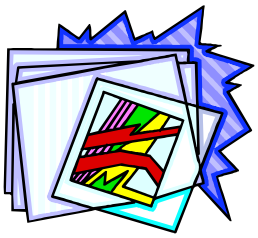
Written in NZ for NZ

Help Me at HOME Series

Curriculum Strand Worksheets

A Teacher's resource supplied as PHOTOCOPY MASTERS

Book 2b

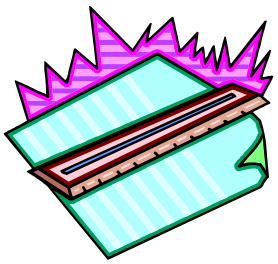


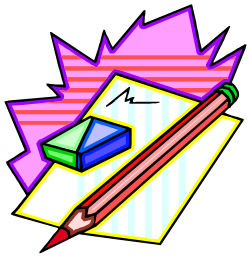
This resource contains

40 CURRICULUM STRAND WORKSHEETS

which covers **Level 1** & some **Level 2** of the achievement objectives as outlined in the ***Mathematics in the New Zealand Curriculum*** for the strands ...

Number & Algebra,
Measurement & Geometry
and **Statistics.**





This resource is to be used in conjunction with **Book 2a** and supports the **Numeracy Professional Development Project Stage 4**

Author: A. W. Stark

AWS Publications Ltd

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Help Me at HOME Series

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A Teacher's resource supplied as PHOTOCOPY MASTERS

Book 2b

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This resource is to be used in conjunction with Book 2a and supports the Numeracy Professional Development Project Stage 4

Author: A. W. Stark

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AH2b

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Note from the author:

About this resource ...

Help Me at Home Curriculum Strand Worksheets
- Book 2b (Code: AH2b)

is one of a series of **TWO sets** of 8 resources and has been written to cover the achievement objectives as outlined in the ***Mathematics in the New Zealand Curriculum*** (2007 revised edition) document for the teaching areas or strands of ... **Number** & **Algebra**, **Measurement** & **Geometry** and **Statistics**.

Resource Book 2b is to be used in conjunction with a second resource, Book 2a.

Help Me at Home Number Knowledge Worksheets
- Book 2a (Code: AH2a)

Book 2a has been written to support the ***Numeracy Professional Development Project*** currently being implemented within many New Zealand schools.

Background Information:

The Numeracy Professional Development Project being implemented in many schools involves a **knowledge section** and a **strategy section**.

The **knowledge section** introduces and revises the key number knowledge facts required.

The **strategy section** describes the mental processes students employ to estimate answers and solve problems involving the four operations of addition, subtraction, multiplication and division.

The **strategy stages** are listed in this table.

The aim of this project is to equip students with various strategies that allow them to be successful at Mathematics.

In order for this to occur, it is essential for students to be confident with number knowledge.

	Strategy Stages
0	Emergent
1	One-to-one Counting
2	Counting from One on Materials
3	Counting from One by Imaging
4	Advanced Counting (Counting On)
5	Early Additive Part-Whole
6	Advanced Additive Part-Whole
7	Advanced Multiplicative Part-Whole
8	Advanced Proportional Part-Whole

Without the 'knowledge', that is, knowing the basic numeracy facts, it is difficult for a student to progress through the strategy stages. Students move through the strategy stages at different rates and may be working at different stages given a certain problem. This is often a result of gaps in key knowledge, hence it CANNOT be stressed enough the importance of learning the numeracy facts. How children learn the numeracy facts is not as important as knowing them. These resources are designed to systematically introduce and revise the key numeracy facts.

How to use these resources:

There are **2 sets** of **8** resources in this series.

The table opposite shows the suggested Year Group each book can be used at, but this is only a suggestion.

Example: *1 - **2** - 3 means it is likely to be used at Year 2, the bold underlined number.*

Book	Resource Code	Suggested Year Group (underlined)	Strategy Stages covered	Curriculum Level
1a / 1b	AH1a & AH1b	1 - **2** - 3	1 to 3	1
2a / 2b	AH2a & AH2b	2 - **3** - 4	4	1 / 2
3a / 3b	AH3a & AH3b	3 - **4** - 5	4 & 5	2
4a / 4b	AH4a & AH4b	4 - **5** - 6	5 & 6	2 / 3
5a / 5b	AH5a & AH5b	5 - **6** - 7	6 & 7	3
6a / 6b	AH6a & AH6b	6 - **7** - 8	6 & 7	3 / 4
7a / 7b	AH7a & AH7b	7 - **8** - 9	6 to 8	4
8a / 8b	AH8a & AH8b	8 - **9** - 10	6 to 8	5

Why so many resources?

A note for Teachers

There are 2 sets of 8 resources in this series to allow you to have a different book available each year for classes which are made up of mixed year groups. This will stop the problem of a student saying "We used this book last year!". Which book you use for your class is up to your professional judgement, taking into account which resource classes above or below your class might use.

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How to use these TWO resources - Book 2a & Book 2b

Book AH2a
40x Number Knowledge Worksheets

- This resource systematically introduces and revises the number knowledge, presented in various formats.
- Designed to reinforce the Numeracy Professional Development Project, it is intended that one worksheet per week is completed in order from worksheet 1 to worksheet 40.
- One worksheet per week is to be done in conjunction with one worksheet selected from the **Curriculum Strand Worksheet** resource **(Book 2b)**.
- **Book 2a** covers the **Strategy Stage** 4.

Select ONE worksheet from each book to make up your homework worksheet

Book AH2b
40x Curriculum Strand Worksheets

- The **40 worksheets** in this resource cover the Achievement Objectives as outlined in **Mathematics in the New Zealand Curriculum** for Number & Algebra, Measurement & Geometry and Statistics.
- These worksheets can be completed in any order.
- One worksheet is selected per week to be done in conjunction with one worksheet from the **Number Knowledge Worksheet** resource **(Book 1a)**.
- The worksheet selected per week relates to the topic being covered at school or as revision.
- **Book 2** covers Level 1 & some Level 2 of the **Curriculum**.

Note to Teachers:

- The aim of these TWO resources **(AH2a & AH2b)** are to provide the classroom teacher with a systematic and comprehensive series of worksheets, which form the basis of your mathematics homework.

Worksheets from Book 2a:

- **Photocopy** weekly and sequentially in order, **a Number Knowledge** worksheet from **Book 2a**. On the Number Knowledge worksheet, pupils can record their **Name**, **Term**, **Week** and the **Curriculum Strand Worksheet** that is also to be done that week.

Worksheets from Book 2b:

- **Select** and **photocopy** the appropriate **Curriculum Strand Worksheet** required, as determined by what you are currently teaching in class or a topic you are revising. In the table on the next page, record the curriculum worksheet being used each week.

Extension Activity for Parents:

- **Each Curriculum Strand Worksheet has an AT HOME activity as an extension activity for parents or care-givers.**
- Success in mathematics is greatly enhanced by having a good understanding of Number Knowledge. That is, from being able to add, subtract, multiply and divide with confidence, ... with success .... comes enjoyment.
- Either staple the two worksheets together or create a double sided homework sheet.

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Book 2a (AH2a) - Number Knowledge Worksheets

Number Knowledge Worksheet	Term & Week Enter details below	Curriculum Strand Worksheet Enter the worksheet number issued each week
1	Term: Week:	
2	Term: Week:	
3	Term: Week:	
4	Term: Week:	
5	Term: Week:	
6	Term: Week:	
7	Term: Week:	
8	Term: Week:	
9	Term: Week:	
10	Term: Week:	
11	Term: Week:	
12	Term: Week:	
13	Term: Week:	
14	Term: Week:	
15	Term: Week:	
16	Term: Week:	
17	Term: Week:	
18	Term: Week:	
19	Term: Week:	
20	Term: Week:	

Number Knowledge Worksheet	Term & Week Enter details below	Curriculum Strand Worksheet Enter the worksheet number issued each week
21	Term: Week:	
22	Term: Week:	
23	Term: Week:	
24	Term: Week:	
25	Term: Week:	
26	Term: Week:	
27	Term: Week:	
28	Term: Week:	
29	Term: Week:	
30	Term: Week:	
31	Term: Week:	
32	Term: Week:	
33	Term: Week:	
34	Term: Week:	
35	Term: Week:	
36	Term: Week:	
37	Term: Week:	
38	Term: Week:	
39	Term: Week:	
40	Term: Week:	

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Book 2b (AH2b) - Curriculum Strand Worksheets

(Tick next to worksheet as each ONE worksheet is issued per week)

		Tick			*Tick*
1	Identifying numerals and number words		21	Understanding weight	
2	Counting / colouring in shapes		22	Understanding volume	
3	Counting in 1's up to 100		23	Days of the week and months of the year	
4	Ordering numbers up to 100		24	Using calendars	
5	Reading and writing 2-digit numbers		25	Analogue time	
6	Numeracy facts revision 1 - Sums up to 10		26	Digital time	
7	Numeracy facts revision 2 - Sums up to 10		27	Introducing temperature	
8	Numeracy facts for sums of 11 to 18		28	2-Dimensional shapes	
9	Adding using the 10^{+} strategy		29	3-Dimensional shapes	
10	Introducing place value		30	Turning / Rotation	
11	Renaming numbers		31	Flipping / Reflections	
12	Recognising New Zealand coins		32	Sliding / Translation	
13	Skip counting in 2's		33	Sorting into groups	
14	Multiples of 2's / multiplication facts		34	Understanding and using tables	
15	Skip counting in 10's		35	Creating tally charts	
16	Multiples of 10's / multiplication facts		36	Understanding and drawing pictograms	
17	Can I have a half?		37	Understanding and drawing column graphs	
18	Can I have a quarter?		38	Ordering events & probability words	
19	Unconventional units for measuring length		39	Finding possible outcomes	
20	Introducing the METRE as measure of length		40	Simple probability	

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Curriculum Strand Worksheets

(Level 1 / 2)

Number & Algebra,

Measurement & Geometry,

and Statistics

Worksheets

Select **ONE** Curriculum Strand Worksheet per week from this book (AH2b) to be completed in conjunction with **ONE** Number Knowledge Worksheet, selected from Book 2a (AH2a).

Record your selection in the table at the front of this resource.

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1 Numerals and number words

Name: _____ AWS

(1) **Write in** the missing **numerals**, **English** or **Maori** number words in this table.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10	one, two, three, four, five, six, seven, eight, nine, ten	(ko)tahi, rua, toru, wha, rima, ono, whitu, waru, iwa, tekau

Numeral	English	Maori
1		(ko)tahi
2		
	three	
4		
		rima
	six	
7		
		waru
	nine	
10		

11, 12, 13, 14, 15, 16, 17, 18, 19, 20	eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty

Numeral	English
	eleven
12	
13	
	fourteen
15	
	sixteen
17	
	eighteen
19	
	twenty

(2) **Write** in the missing numbers as you count from **1** to **20**.

1, _____, _____, 4, _____, _____, 7,

_____, 9, _____, 11, _____, _____, 14,

15, _____, 17, _____, _____, _____

(3) **Write** in the missing numbers as you count backwards from **20** to **1**.

20, _____, _____, 17, _____, 15, _____,

_____, _____, _____, 10, _____, _____,

7, _____, _____, _____, 3, _____, 1

(4) **Write** the number that comes **after** ...

5, _____ 9, _____ 3, _____

12, _____ 18, _____ 16, _____

(5) **Write** the number that comes **before** ...

_____, 8 _____, 3 _____, 6

_____, 17 _____, 14 _____, 20

(6) **Write** the number that is **between** ...

2, _____, 4 5, _____, 7

16, _____, 18 11, _____, 13

The aim of this activity sheet is to recognize and match the numerals 1 to 20 with English and Maori (1 to 10) number words and revise counting from 1 to 20.

Suggested HOME activity:

Create some numeral and number word cards for the numbers on these worksheets. Mix the cards up and ask your child to match numeral cards with number word cards. Select a card at random and ask your child to say the number and then find the matching card.

Repeat exercises as above until your child can successfully count from 1 to 20 and say the number that comes after / before a given number.

Sign when completed: .....

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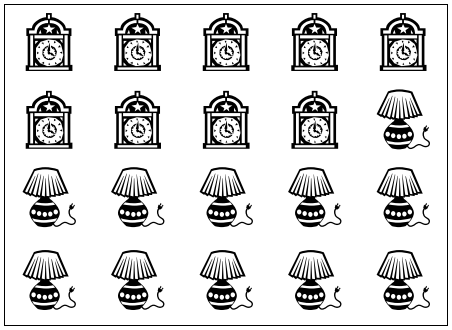
2 Counting / colouring in shapes

Name:

AWS

Count the number of each picture.
Write your answer in each box.

(1)



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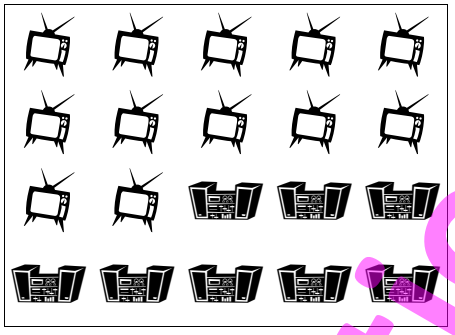
(2)



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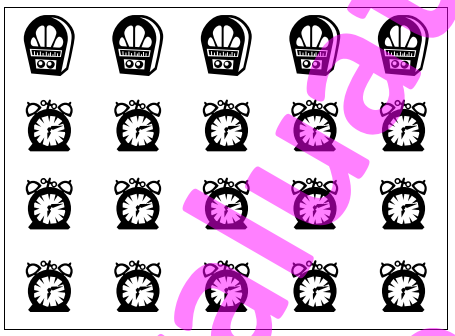
(3)



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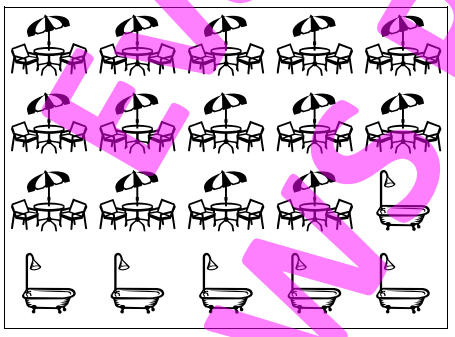
(4)



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(5)

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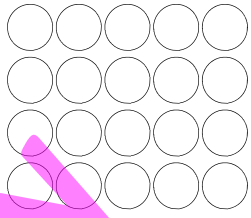
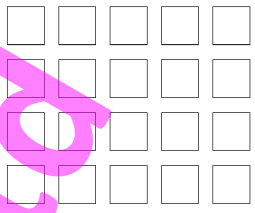
(6)

Colour in 10

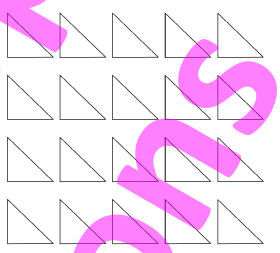


Colour in 8

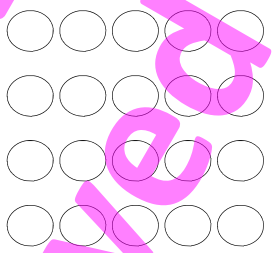


(7)

Colour in 13

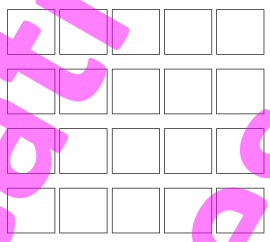


Colour in 20

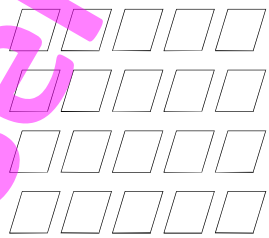


(8)

Colour in 9

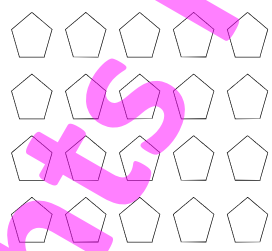


Colour in 17

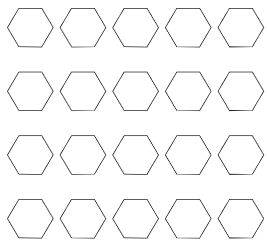


(9)

Colour in 19

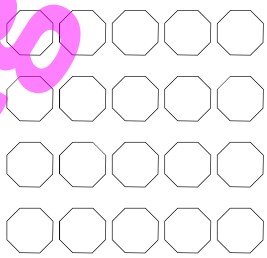


Colour in 7

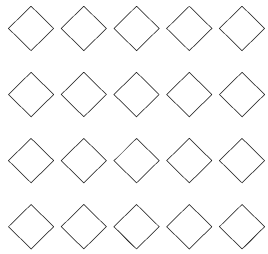


(10)

Colour in 16



Colour in 18



The aim of this activity sheet is to revise counting up to 20 by counting pictures and by colouring in shapes.

