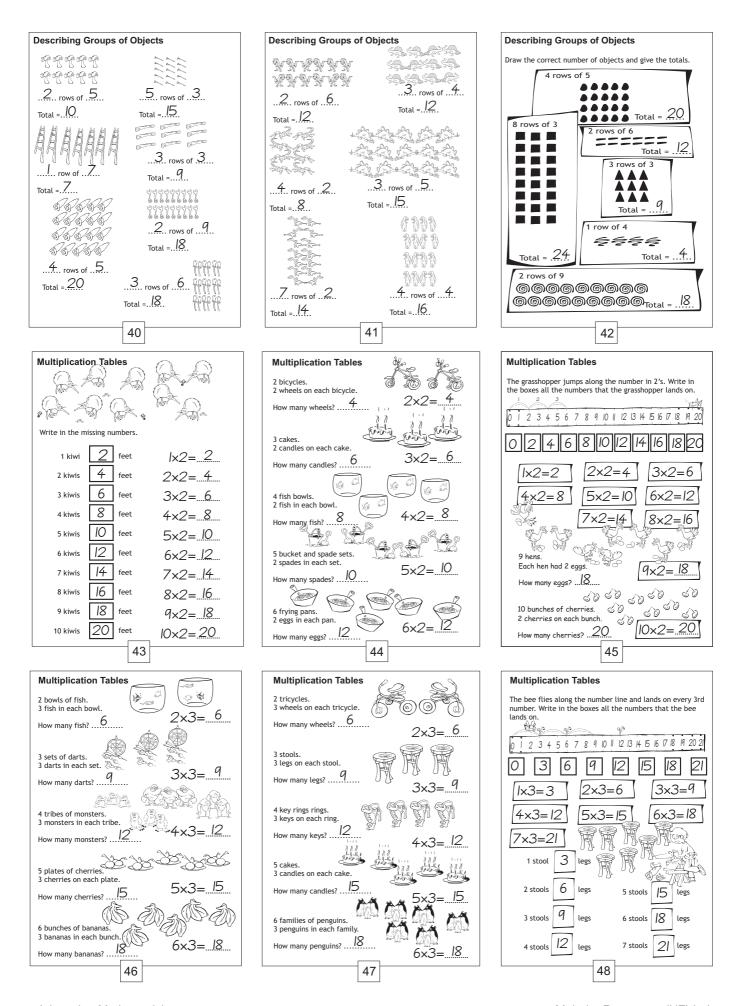


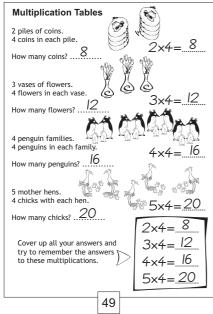


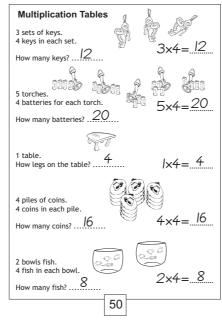


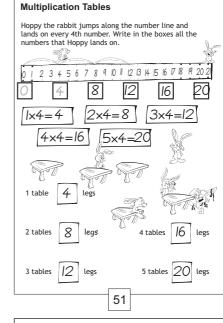


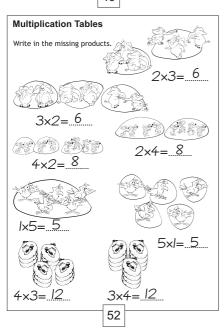


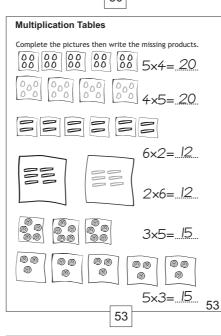


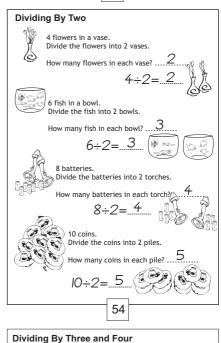


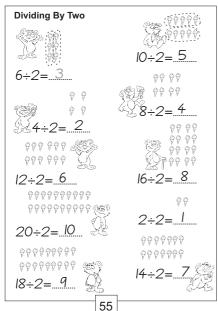


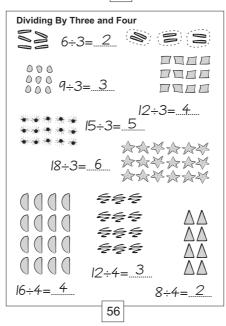


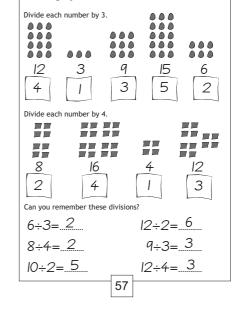














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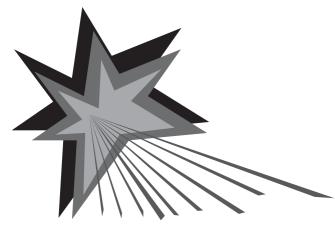
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