Suggested HOME activity:
Have a selection of up to 20 objects from around the house. Place a given number of them in front of your child and ask them to count how many. Give them all 20 objects and ask them to give you a certain number back.

Example: How many blocks is this? Can I have seventeen blocks?

Sign when completed: .....

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3 Counting in 1's up to 100

Name:

AWS

(1) **Write in** the missing **numerals** as you count from **1** to **100**.

			4		6			9	
	12			15			18		20
21		23				27			
	32				36				40
41			44		46		48		
			54			57			60
	62			65				69	
		73			76				80
81			84			87			
	92			95				99	

(2) **Write** the number that comes **after** ...

55, _____ 39, _____ 68, _____

41, _____ 80, _____ 52, _____

67, _____ 16, _____ 70, _____

(3) **Write** the number that comes **before** ...

_____, 32 _____, 54 _____, 82

_____, 67 _____, 79 _____, 30

_____, 75 _____, 41 _____, 95

(4) **Write** the number that is **between** ...

35, _____, 37 22, _____, 24

16, _____, 18 80, _____, 82

93, _____, 95 71, _____, 73

69, _____, 71 44, _____, 46

The aim of this activity sheet is to learn to count in 1's from 1 to 100.

Suggested HOME activity:

Point to any number between 1 and 100 on this page and ask your child to say that number. Draw your own 10 x 10 table and ask your child to write in the numbers 1 to 100.

Make up similar questions as above involving finding the numbers that are after or before a given number or between two numbers.

Sign when completed: .....

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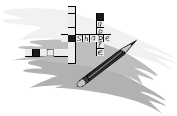
4 Ordering numbers up to 100

Name: _____ AWS

Write these whole numbers in **order** of **smallest** to **largest**.



(1) 9 10 18 13

_____, _____, _____, _____

(2) 23 14 32 50 41

_____, _____, _____, _____, _____

(3) 75 46 57 91 64 19

_____, _____, _____, _____, _____, _____

(4) If you **write** these numbers in order from **smallest** to **largest**,

47 16 75 61 53

... which number is first? _____

... which number is last? _____

... which number is in the middle? _____

Write these whole numbers in **order** of **largest** to **smallest**.

(5) 24 15 60 42 51

_____, _____, _____, _____, _____

(6) 76 85 67 18 58 81

_____, _____, _____, _____, _____, _____

(7) If you **write** these numbers in order from **largest** to **smallest**,

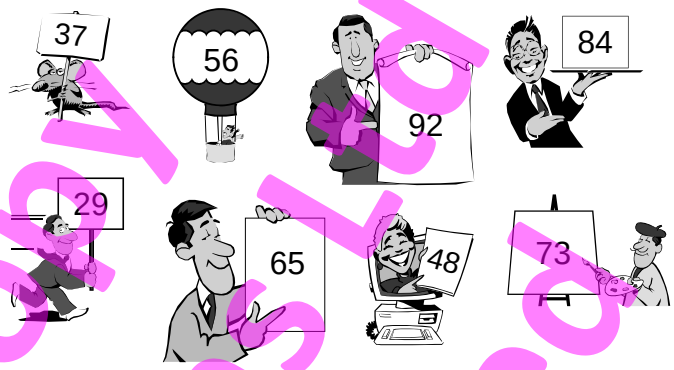
63 36 27 90 72

... which number is first? _____

... which number is last? _____

... which number is in the middle? _____

(8) **Write** these whole numbers in **order** of **smallest** to **largest**.



_____, _____, _____, _____

_____, _____, _____, _____

Harry counted the number of blocks he used to make 5 models (A to E).

Model	A	B	C	D	E
Number of blocks used	56	47	73	69	62

(9) Which model used the **least** number of blocks?

_____

(10) Which model used the **most** number of blocks?

_____

(11) **Write** the number of blocks used in order of **most** number used to **least** number used.

_____, _____, _____, _____, _____

The aim of this activity sheet is to learn to order numbers 1 to 100 from smallest to largest or largest to smallest and understand words such as first, last, most and least etc.

Suggested HOME activity:

Create some cards with numbers ranging from 1 to 100. Select 5, 6, 7 or more cards and ask your child to place them in order from smallest to largest or largest to smallest. Select pairs such as 23, 32 to make sure your child is not transposing the digits.

Make up similar word questions as above involving ordering numbers.

Sign when completed: .....

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5 Reading / writing 2-digit numbers

Name:

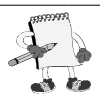
AWS

Write the 2-digit numbers that match these number words.

(1) thirty-two
(2) sixty-four
(3) twelve
(4) fifty-seven
(5) twenty-five
(6) ninety-three
(7) nineteen
(8) seventy-four
(9) fifty-one
(10) eighty-six
(11) thirty-one
(12) ninety-five
(13) thirty-seven
(14) sixty-one
(15) eighty-two
(16) seventy-five
(17) thirty-six
(18) eighty-one
(19) forty-nine
(20) fourteen
(21) ninety-eight
(22) twenty-seven
(23) seventeen
(24) ninety-four

86	63	93	
23	12	36	
49	31	39	
21	82	32	
95	14	72	
28	68	51	
13	16	75	
27	64	81	
46	17	18	
94	98	57	
41	91	59	
25	73	47	
89	52	19	
15	74	71	
61		37	

(25) forty-six
(26) fifteen
(27) sixty-eight
(28) twenty-three
(29) forty-seven
(30) fifty-two
(31) thirteen
(32) twenty-eight
(33) seventy-one
(34) eighty-nine
(35) twenty-one
(36) sixteen
(37) seventy-three
(38) forty-one
(39) thirty-nine
(40) sixty-three
(41) ninety-one
(42) seventy-two
(43) eighteen
(44) fifty-nine



The aim of this activity sheet is to read number words for 2-digit numerals and match words to numerals.

Suggested HOME activity:

Say aloud or write any 2-digit numeral in number words and ask your child to write it as a numeral. Concentrate on pairs where the digits have been reversed. *Example: 23, 32 ….. 47, 74 …. 56, 65 etc.*

Point to any 2-digit number and ask your child to say, then write each numeral as a number word.

Sign when completed: .....

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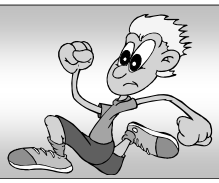
6 Revision 1 - Sums up to 10

Name: _____ AWS

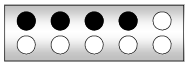
Let's test your skills ... how quickly can you **add** or **subtract** these numbers?

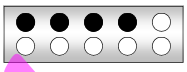


(1)	3	+	2	=	_____
(2)	4	-	1	=	_____
(3)	1	+	1	=	_____
(4)	3	-	2	=	_____
(5)	2	+	2	=	_____
(6)	6	-	4	=	_____
(7)	5	+	1	=	_____
(8)	7	-	3	=	_____
(9)	2	+	5	=	_____
(10)	5	-	2	=	_____
(11)	6	+	2	=	_____
(12)	8	-	4	=	_____
(13)	4	+	5	=	_____
(14)	9	-	2	=	_____
(15)	1	+	8	=	_____
(16)	7	-	4	=	_____
(17)	5	+	5	=	_____
(18)	9	-	6	=	_____
(19)	6	+	4	=	_____
(20)	10	-	3	=	_____
(21)	5	+	3	=	_____
(22)	10	-	4	=	_____
(23)	1	+	6	=	_____
(24)	8	-	7	=	_____
(25)	3	+	3	=	_____

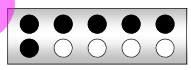
Find **half** of or **double** of each number.

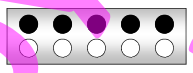
(26) Half of **4** is _____?



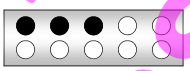
(27)  Double **4** is _____?

(28) Half of **6** is _____?



(29)  Double **5** is _____?

(30) Half of **8** is _____?

(31)  Double **3** is _____?

(32) Half of **10** is _____?

Word problems.

(33) If you have 6 plums and 3 pears, how many pieces of fruit do you have altogether?

_____ + _____ = _____

(34) If you have $8 and spend $6, how much money do you have left?

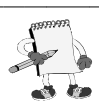
_____ - _____ = _____

(35) If you have 5 carrots and 5 onions, how many vegetables do you have altogether?

_____ + _____ = _____

(36) If you have $10 and spend $7, how much money do you have left?

_____ - _____ = _____



The aim of this activity sheet is to revise all addition and subtraction combinations for numbers up to 10, quickly and accurately.

Suggested HOME activity:

Have a supply of objects, such as blocks, available so that you can model each addition and subtraction if required.

Make up some more questions to practise all combinations for additions up to 10 and their subtraction opposites. Knowing the basic numeracy facts, forms the foundations for future success!

Sign when completed: .....

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7 Revision 2 - Sums up to 10

Name:

AWS

Let's test your skills again ... how quickly can you **write in** the missing numbers?

(1)	3	+	____	=	5
(2)	____	-	1	=	3
(3)	____	+	1	=	2
(4)	3	-	____	=	1
(5)	2	+	____	=	4
(6)	____	-	4	=	2
(7)	____	+	1	=	6
(8)	7	-	____	=	4
(9)	2	+	____	=	7
(10)	____	-	2	=	3
(11)	____	+	2	=	8
(12)	8	-	____	=	4
(13)	4	+	____	=	9
(14)	____	-	2	=	7
(15)	____	+	8	=	9
(16)	7	-	____	=	3
(17)	5	+	____	=	10
(18)	____	-	6	=	3
(19)	____	+	4	=	10
(20)	10	-	____	=	7
(21)	5	+	____	=	8
(22)	____	-	4	=	6
(23)	____	+	6	=	7
(24)	8	-	____	=	1
(25)	3	+	____	=	6

(26) **Add** up all the numbers in this box.

2	5	9	
4	3	8	
1	6	5	
			Total

Word problems.

(27) You have 10 red and blue blocks. If 4 blocks are blue, how many blocks are red?

(28) You have $9 and buy a drink. If you have $6 left, how much did the drink cost?

The aim of this activity sheet is to revise all addition and subtraction combinations for numbers up to 10, quickly and accurately.

Suggested HOME activity:

Have a supply of objects, such as blocks, available so that you can model each addition and subtraction if required.

Make up similar questions that cover the basic numeracy facts on this activity sheet.

Example: 3 + ? = 5 can be rewritten as 5 - 3 = ? ... etc.

In the number box (Q26), look for pairs of numbers that add to 10, then add the 10's, 10 plus 10 equals 20 etc....

Sign when completed: .....

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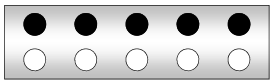
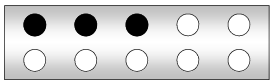
8 Numeracy facts for sums of 11 to 18

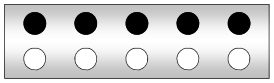
Name:

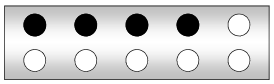
AWS

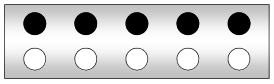
Work out each answer by '**counting on**' the **black dots** to each number.
Example: 9 + ●●● = 9 .... 10, 11, 12.

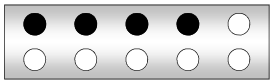
(1) 6 +  =

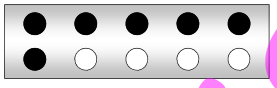
(2) 9 +  =

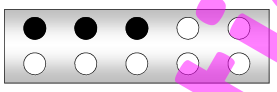
(3) 8 +  =

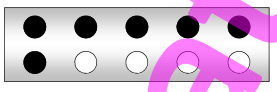
(4) 7 +  =

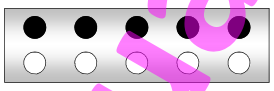
(5) 9 +  =

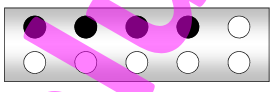
(6) 8 +  =

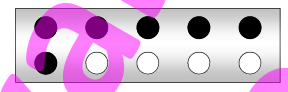
(7) 7 +  =

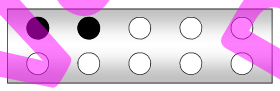
(8) 8 +  =

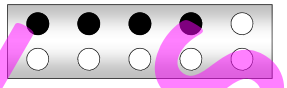
(9) 9 +  =

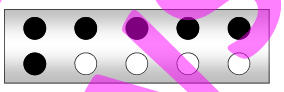
(10) 7 +  =

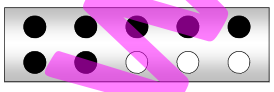
(11) 9 +  =

(12) 8 +  =

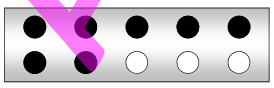
(13) 9 +  =

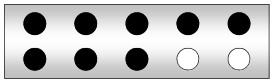
(14) 8 +  =

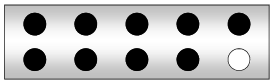
(15) 6 +  =

(16) 9 +  =

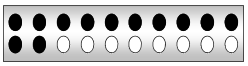
(17) 9 + =

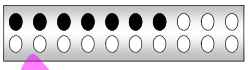
(18) 7 +  =

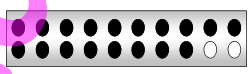
(19) 8 +  =

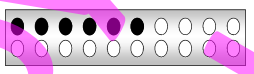
(20) 9 +  =

Find **half** of or **double** of each number.

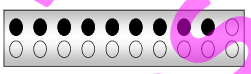
(21) Half of **12** is _____? 

(22)  Double **7** is _____?

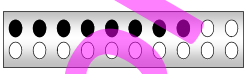
(23) Half of **18** is _____? 

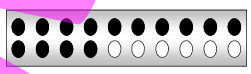
(24)  Double **6** is _____?

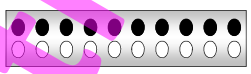
(25) Half of **16** is _____?

(26)  Double **9** is _____?

(27) Half of **20** is _____?

(28)  Double **8** is _____?

(29) Half of **14** is _____? 

(30)  Double **10** is _____?

Write a number in each box as you work out these questions.

(31) 8 + ____ = 13

(32) ____ - 9 = 4

(33) ____ + 5 = 14

(34) 15 - ____ = 7

(35) 9 + ____ = 15

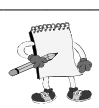
(36) ____ - 8 = 8

(37) ____ + 7 = 16

(38) 16 - ____ = 9

(39) 8 + ____ = 17

(40) 18 - ____ = 9



The aim of this activity sheet is to learn the addition numeracy facts for the sums of 11 to 18 by 'counting on' from the larger number.

Suggested HOME activity:
Point to any question from 1 to 20 and ask your child to work out the answer by 'counting on'. Cover up the answers if already done and have a supply of blocks to model each question if required.

Repeat the exercise concentrating on questions your child finds difficult.

Sign when completed: .....

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9 Adding strategies

Name:

AWS

There is more than one way to work out an answer. Here are some examples.

Groupings of 10

Adding 8 + 5 + 2 is the same as 10 + 5 = 15

(1) 7 + 1 + 3 = 10 + *1* = *11*

(2) 6 + 4 + 5 = 10 + ____ = ____

(3) 8 + 9 + 11 = 20 + ____ = ____

(4) 4 + 6 + 7 = ____ + ____ = ____

(5) 5 + 8 + 5 = ____ + ____ = ____

(6) 5 + 4 + 16 = ____ + ____ = ____

(7) 18 + 2 + 7 = ____ + ____ = ____

(8) 9 + 4 + 11 = ____ + ____ = ____

Using known doubles

Adding 6 + 7 is the same as 6 + 6 + 1 = 13

or 7 + 7 - 1 = 13

(9) 5 + 4 = 4 + 4 + _____ = _____

(10) 8 + 7 = _____ + 7 + _____ = _____

(11) 9 + 6 = 6 + _____ + _____ = _____

(12) 5 + 8 = _____ + _____ + 3 = _____

(13) 9 + 7 = _____ + _____ + _____ = _____

(14) 8 + 9 = _____ + _____ + _____ = _____

(15) 20 + 22 = _____ + _____ - 2 = _____

(16) 37 + 30 = _____ + _____ - _____ = _____

Splitting to make '10'

Add 9 + 7 (add 1 to 9, subtract 1 from 7)

Answer: 9 + 7 = 10 + 6 = 16

(17) 8 + 3 = 10 + *1* = *11*

(18) 6 + 7 = 10 + ____ = ____

(19) 19 + 5 = 20 + ____ = ____

(20) 6 + 28 = ____ + ____ = ____

(21) 17 + 5 = ____ + ____ = ____

(22) 7 + 18 = ____ + ____ = ____

(23) 29 + 9 = ____ + ____ = ____

(24) 8 + 37 = ____ + ____ = ____

Work out these questions using any of the **strategies** on this worksheet.

(25) 9 + 7 + 13 = _____

(26) 9 + 12 = _____

(27) 8 + 32 + 11 = _____

(28) 27 + 8 = _____

(29) 32 + 30 = _____

(30) 19 + 20 = _____

The aim of this activity sheet is to look at different strategies that could be used to work out addition or subtraction problems.

Suggested HOME activity:

Make up similar questions that cover the basic numeracy facts at the back of this resource. These are **key number knowledge facts**.

The strategies used on this worksheet are only suggestions. Your child may not need to use some or all of these strategies and may have strategies of their own. Encourage them to talk about how they work out their answers. Remember that working out the answer with confidence is more important than the strategy used.

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10 Introducing place value

Name:

AWS

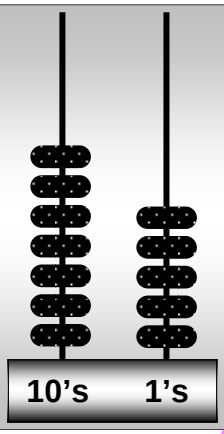
Lucy placed some rings on an abacus to show the number **75**.

How many rings on the 10's peg?

How many rings on the 1's peg?

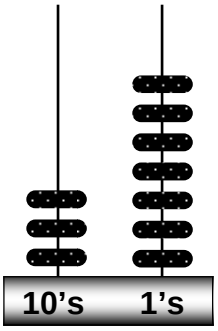
Answer:

Seven **10's** and five **1's**.



Count the number of rings on each peg.
What number is shown on each abacus?

(1)

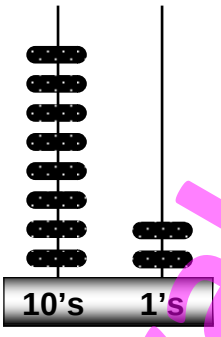


10's =

1's =

number =

(2)

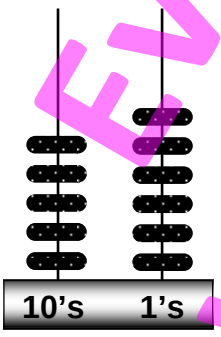


10's =

1's =

number =

(3)

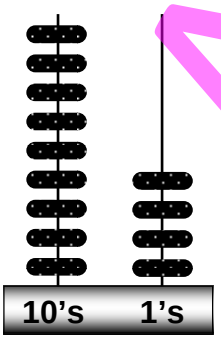


10's =

1's =

number =

(4)



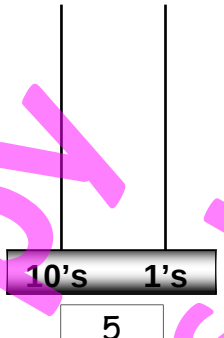
10's =

1's =

number =

Draw rings on each abacus to show the number written below each abacus.

(5)



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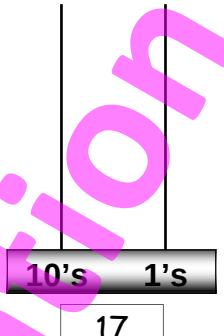
(6)



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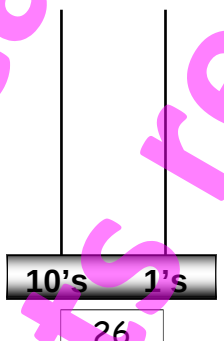

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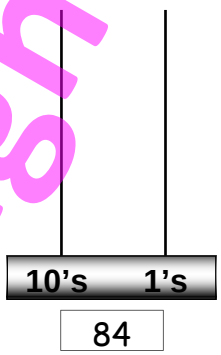

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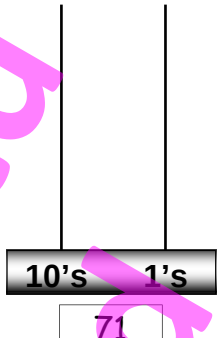
(9)



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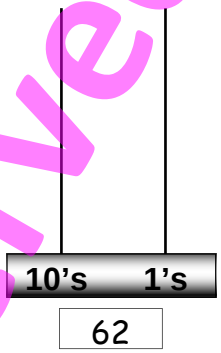
(10)



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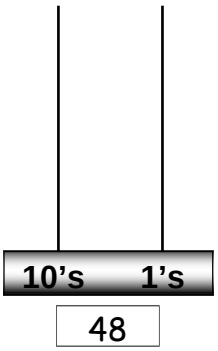
(11)



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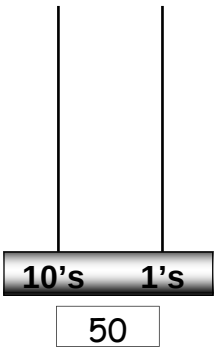
(12)



50

The aim of this activity sheet is to understand place value for 2-digit numbers. i.e. tens and units.

Suggested HOME activity:

Find two different coloured blocks or objects, one to represent 10's (tens) and one to represent 1's (units). Ask your child to model any 2-digit number using the blocks.

Example: For 72, there would be 7 10's blocks and 2 1's blocks.

Ask your child how many 10's and 1's, in any given 2-digit number.

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11 Renaming numbers

Name:

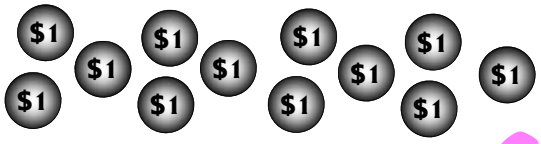
AWS

Tom asked "Can I swap these $1.00 coins for a $10.00 note?"

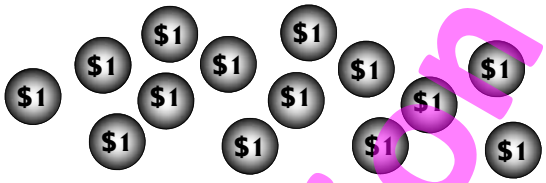
How many $1.00 coins did Tom have?

Answer: 10 $1.00 coins

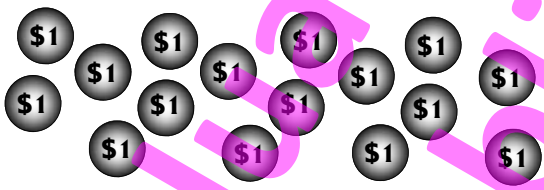
Write in the **missing numbers** as you **rename** these $1 coins as $10 notes and $1 coins.



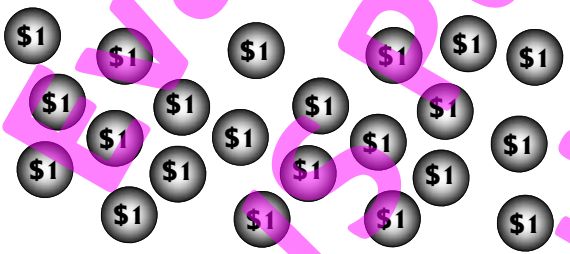
(1) ☐ $10 notes + ☐ $1 coins



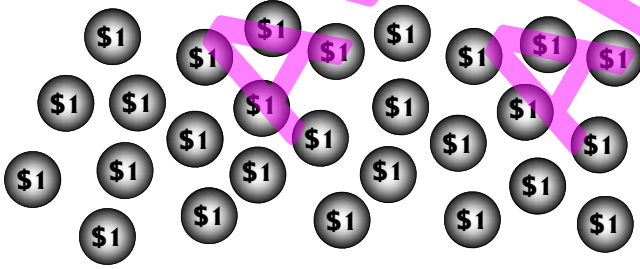
(2) ☐ $10 notes + ☐ $1 coins



(3) ☐ $10 notes + ☐ $1 coins



(4) ☐ $10 notes + ☐ $1 coins



(5) ☐ $10 notes + ☐ $1 coins

(6) What money total is made up of **2** $10 notes and **7** $1 coins? _____

(7) What money total is made up of **3** $10 notes and **4** $1 coins? _____

(8) What money total is made up of **4** $10 notes and **6** $1 coins? _____

(9) What money total is made up of **9** $10 notes and **0** $1 coins? _____

Numbers can also be **renamed** into **10's** and **1's**.

Example: 53 = 5 10's + 3 1's

(10) 23 = ☐ 10's + ☐ 1's

(11) 56 = ☐ 10's + ☐ 1's

(12) 72 = ☐ 10's + ☐ 1's

(13) 80 = ☐ 10's + ☐ 1's

(14) What number is made up of **4** 10's and **5** 1's? _____

(15) What number is made up of **6** 10's and **2** 1's? _____

(16) What number is made up of **0** 10's and **9** 1's? _____

(17) What number is made up of **7** 10's and **0** 1's? _____

The aim of this activity sheet is to introduce place value using money totals made up of $10's and $1's. Therefore gaining an understanding that the position of a digit in a number affects its value.

Suggested HOME activity:

Find two different coloured blocks or objects, one to represent $10 (tens) and one to represent $1 (units). Ask your child to model any 2-digit money total using the blocks.

Example: For $45, there would be 4 $10 blocks and 5 $1 blocks.

Ask your child how many 10's and 1's, in any given 2-digit number.

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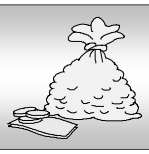
12 Recognising New Zealand coins

Name: _____ AWS

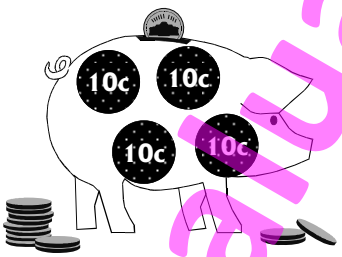
"Is this a 50 cent coin?" asked Jane.

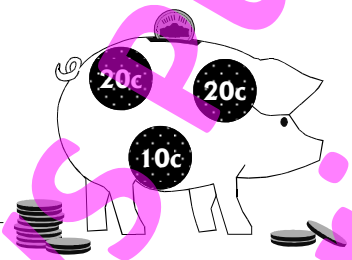


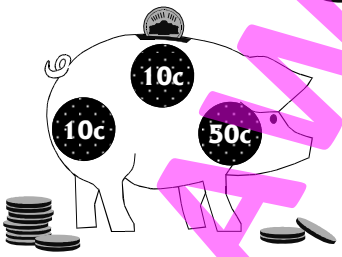
(1) What is the **value** of each **coin**?

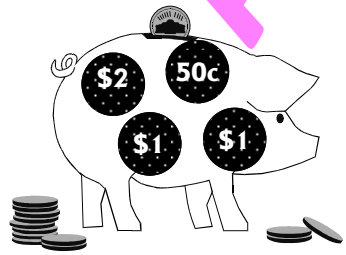
10 cents
20 cents
50 cents
$1.00
$2.00

(2) How much money is in each piggy bank?









Make up these money totals by writing in the **missing coin** in the circles.

(3) **40 cents** = 10c + 10c + ◯

(4) **50 cents** = 10c + 20c + ◯

(5) **70 cents** = 10c + 10c + ◯

(6) **$1.00** = 50c + 20c + 20c + ◯

(7) **$1.00** = 20c + 20c + 10c + ◯

What coins could be used to make up these money amounts? There will be more than one correct answer.

(8) **30c** = _____

(9) **60c** = _____

(10) **90c** = _____

(11) **$1.20** = _____

(12) **$1.50** = _____

The aim of this activity sheet is to become familiar with New Zealand coins, add up groups of coins and work out simple problems involving giving change.

Suggested HOME activity:
Have a selection of New Zealand coins or make up cards to represent the coins. Using the methods above, make up similar questions involving adding groups of coins, making up a given total and selecting different combinations of coins to make a given value.

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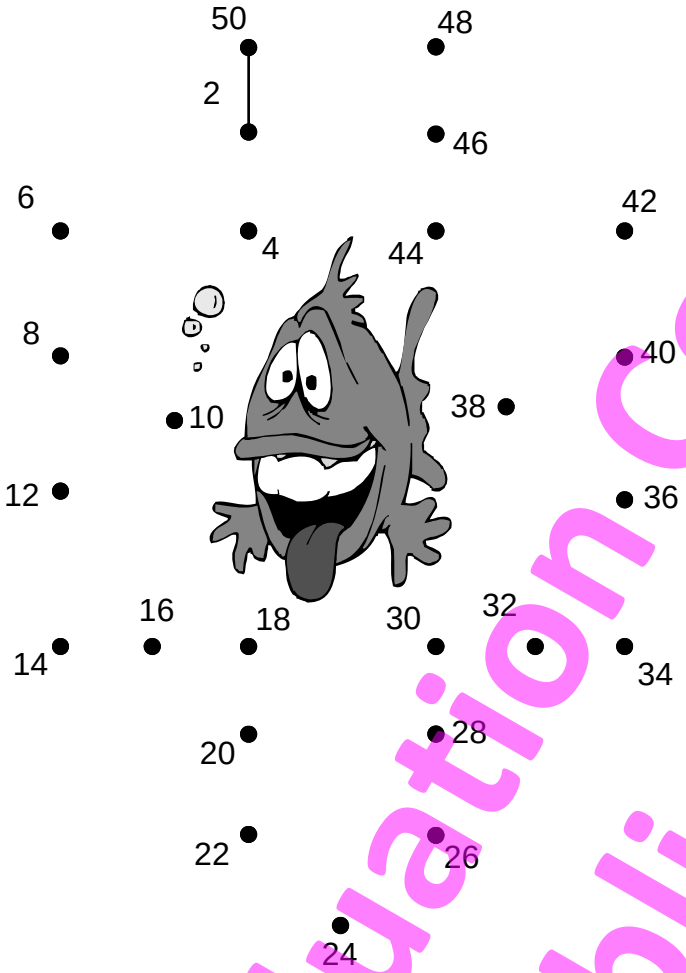
13 Skip counting in 2's

Name:

AWS

(1) **Join** the dots as you **skip count** in **2's** up to **50**.



(2) As you **skip count** in **2's**, what number comes **after** ...

8, ____ 20, ____ 34, ____

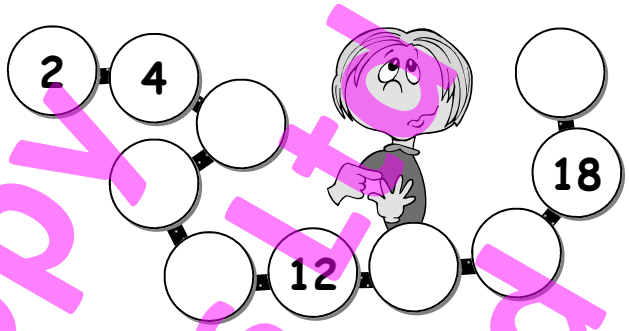
16, ____ 42, ____ 26, ____

(3) As you **skip count** in **2's**, what number comes **before** ...

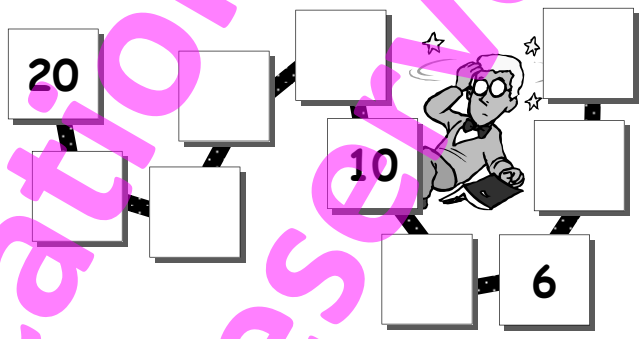
____ , 6 ____ , 18 ____ , 34

____ , 28 ____ , 36 ____ , 12

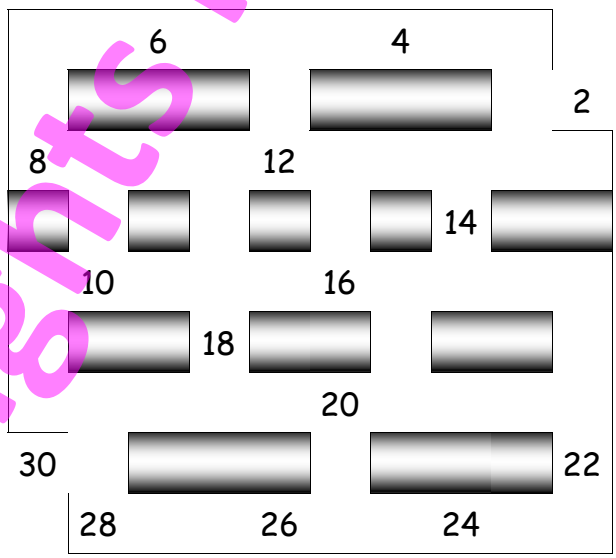
(4) **Write** the missing numbers as you skip count in **2's** up to **20**.



(5) **Write** the missing numbers as you skip count backwards in **2's**.



(6) **Draw** the **shortest** path through this maze as you skip count in **2's**.



The aim of this activity sheet is to learn to skip count in 2's. Knowing these numbers will help your child when learning the 2x multiplication and division facts.

Suggested HOME activity:

Create some 2's cards for the numbers 2 to 20. Mix the cards up and ask them to place the cards in order from 2 to 20 or reverse.

Create some dot to dot or mazes as on this worksheet. Ask your child what number comes after, before or between a given number, as you skip count in 2's.

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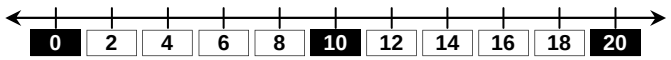
14 Multiples of 2's / 2x facts

Name: _____ AWS

This number line shows skip counting in **2's**.



"What's 2 + 2 + 2 + 2 + 2 ..... is that the same as 2 x 5?" asked Blair.

(1) **Write** the missing **multiples** of 2 as you **skip count** in **2's** up to 20.

2, _____, _____, 8, _____,

_____, 14, _____, 18, _____

Work out these **skip counting questions** and **write** them as **multiplication facts**.

(2) 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(3) 2 + 2 + 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(4) 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(5) 2 + 2 = _____ and is the same as 2 x _____ = _____

(6) 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(7) 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(8) 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(9) 2 + 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

(10) 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = _____ and is the same as 2 x _____ = _____

Write in the missing numbers for the **2x multiplication facts**.

(11)	1 x 2 = _____	(16)	2 x 5 = _____
(12)	2 x 4 = _____	(17)	2 x 2 = _____
(13)	6 x 2 = _____	(18)	2 x 7 = _____
(14)	2 x 9 = _____	(19)	3 x 2 = _____
(15)	10 x 2 = _____	(20)	2 x 8 = _____

"What number multiplied by 2 gives me an answer of 10?" asked Miri.
Written as 2 x ____ = 10 ... the answer is 5.

Write in the missing numbers for these **2x multiplication facts**.

(21)	____ x 2 = 4	(26)	2 x ____ = 8
(22)	2 x ____ = 16	(27)	____ x 2 = 20
(23)	____ x 2 = 6	(28)	2 x ____ = 10
(24)	2 x ____ = 14	(29)	____ x 2 = 2
(25)	____ x 2 = 12	(30)	2 x ____ = 18

(31) If one book costs $2.00, how much would 6 books cost?

_____ x _____ = _____

(32) If one ice-cream costs $2.00, how much would 10 ice-creams cost?

_____ x _____ = _____

The aim of this activity sheet is to use skip counting in 2's to introduce the multiplication facts. Multiplication is 'short-hand' for repeated addition of the same number.

Suggested HOME activity:
Revise skip counting in 2's until your child can successfully and quickly count in 2's up to at least 20. These are called the multiples of 2.
Ask your child each multiplication fact until they know them all.
Example: What is 2 multiplied by 5? ..... 2, 4 ,6, 8, 10.
At this stage, your child may still skip count to get the answer.

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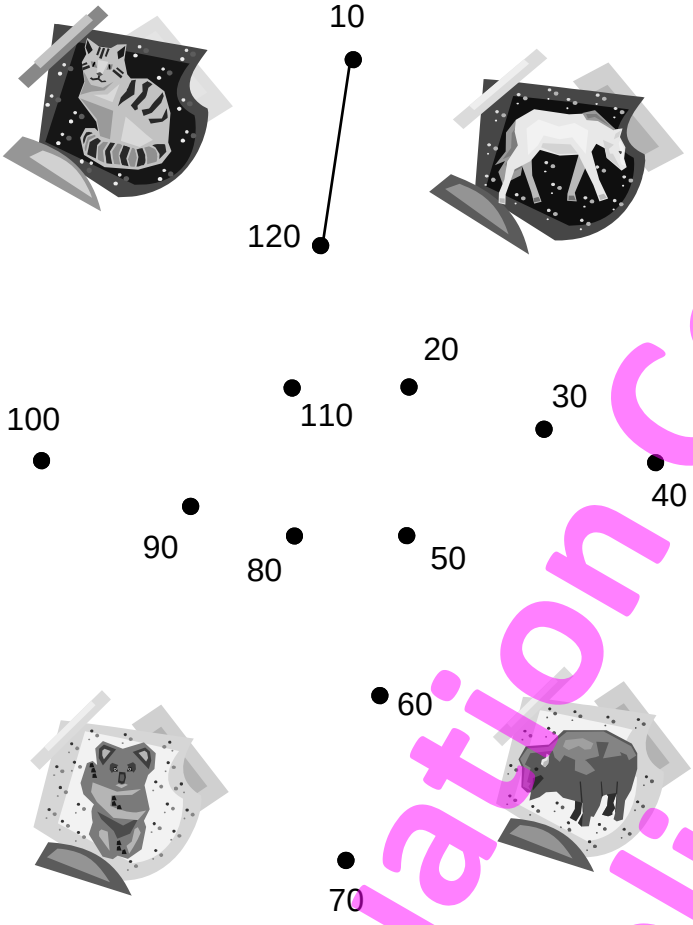
15 Skip counting in 10's

Name:

AWS

(1) **Join** the dots as you **skip count** in **10's**.



(2) As you **skip count** in **10's**, what number comes **after** ...

50, ____ 90, ____ 10, ____

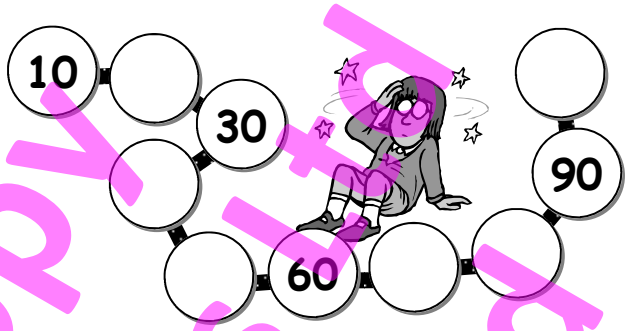
70, ____ 30, ____ 80, ____

(3) As you **skip count** in **10's**, what number comes **before** ...

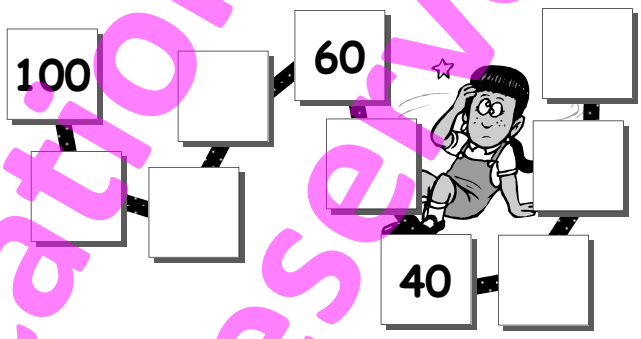
____ , 100 ____ , 30 ____ , 70

____ , 40 ____ , 90 ____ , 60

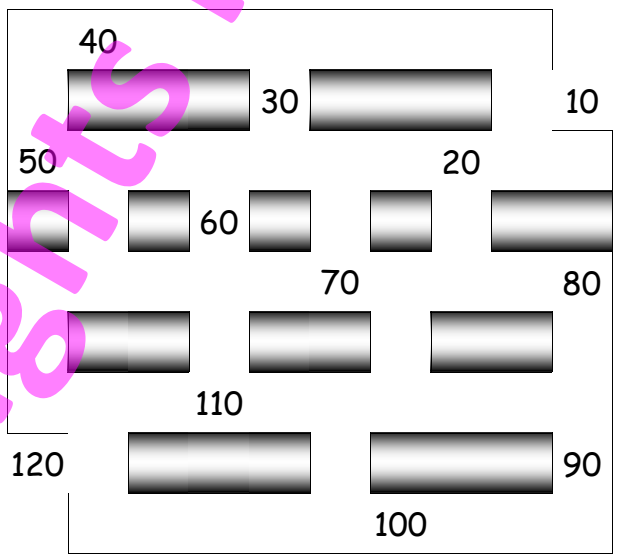
(4) **Write** the missing numbers as you skip count in **10's**.



(5) **Write** the missing numbers as you skip count backwards in **10's**.



(6) **Draw** the **shortest** path through this maze as you skip count in **10's**.



The aim of this activity sheet is to learn to skip count in 10's. Knowing these numbers will help your child when learning the 10x multiplication and division facts.

Suggested HOME activity:

Create some 10's cards for the numbers 10 to 100. Mix the cards up and ask them to place the cards in order from 10 to 100 or reverse.

Create some dot to dot or mazes as on this worksheet. Ask your child what number comes after, before or between a given number, as you skip count in 10's.

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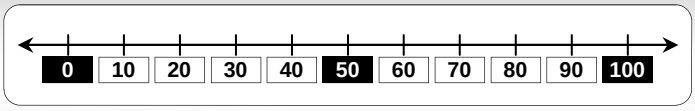
16 Multiples of 10's / 10x facts

Name: _____ AWS

This number line shows skip counting in **10's**.



"What's 10 + 10 + 10 + 10 ..... is that the same as 10 x 4?" asked Jack.

(1) **Write** the missing **multiples** of 10 as you **skip count** in **10's** up to 100.

10, _____, _____, 40, _____,

_____, 70, _____, 90, _____

Work out these **skip counting questions** and **write** them as **multiplication facts**.

(2) 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(3) 10 + 10 + 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(4) 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(5) 10 + 10 = _____ and is the same as 10 x _____ = _____

(6) 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(7) 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(8) 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(9) 10 + 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

(10) 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = _____ and is the same as 10 x _____ = _____

Write in the missing numbers for the **10x multiplication facts**.

(11) 1 x 10 = _____
(12) 10 x 4 = _____
(13) 6 x 10 = _____
(14) 10 x 9 = _____
(15) 10 x 10 = _____
(16) 10 x 5 = _____
(17) 2 x 10 = _____
(18) 10 x 7 = _____
(19) 3 x 10 = _____
(20) 10 x 8 = _____

"What number multiplied by 10 gives me an answer of 70?" asked Miri.
Written as 10 x ____ = 70 ... the answer is 7.

Write in the missing numbers for these **10x multiplication facts**.

(21) ____ x 10 = 20
(22) 10 x ____ = 80
(23) ____ x 10 = 30
(24) 10 x ____ = 70
(25) ____ x 10 = 60
(26) 10 x ____ = 40
(27) ____ x 10 = 100
(28) 10 x ____ = 50
(29) ____ x 10 = 10
(30) 10 x ____ = 90

(31) If one book costs $10.00, how much would 7 books cost?

_____ x _____ = _____

(32) If one hot-dog costs $10.00, how much would 9 hot-dogs cost?

_____ x _____ = _____

The aim of this activity sheet is to use skip counting in 10's to introduce the multiplication facts. Multiplication is 'short-hand' for repeated addition of the same number.

Suggested HOME activity:
Revise skip counting in 10's until your child can successfully and quickly count in 10's up to at least 100. These are called the multiples of 10. Ask your child each multiplication fact until they know them all.

Example: What is 10 multiplied by 5? ..... 10, 20 ,30, 40, 50.

At this stage, your child may still skip count to get the answer.

Sign when completed: _____

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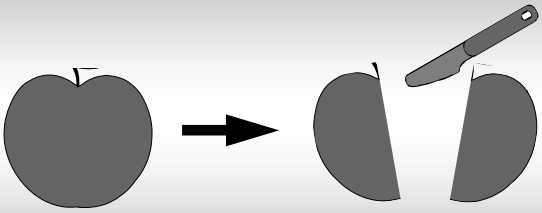
17 Can I have a half?

Name:

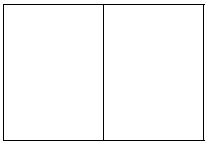
AWS

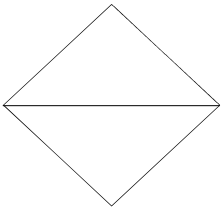
This apple has been cut into **two equal** pieces.

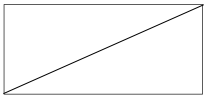


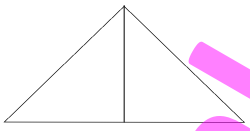
Each piece is called a **half**, written as ½.

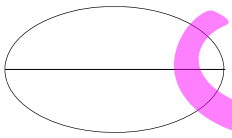
Colour in **one half** of each shape.

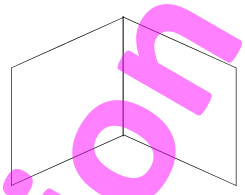
(1) 

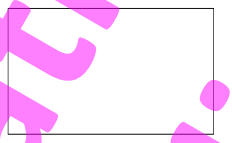
(2) 

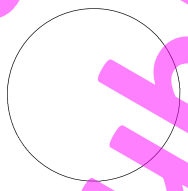
(3) 

(4) 

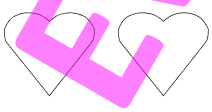
(5) 

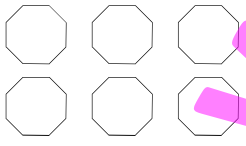
(6) 

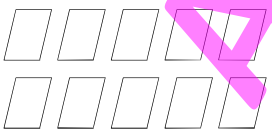
(7) 

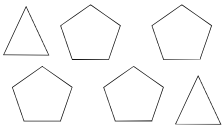
(8) 

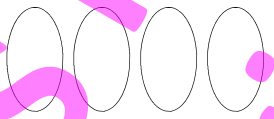
Colour in ½ of each group of shapes.

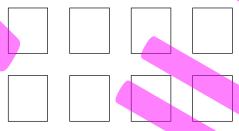
(9) 

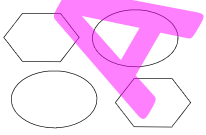
(10) 

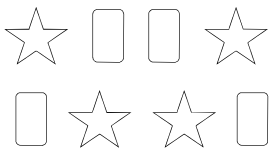
(11) 

(12) 

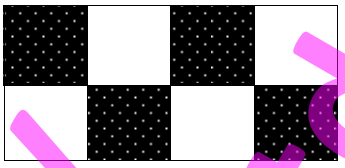
(13) 

(14) 

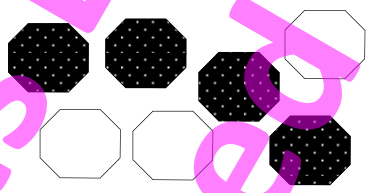
(15) 

(16) 

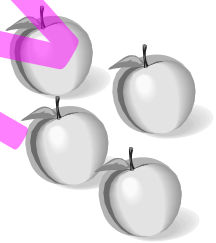
(17) Is half of this shape shaded in?

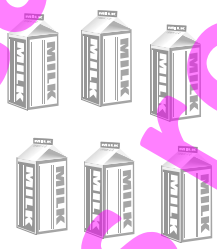


(18) Is ½ of this group of shapes shaded in?



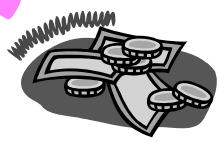
(19) Jim has four apples. If he eats half of the apples, how many apples did he eat?



(20) 

If Kate is to have ½ of these six milk cartons, how many does she get?

(21) Willie has $10.00 and spends half. How much does he have left?

(22) 

Hannah has $8.00 and spends ½. How much does she spend?

The aim of this activity sheet is to find a half of a shape, a group of shapes or a whole number. One half means 'one out of two' and has the symbol ½.

Suggested HOME activity:

Find a collection of objects from around the house and ask your child to find a half of each group. Draw shapes that can be divided equally in half. Use money totals that can be divided in half.

The idea of sharing can be introduced, an important skill when it comes time to learn division. Finding a ½ is the same as dividing by 2.

Sign when completed: .....

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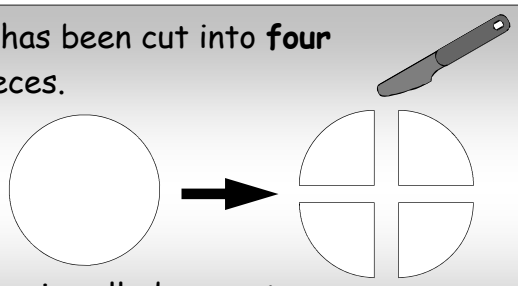
18 Can I have a quarter?

Name:

AWS

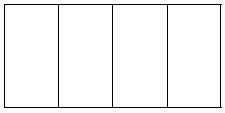
This pie has been cut into **four equal** pieces.



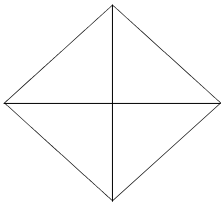
Each piece is called a **quarter** and is written as $\frac{1}{4}$.

Colour in **one quarter** of each shape.

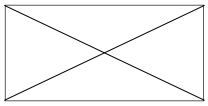
(1)



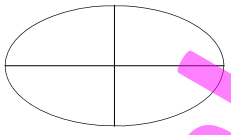
(2)



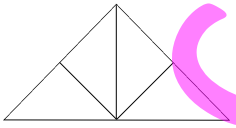
(3)



(4)



(5)



(6)

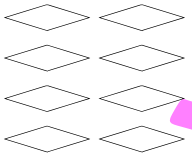
(7)

(8)

Colour in $\frac{1}{4}$ of each group of shapes.

(9)

(10)



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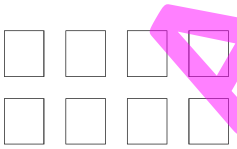

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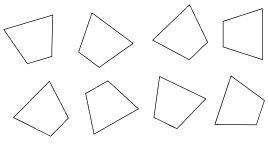

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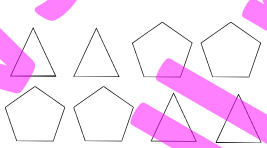

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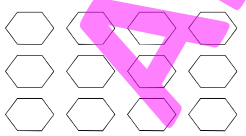

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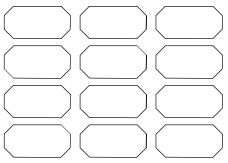
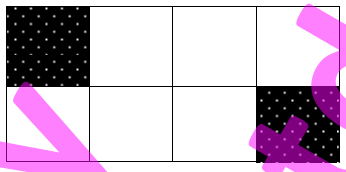
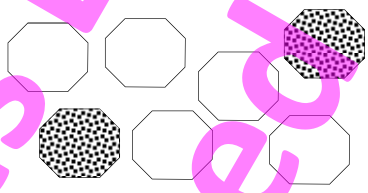


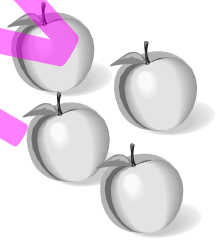
(17) Is a quarter of this shape shaded in?



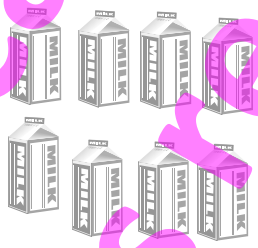
(18) Is $\frac{1}{4}$ of this group of shapes shaded in?



(19) Jim has four apples. If he eats $\frac{1}{4}$ of the apples, how many apples did he eat?



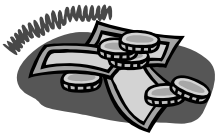
(20)



If Sarah is to have one quarter of these 8 milk cartons, how many does she get?

(21) Willie has $8.00 and spends $\frac{1}{4}$. How much does he spend?

(22)



Hannah has $4.00 and spends a $\frac{1}{4}$. How much does she have left?

The aim of this activity sheet is to find a quarter of a shape, a group of shapes or a whole number. One quarter means 'one out of four' and has the symbol ¼.

Suggested HOME activity:

Find a collection of objects from around the house and ask your child to find a quarter of each group. Draw shapes that can be divided equally into four. Use money totals that can be divided into quarters.

The idea of sharing can be introduced, an important skill when it comes time to learn division. Finding a ¼ is the same as dividing by 4.

Sign when completed: .....

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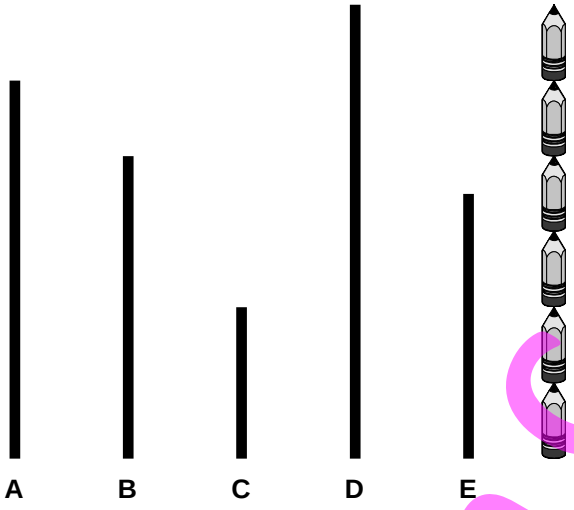
19 Measuring length

Name: _____ AWS

Sarah measured how long each line was by using her pencils. How long were they?

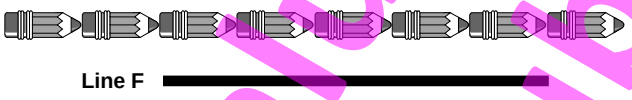


(1) Line A is _____ pencils long.

(2) Line B is _____ pencils long.

(3) Line C is _____ pencils shorter than Line D.

(4) Line E is _____ pencils long.



(5) Line F is _____ pencils long.

(6) **Draw** a line **5** pencils long, **above** this line of pencils.

Use a pencil to **measure** these distances.

(7) The height of a table. _____ pencils.

(8) The length of your leg. _____ pencils.

(9) The distance across a table top. _____ pencils.

Jack **measured** the distance from his bed to the desk in his bedroom, using his **feet**.

This is shown below.

(10) How far is Jack's bed from his desk?

_____ feet

Measure the distance between **two** other 'things' in your room using your feet.

(11) I measured from the

_____

to the _____.

It was _____ feet long.

(12) I measured from the

_____

to the _____.

It was _____ feet long.

Have someone else in your family measure the same distances using their feet.

(13) Are distances the same number of feet? _____.

Talk about why the answers may not be the same.

The aim of this activity sheet is to introduce the concept of the 'standard' unit for measuring how long something is or the distance between two points.

Suggested HOME activity:

Select items or two points around your house.

Example: Use a drinking straw to measure the height of a table. Use your feet and your child's feet to measure the distance between two points.

Talk about why answers vary when using feet, hence the need for a standard unit for length, such as the 'metre', which will be introduced in the next activity sheet.

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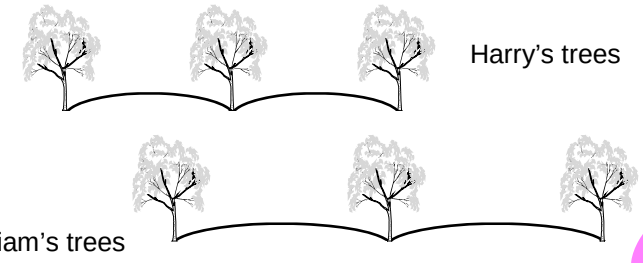
20 Using a METRE for measuring

Name: _____ AWS

Harry and William are to plant some trees in a row, using their own feet to work out where to plant the trees.



"But the trees are not the same distance apart", said William.

"Let's use a metre ruler (or stick) to measure the gap", said Harry.

How far apart are the teddy bear and tricycle?

Using a **metre ruler** (or stick), **measure** the distance between pairs of objects around your house. Measure to the nearest ½ metre.

(1) Object 1: _____

Object 2: _____

Distance: _____ metres

(2) Object 3: _____

Object 4: _____

Distance: _____ metres

(3) Object 5: _____

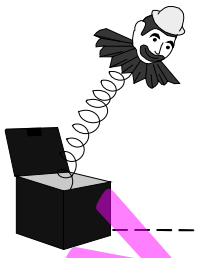
Object 6: _____

Distance: _____ metres

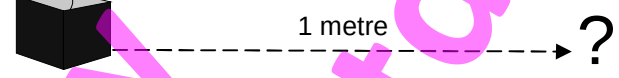
(4) Object 7: _____

Object 8: _____

Distance: _____ metres



Estimate .... place ....
.... then measure.



Place a toy in the middle of the floor or outside. **Ask** your child to place another toy **1 metre** away.

Measure the distance with a **1 metre** ruler. How close was their **estimate**?

(5) close / not so close (circle one)

(6) **Repeat** the exercise **5** more times

(1) close / not so close (circle one)

(2) close / not so close (circle one)

(3) close / not so close (circle one)

(4) close / not so close (circle one)

(5) close / not so close (circle one)

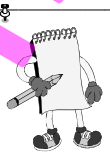
Repeat the exercise, but this time you **select** the **distance**.

(7) Distance apart: _____ metres

Estimate: close / not so close

(8) Distance apart: _____ metres

Estimate: close / not so close



*The aim of this activity sheet is to introduce the standard unit for measurement in the metric system, which is the **metre**. If you do not have a metre ruler, make one out of a stick.*

Suggested HOME activity:
With the use of a 30 centimetre ruler, 1 metre ruler, a tape measure or even a stick, select various points around your home that you can measure.

Example: The distance between a chair and the TV.

Place each pair of objects a whole number of metres apart, such as 2m, 3m, 4m etc. Include ½ metres as your child gets better at measuring.

Sign when completed: _____

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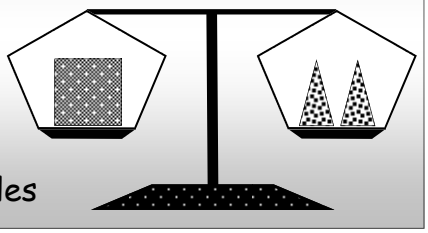
21 Understanding weight

Name: _____ AWS

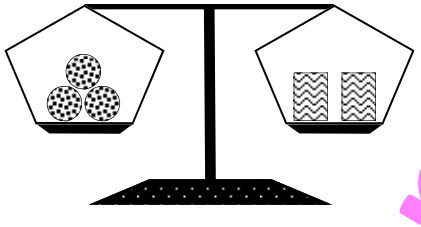
This set of scales is **balanced**.
This means both sides are the same weight.

On these scales, 1 square weighs the same as how many triangles?



Answer: 2 triangles

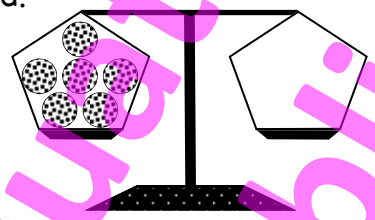
Look at these scales.



(1) On these scales, 3 circles weigh the same as _____ rectangles.

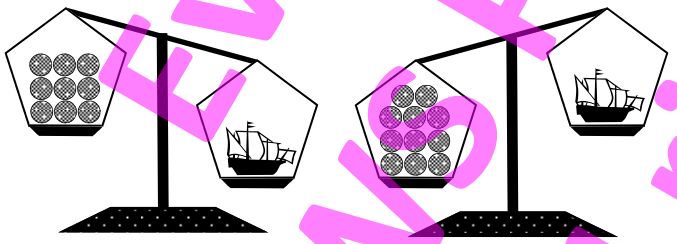
(2) **Draw** rectangles on these scales so they are still balanced.

(3) How many rectangles did you draw?



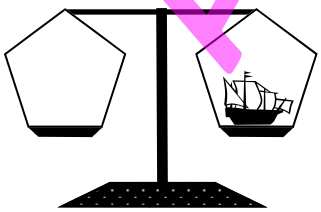
_____

Jim is weighing his toy boat using marbles.
Look at these two scales which are **not** balanced.



(4) Jim's toy boat is heavier than _____ marbles, but lighter than _____ marbles.

(5) **Draw** marbles on these scales to balance the scales.



(6) How many marbles

"Which object is heavier?" asked Sam.
Sam held one object in each hand.

(7) **Find 4 objects** around your house that you can pick up with one hand.
Name these 4 objects.

(1) _____

(2) _____

(3) _____

(4) _____

(8) **Pick up** these objects in pairs.
Which object in each pair is **heavier** ...

(1) or (2) ? _____

(1) or (3) ? _____

(1) or (4) ? _____

(2) or (3) ? _____

(2) or (4) ? _____

(3) or (4) ? _____

(9) Put these objects in **order** from **lightest** to **heaviest**.

_____ , _____ , _____ , _____

The aim of this activity sheet is to understand that different objects can weigh the same / compare objects of different weights and to revise words that describe weight.

Suggested HOME activity:
Select more items from around your house that can be picked up.
Example: A toy truck, a bag of marbles, a stuffed toy, etc.
Using the method above, have your child work out which are the heaviest and lightest objects and place the objects in order from lightest to heaviest.

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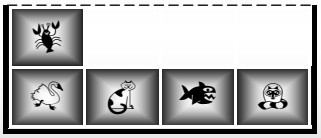
22 Understanding volume

Name: _____ AWS

This box can neatly hold 6 blocks with animal pictures on the side.



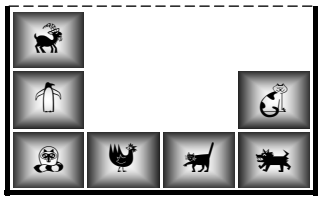
This box is not yet full with blocks.

How many blocks will it hold when it is full?

(Answer: 8 blocks.)

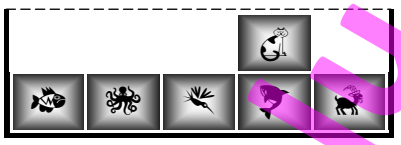
Look at these boxes which have some blocks missing.

(1) **Draw** in the missing blocks to make each box full.

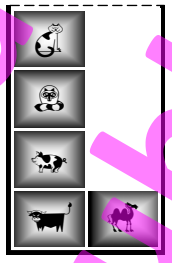


Box A

Box B



Box C



Box D

(2) How many blocks in Box A?

_____.

(3) How many blocks in Box B?

_____.

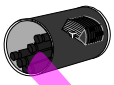
(4) How many blocks in Box C?

(5) How many blocks in Box D?

_____.

(6) **List** the boxes in order of which holds the **most** to which holds the **least** blocks.

_____ , _____ , _____ , _____



"Which container holds more?" asked Sophie.

(7) **Find 4 containers** around your house you can fill with water, rice or sand.

Name these 4 containers.

(1) _____

(2) _____

(3) _____

(4) _____

(8) **Fill** each pair of containers to work out which one **holds more**.

(1) or (2) ? _____

(1) or (3) ? _____

(1) or (4) ? _____

(2) or (3) ? _____

(2) or (4) ? _____

(3) or (4) ? _____

(9) List your containers in order of which **holds least** to which **holds most**.

_____ , _____ , _____ , _____

The aim of this activity sheet is to introduce the concept of volume or capacity, by using simple cross-sectional shapes to represent 3D shapes.

Suggested HOME activity:

Select items from around your house that can be filled.

Example: A tall glass, a flat shaped bowl, a tin or bottle etc.

Ask your child to 'guess' which shape would hold the most or the least. Check their estimations by filling one container, then pouring the contents into another container. If it overflows, it holds less. If it is not full, it holds more.

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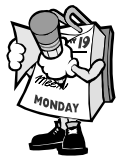
23 Weeks and months

Name:

AWS

(1) Find the **days of the week** in this wordsearch.



T	s	T	u	e	s	d	a	y	S
S	a	t	u	r	d	a	y	e	u
s	y	h	W	u	e	d	e	y	e
u	d	a	S	u	n	d	a	y	T
W	e	d	n	e	s	d	a	y	r
W	e	r	a	S	t	y	c	r	M
e	a	T	h	u	r	s	d	a	y
d	u	r	f	e	u	s	d	S	u
j	T	M	o	n	d	a	y	n	e
e	e	F	r	i	d	a	y	u	W

(2) **Write** the days of the week in **order** in the spaces below.

S _____

M _____

T _____

W _____

T _____

F _____

S _____

(3) On what day of the week is your birthday? _____

(4) What day comes three days after Monday? _____

(5) What two days make up the weekend?

_____

_____

(6) In which month of the year is your birthday? _____

(7) Find the **months of the year** in this wordsearch.

O	c	t	o	b	e	r	t	h	j
s	a	F	e	b	r	u	a	r	y
J	u	n	e	r	A	p	r	i	l
A	u	g	u	s	t	t	g	h	k
e	w	M	a	y	d	J	u	l	y
e	a	N	o	v	e	m	b	e	r
r	J	a	n	u	a	r	y	w	r
S	e	p	t	e	m	b	e	r	u
r	M	a	r	c	h	k	m	a	q
u	D	e	c	e	m	b	e	r	d

(8) **Write** the months of the year in **order** in the spaces below.

J _____

F _____

M _____

A _____

M _____

J _____

J _____

A _____

S _____

O _____

N _____

D _____

The aim of this activity sheet is to learn the days of the week and the months of the year.

Suggested HOME activity:

Write the days of the week and months of the year on some cards. Shuffle the cards and ask your child to place the cards in order, starting with Sunday and January. Replay the game, but this time start with a different day or month.

Ask questions such as, "If today is Monday, what day will it be in 5 days?" Repeat with similar questions concerning the months of the year.

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24 Using calendars

Name: _____ AWS

"Mum … why have you circled July 6th on the calendar?" asked Tony.
"I have a hair cut that day," she replied.

August

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

2007

(1) **Colour** in August 18th.

(2) What day of the week is August 18th?

_____

(3) **Colour** in August 13th.

(4) What day of the week is August 13th?

_____

(5) What day of the week is 5 days after August 20th? _____

(6) What is the date of the **third** Tuesday in August? _____

(7) What is the date of the **second** Sunday in August? _____

(8) What is the date of the **last** Friday in August? _____

On a calendar, it can be useful to write up-coming events.

(9) What is happening on Thursday January 22nd?

_____

(10) On which day, date and time are we meeting for lunch?

_____

(11) On which two days are they going to the movies?

_____

_____

(12) Why is January 1st circled?

_____

January

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	movies at 6
lunch at 12	12	13	14	15	16	17
18	19	20	21	haircut at 3	23	24
25	movies at 7	27	28	29	30	31

2007

The aim of this activity sheet is to introduce calendars and understand how they can best be used.

Suggested HOME activity:
Have your child make their own calendar and write important dates to remember on it.

Example: Birthdays, school holidays, Easter holiday etc.

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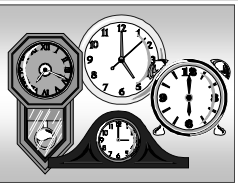
25 Analogue time

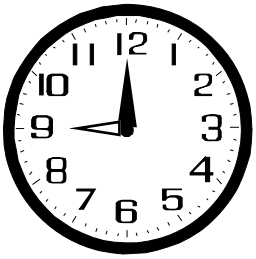
Name:

AWS

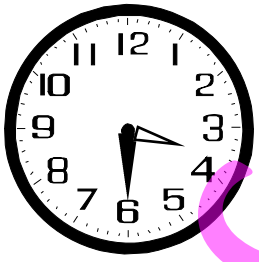
"What time is Rebecca coming around?" asked Ben.



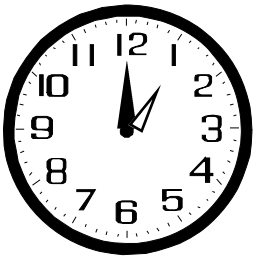
What is the time on each of these clocks?



(1) _____



(5) _____



(2) _____

(6) _____

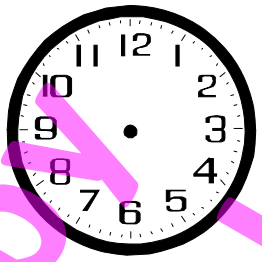
(3) _____

(7) _____

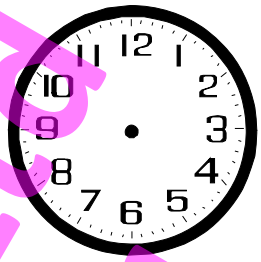
(4) _____

(8) _____

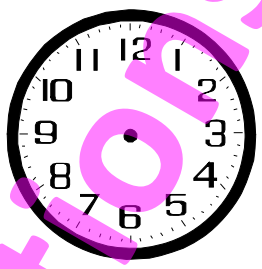
Draw these times on the clock faces.



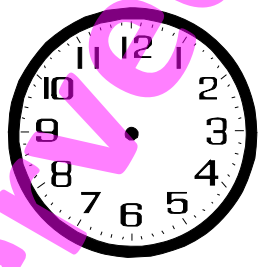
(9) 6 o'clock



(11) ½ past 7



(10) 10 o'clock



(12) ½ past 3

(13) Kate has been shopping for 3 hours. If she started shopping at 11 o'clock, what time is it now?

_____

(14) John played soccer for 2 hours. If he started playing at 10 o'clock, what time is it now?

_____

(15) A 2½ hour bus trip finished at 4 o'clock. At what time did the bus trip start?

_____

The aim of this activity sheet is to learn how to tell the time on an analogue clock face. The time is restricted to ***? o'clock*** *time and* ***'half past'*** *time only.*

Suggested HOME activity:

Draw a circle on some cards and have your child draw and label a clock face on it. Using pencils as clock hands, repeat similar exercises as outlined on this page.

Example: Place the pencils to show 6 o'clock, ½ past 7, etc.

Given a starting time, ask your child what the time will be in 3 hours, 5 hours, 10 hours etc. or what the time was 4 hours ago etc.

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26 Digital time

Name:

AWS

Not all clocks have hands. Some clocks use only numbers to tell the time.

Example: 7 o'clock would be ... **7:00**

half past 7 would be ... **7:30**

Clocks that use numbers only are called **digital clocks**.

Show these **times** on each **digital clock**.

(1) 5 o'clock =

(2) 11 o'clock =

(3) 8 o'clock =

(4) 4 o'clock =

(5) half past 7 =

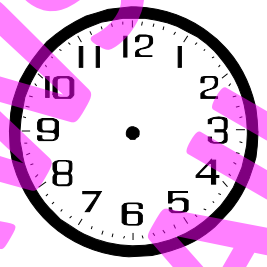
(6) half past 1 =

(7) half past 3 =

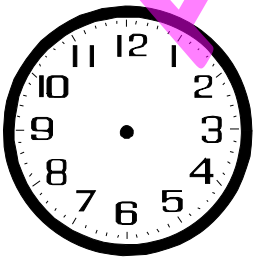
(8) half past 12 =

Draw these digital times as **hands** on each clock face.

(9) **10:00**

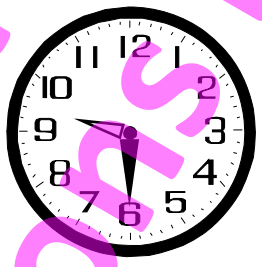


(10) **5:30**



What is the new time?

(11) + 4 hours

(12)  - 5 hours

(13) **10:00** + 4 hours

(14) **1:30** - 3 hours

(15) A roast turkey takes $4\frac{1}{2}$ hours to cook. If it went into the oven at 3:30, when will it be ready?

(16) If a 2 hour TV programme finished at 1:30, at what time did it start?

The aim of this activity sheet is to learn how to convert between analogue and digital time and to add on or take off time from a given starting time.

Suggested HOME activity:

Draw an analogue or digital clock face and repeat similar exercises as outlined on this page.

Example: On the microwave it says 12:30. How would that time appear on an analogue clock face?

Given a starting time, ask your child what the time will be in 3 hours, 5 hours, 10 hours etc. or what the time was 4 hours ago etc.

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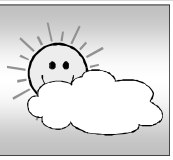
27 Introducing temperature

Name: _____ AWS

Use the words **cold**, **cool**, **warm** and **hot** in these sentences.



(1) Today it was so _____ we went for a swim.

(2) Having a _____ milo drink helps you sleep at night.

(3) We had to light a fire to keep warm because it was so _____ .

(4) After playing outside a _____ drink tastes great.

(5) Tom did not sleep too well last night because he was too _____ .

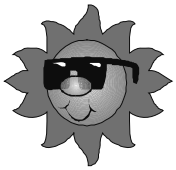
(6) The ice-cream started to melt in the _____ weather.

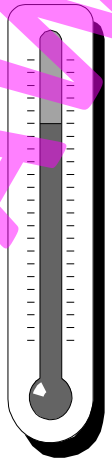
(7) We did not go swimming because the water was too _____ .

(8) Peter put on a jacket to keep himself _____ .

There is **liquid** inside the thermometer that **goes up** when it gets hotter and **goes down** when it gets colder.

(9) Write the words **cold**, **cool**, **warm** and **hot** in the correct place on the





_____

_____

_____

_____

For each event, would the liquid in a thermometer **go up** or **go down**?

(10) The sun comes out from behind the clouds. **up / down** (circle one)

(11) The sun goes down at the end of the day. **up / down** (circle one)

(12) It starts to snow. **up / down** (circle one)

(13) The sun comes out after it has been raining. **up / down** (circle one)

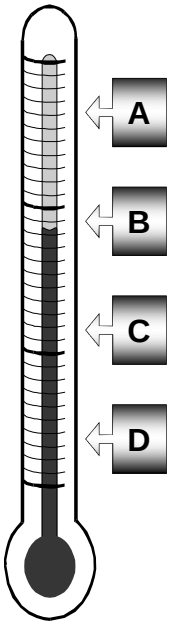
Match the letters A to D on this thermometer with these events.

(14) The water temperature for a bath. _____

(15) The temperature of water that has frozen into an ice cube. _____

(16) The temperature of water in a kettle that has just boiled. _____

(17) The temperature of fruit juice in the fridge. _____



The aim of this activity sheet is to introduce and use words that describe temperature and match events on a temperature scale on a thermometer.

Suggested HOME activity:
Draw a thermometer. Using the methods above, create events that can be measured by a thermometer scale.

Example: An ice cube is cold, the coffee cup is warm, etc.

Sign when completed: _____

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28 2-Dimensional shapes

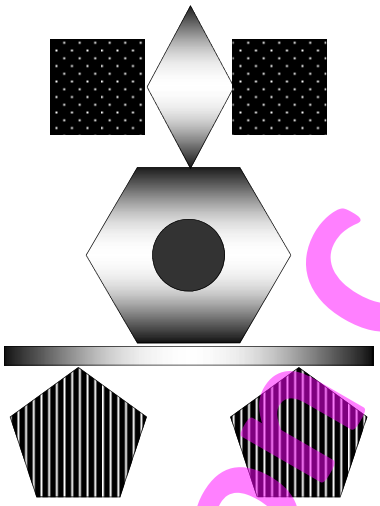
Name:

AWS

Below is a picture drawn using some 2D shapes.

(1) What **6 shapes** have been used to draw this picture? Fill in the table.

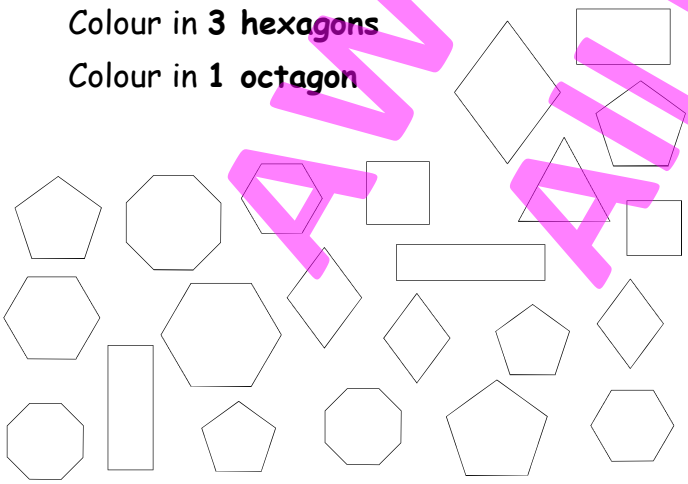
Shape words:
circle
oval
triangle
square
rectangle
diamond
pentagon
hexagon
octagon



Name of the shape	Number of each shape in the picture

(2) Look at the group of shapes below. Using different colours ...

Colour in **2 diamonds**
Colour in **3 rectangles**
Colour in **4 pentagons**
Colour in **3 hexagons**
Colour in **1 octagon**



(3) **Draw** a picture made up of **3** diamonds, **1** pentagon, **2** ovals.

(4) **Draw** another picture made up of **3** hexagons, **2** octagons, **1** square, **2** rectangles and **1** oval.

(5) **Name** the shape that has **5** sides.

Name the shape that has **6** sides.

Name the shape that has **8** sides.

The aim of this activity sheet is to be able to recognise, name and draw various 2D shapes.

Suggested HOME activity:

Look around your home and have your child name various 2D shapes.

Example: Windows are rectangles, this plate is a circle etc.

Using the method above, have your child draw designs using a collection of 2D shapes.

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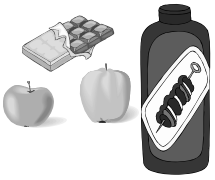
29 3-Dimensional shapes

Name:

AWS



Below are pictures of some everyday 3D objects.

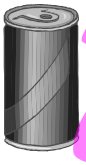
Talk about these objects.

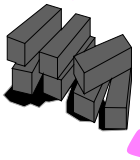
(1) What makes a box a box?
What is special about a box called a cube?

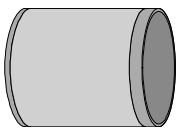
(2) What makes a cylinder a cylinder?

(3) What makes a sphere a sphere?

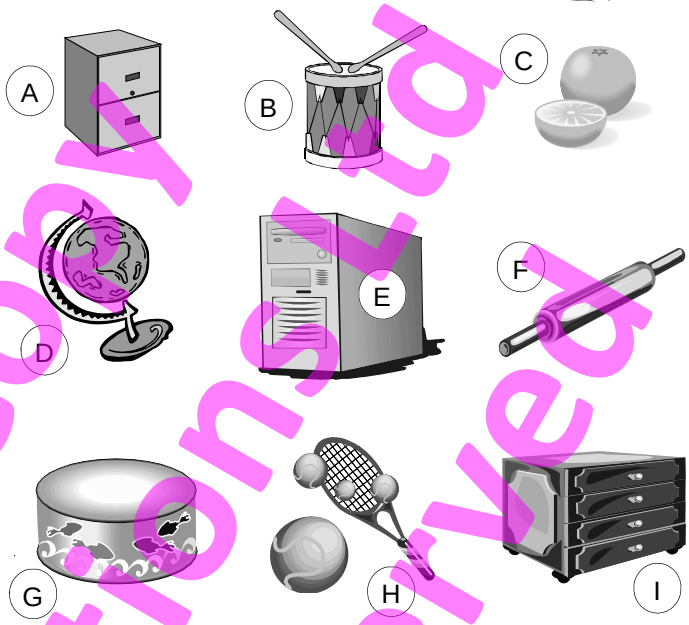
(4) Can you **name** these objects?
They are either a **box**, a **cylinder** or a **sphere (ball)**.







Below are pictures of everyday 3D objects, labelled A to I.



(5) Why can objects C, D and H be grouped together?

(6) Which objects can be **stacked**?

(7) Which objects can be **packed**?

(8) Which objects can be **rolled**?

(9) **Talk** about other ways to **sort** these objects.

The aim of this activity sheet is to be able to recognize, name and describe simple 3D shapes.

Suggested HOME activity:
Look around your home and ask your child to sort and describe simple 3D objects. To describe each group; a box has corners, edges and faces; a cylinder has a circle at each end and a smooth surface between; a sphere has a smooth surface and is the shape of a globe, or something similar.

Example: This apple is a sphere.

Find objects around the home that 'stack', 'pack' or 'roll'.

Sign when completed: .....

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30 Turning / Rotation

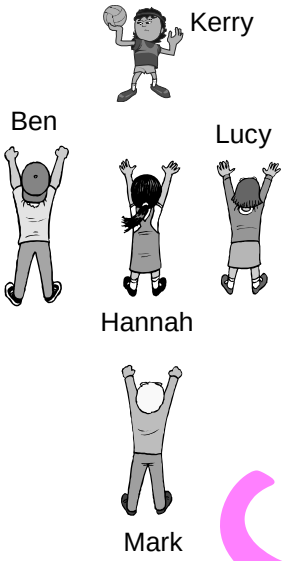
Name: _____ AWS

Kerry is about to throw the ball.

Ben, Hannah, Lucy and Mark are all ready, waiting to catch it.

Who's looking at who?

(There may be more than one answer)



(1) If Hannah does a **quarter turn left**, who is she looking at?

_____

(2) If Hannah does a **quarter turn right**, who is she looking at?

_____

(3) If Lucy does a **quarter turn left**, who is she looking at?

_____

(4) If Ben does a **quarter turn right**, who is he looking at?

_____

(5) If Hannah does a **half turn left** or **right**, who is she looking at?

_____

Look around the room you are in.

(6) What do you see if you do a quarter turn right?

_____

(7) What do you see if you do a quarter turn left?

_____

(8) What do you see if you do a half turn right or left?

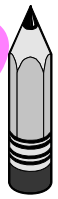
_____

Draw which way the pencil will be pointing after it has been turned or rotated.

(9)

quarter turn clockwise

(10)



quarter turn anti-clockwise

Some alphabet cards have been used to create these patterns.

Talk about how each pattern was created.

Draw the next 2 letters for each pattern.

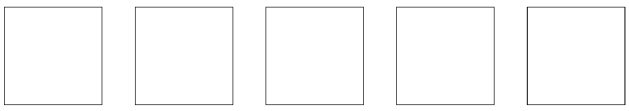
(11)

(12)

(13)

Make up your own pattern using letter **M**.

(14)



The aim of this activity sheet is to show an understanding of directional words and create letter patterns that involve turning or rotation.

Suggested HOME activity:

Make up a series of instructions, involving the directional words used on this worksheet, to create pathways through your home or outside.

Example: Take 4 steps straight ahead, then do a half turn left etc.

Create repeating patterns as above using letters or designs that your child makes up themselves.

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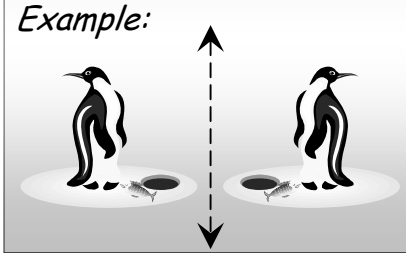
31 Flipping / Reflections

Name:

When you look in a mirror, you see your reflection. Everything looks the same, except it looks back to front.

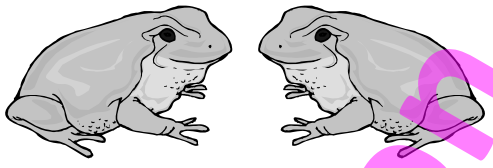
Example:



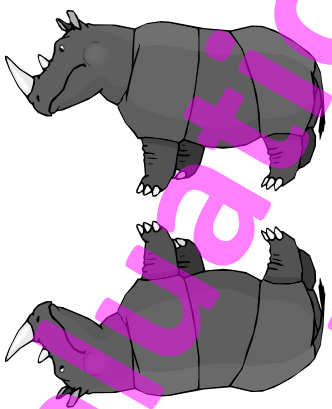
To reflect this picture, the mirror would be placed on the arrowed line.

Draw a line to show where the mirror would go to reflect these pictures.

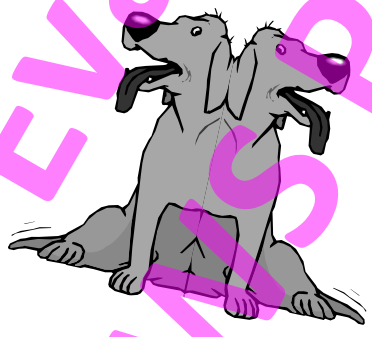
(1)



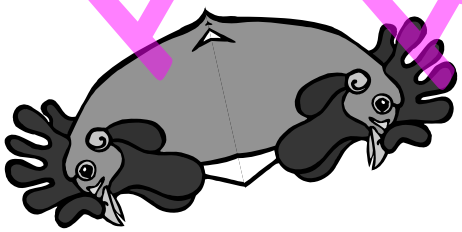
(2)



(3)



(4)



Half of each letter is missing.

The arrow is where the mirror is.

Draw each letter as if you had a mirror.

(5)

(6)

(7)

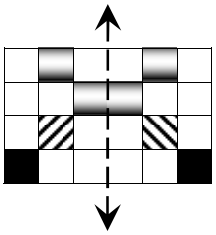
(8)

(9)

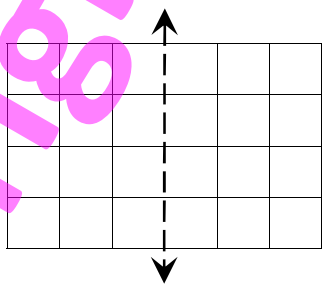
(10)

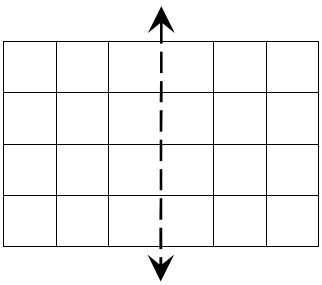
(11) This pattern has been drawn using the arrow as the mirror line.

Draw two reflection patterns of your own.



mirror line





The aim of this activity sheet is to introduce reflection, using a mirror to demonstrate where the mirror line would be, then create patterns that use reflection.

Suggested HOME activity:

Looking around your home, ask your child to point out where the mirror line would be on objects that demonstrate reflection. These objects are said to have symmetry about this imaginary mirror line.

Example: A rectangular window or door, wall-paper designs etc.

Draw various patterns that involve reflection.

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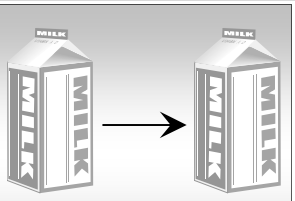
32 Sliding / Translation

Name:

AWS

This milk carton has been moved by sliding it along a table top.



The milk carton has not been turned around or flipped over.

Each group of objects below have been lined up to make a pattern.

Circle yes if the objects have been moved by sliding. **No**, if they have not.

(1) yes / no

(2) yes / no

(3) yes / no

(4) yes / no

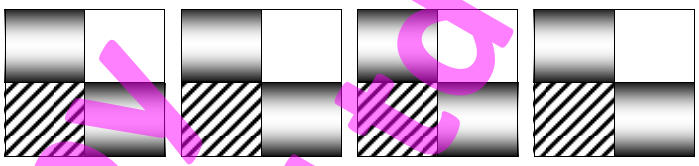
(5) yes / no

(6) yes / no

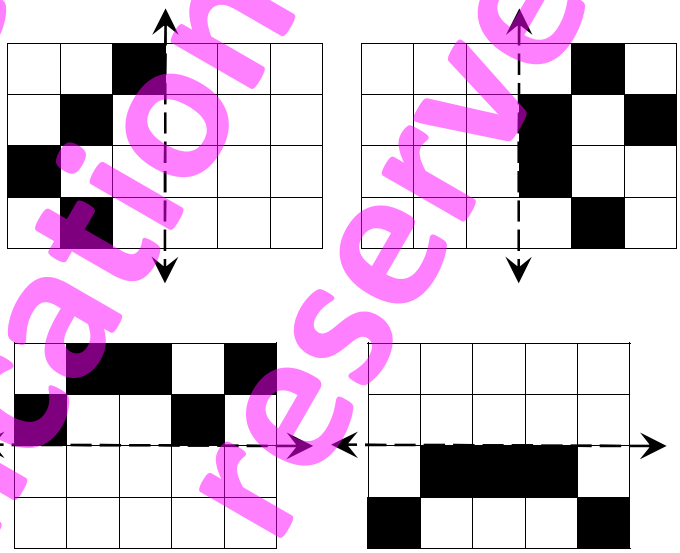
(7) yes / no

(8) **Talk** about how the object patterns above were created if it was not by sliding. Was it by turning (rotation) or flipping (reflection).

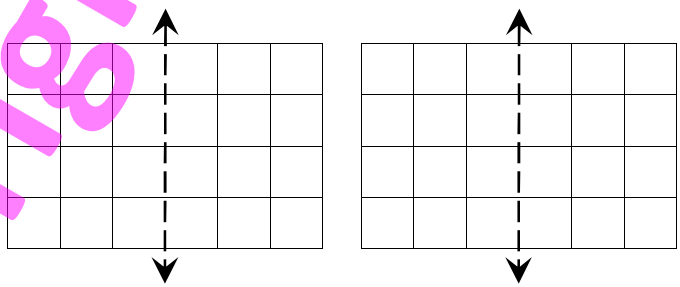
Kate coloured in three squares to make a pattern. She then copied the pattern 3 times to create this design.



(9) **Translate** each pattern to the opposite side of the arrow, without turning the pattern around or over.



(10) **Draw** your own pattern in the left side and copy the pattern into the right squares.



The aim of this activity sheet is to introduce translation. This involves moving an object by sliding it from one position to another, without involving turning or flipping.

Suggested HOME activity:

Looking around your home, ask your child to point out groups of objects that demonstrate translation.

Example: A picket fence, strips of wallpaper, a line of bottles in a row, chairs all pointing in the same direction etc.

Draw various patterns that involve sliding or translation.

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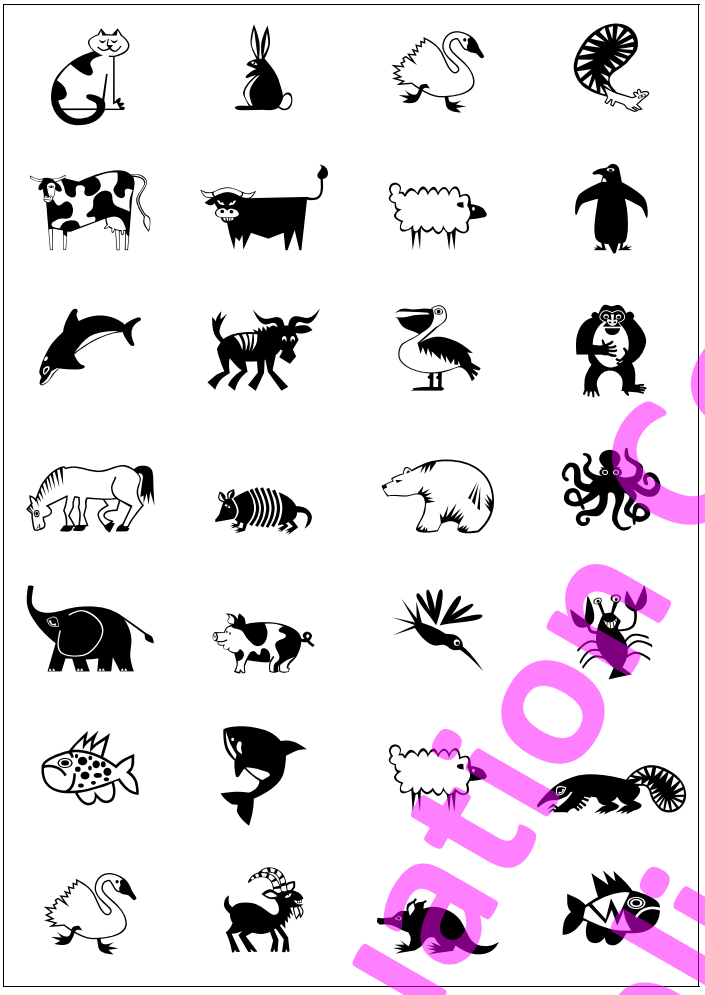
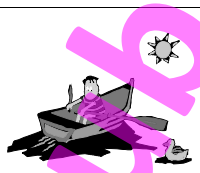
33 Sorting into groups

Name:

Look at these pictures below ...



There are many ways these animals can be grouped.



(1) **Draw** the letter **A** next to the animals that **can fly**.

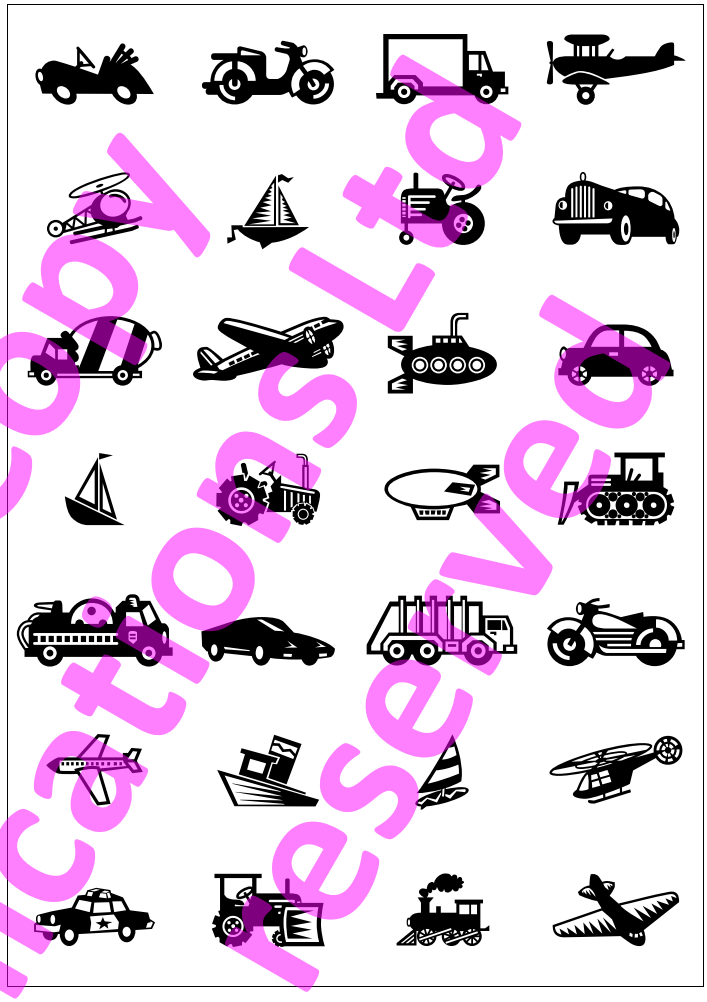
(2) **Draw** the letter **B** next to the animals that **live in the water**.

(3) **Draw** the letter **C** next to the animals that **live on a farm**.

(4) **Draw** the letter **D** next to the animals that **make good pets**.

(5) **Talk** about other ways you could sort these animals in groups.

Look at these pictures below ...



(6) **Draw** the letter **E** next to the **cars**.

(7) **Draw** the letter **F** next to the **boats**.

(8) **Draw** the letter **G** next to the vehicles that can **fly**.

(9) **Draw** the letter **H** next to the vehicles that have only **two wheels**.

(10) **Talk** about other ways you could sort these vehicles in groups.

The aim of this activity sheet is to learn how to sort objects into various groups, based on the characteristics of each object.

Suggested HOME activity:
Gather a collection of objects from around your house that can be sorted more than one way.

Example: Sort different sized blocks by their size or by their colour.

Ask your child to come up with different ways the objects can be sorted.

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34 Understanding and using tables

Name: _____ AWS

Pupils in Room 8 were asked what food they ate for dinner last night.
This table shows the results.

Food				
Number of pupils	4	7	6	8

(1) How many pupils had Chinese food ( )? _____

(2) How many pupils had hamburgers ( )? _____

(3) How many pupils had fish & chips ( )? _____

(4) How many pupils had soup ( )? _____

(5) How many pupils in Room 8? _____

Pupils in Room 6 were asked what their favourite wild animal was.
This table shows the results.

Animal					
Number of pupils	3	6	5	4	8

(6) How many pupils liked zebras ( )? _____

(7) How many pupils liked monkeys ( )? _____

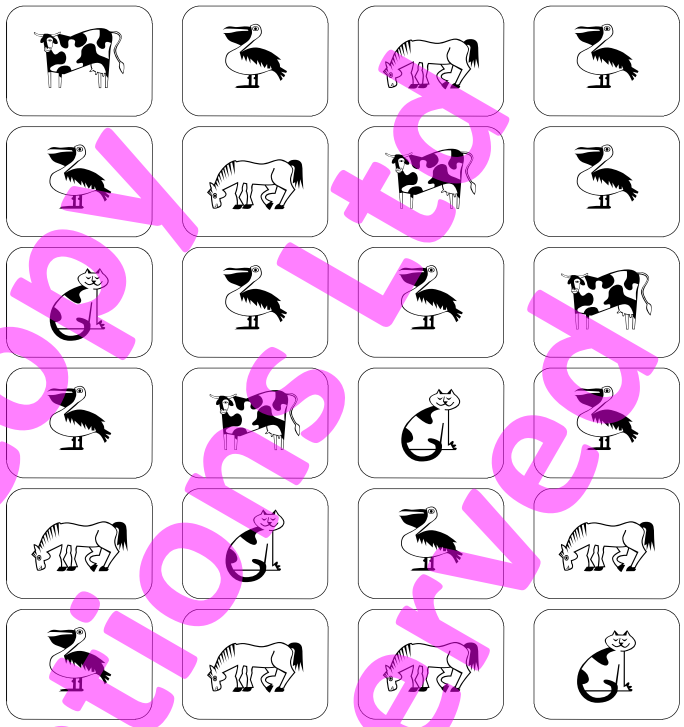
(8) How many pupils liked polar bears ( )? _____

(9) How many pupils liked elephants ( )? _____

(10) How many pupils liked rhinos ( )? _____

(11) How many pupils in Room 6 like wild animals? _____

Billy has been collecting cards ...



(12) **Count** how many there are of each different card and **write** your answers in the table.

Card	Total

(13) How many cards are there altogether? _____

The aim of this activity sheet is to understand information (data) presented in tables and create tables from information (data).

Suggested HOME activity:
Collect information that can be presented in a table. This may require you to ask extended family or friends to answer some questions to collect the data. Then ask your child questions that relate to the data.

Example: A table showing favourite foods your family / friends eat.

Create your own tables, with made-up data and then ask your child to talk about the data in the tables.

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35 Creating tally charts

Name:

AWS

A **tally chart** looks like a table, but has an extra column called a **tally column**.

In the tally column, **marks** are drawn as the objects are sorted and counted.

Colour	Tally	Total
blue	IIII	4
red	III	3
black	𝍸 I	6

Each mark means one and 𝍸 means five.

Example: 𝍸 III *means 5 + 3 = 8*

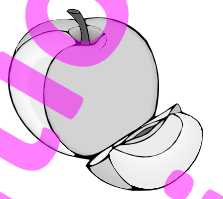
The marks are added up and the total is written in the total column.

Look at each **tally chart**.

Write in the **total column** numbers.

(1)

Fruit	Tally	Total
	𝍸 I	
	𝍸 II	
	IIII	



(2)

Vegetables	Tally	Total
	𝍸 III	
	𝍸 II	
	𝍸 IIII	
	𝍸 𝍸 I	

Draw in the **tally column** marks in these tables.

(3)

Animals	Tally	Total
		7
		10
		8

(4)

Planes	Tally	Total
		11
		15
		13

(5) Use the **tally chart** below to work out how many there are of each picture.

Items	Tally	Total

Remember ...

𝍸 = *5*

(6) How many 's in question 1? _____

(7) How many 's in question 2? _____

(8) How many 's in question 1? _____

(9) How many 's in question 4? _____

(10) How many 's in question 3? _____

(11) How many 's in question 5? _____

The aim of this activity sheet is to understand how to use and create a tally chart. A tally chart is a way of recording data in a systematic way to avoid leaving data out.

Suggested HOME activity:

Data can be collected around your home.

Example: How many doors and windows in your house? What coins are in your wallet or piggy bank?

Create tally charts as you collect this data, making sure your child counts in 5's as shown in this worksheet. This makes it easier to add up large totals by counting 5, 10, 15, 20 etc.

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36 Pictograms

Name:

AWS

Look at each of these **pictograms**. Each picture equals one.

This pictogram below shows the number of pieces of fruit Sam ate in a week.

apples:

pears:

pineapples:

(1) How many pears did Sam eat? _____

(2) Which fruit did he eat 4 of? _____

(3) How many apples did Sam eat? _____

(4) How many pieces of fruit did Sam eat? _____

This pictogram below shows the favourite wild animals that Room 4 pupils like.

zebras:

monkeys:

elephants:

camels:

(5) How many pupils liked monkeys? _____

(6) Which animal did 6 pupils like most? _____

(7) How many pupils liked camels? _____

(8) Which animal did 5 pupils like most? _____

(9) How many pupils in Room 4? _____

Use the numbers in each table to **draw** a **pictogram**. Each picture equals one.

(10) This table shows the number of boys and girls in a group.

	Total
girls	7
boys	8

girls:

boys:

(11) This table shows the number of books read by Jane and Alex.

	Total
Jane	8
Alex	10

Jane:

Alex:

(12) This table shows the number of hours spent playing on a computer.

	Total
James	6
Hannah	5
Jack	9

James:

Hannah:

Jack:

The aim of this activity sheet is to interpret data presented in a pictogram. Each pictogram represents a certain number of items or objects etc.

Suggested HOME activity:

Using data collected from around your home or the information in the tally charts in Worksheet 35, have your child create some pictograms. If the data contains large numbers, to avoid drawing lots of pictures, make each picture worth more than one.

Example: If there were 30 items, by making each picture worth 5, only 6 pictures would be drawn.

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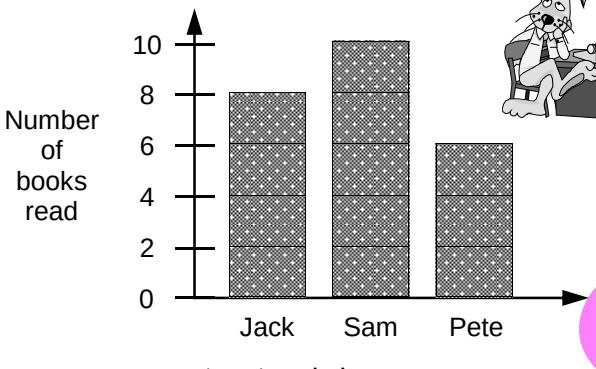
37 Column graphs

Name:

Look at each of these **column graphs**.

This column graph below shows the number of books read by three boys.



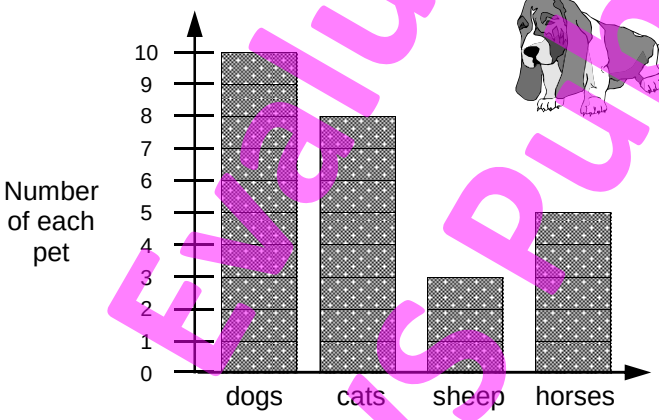
(1) How many books did Sam read?

(2) Which boy read 8 books?

(3) How many books did Pete read?

(4) How many books did these three boys read?

This column graph below shows the pets that Room 5 pupils have.



(5) How many pupils have a pet sheep?

(6) Which pet did 5 pupils have?

(7) How many pupils have a pet dog?

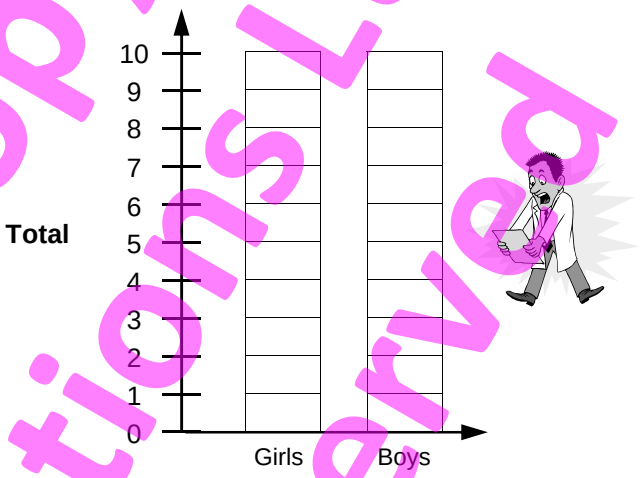
(8) Which pet did 8 pupils have?

(9) How many pets do the Room 5 pupils have?

Use the numbers in each table to **draw** a **column graph**.

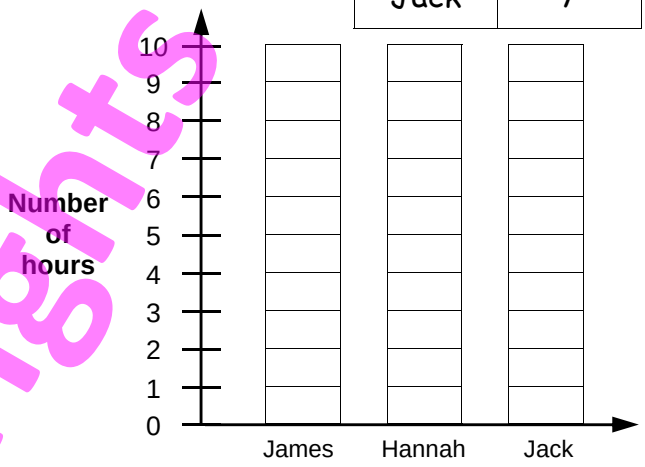
(10) This table shows the number of boys and girls in a group.

	Total
girls	7
boys	6



(11) This table shows the number of hours spent playing on a computer.

	Total
James	8
Hannah	9
Jack	7



The aim of this activity sheet is to interpret data presented in a column graph. The height of the column tells us how many. There are always gaps between columns.

Suggested HOME activity:
Using data collected from around your home or the information in the tally charts in Worksheet 35, have your child create some column graphs. Remember to have a scale up the side of the graph.

Example: How many hours each person in your home watches TV per night.

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38 Ordering events / probability words

Name:

AWS

Which is more likely …

… the sun will rise tomorrow or it will snow tomorrow?

Answer: The sun will rise is certain, but it may not snow.

Read each sentence **A** to **E**.

(1)

A If today is Friday, yesterday was Thursday.

B You have a pet elephant.

C It is going to be sunny tomorrow.

D You have a pet cat or dog.

E You will go to the movies this term.

Order these sentences (A to E) above, starting with the **impossible**.

Sophie asked, *"If today is Monday, is tomorrow Wednesday?"*

X

impossible — certain

Mark an **X** on the scale where the answer to Sophie's question would go.

Read each sentence F to I.

(2)

F Tomorrow it is going to rain.

G We will go on a school trip this year.

H If yesterday was Sunday, today is Monday.

I There are only 11 months in a year.

Mark each letter on the scale below where you think it would go.

certain — impossible

Probability Words			
	yes	maybe	can
	no	always	can't
	might	will	won't
	never	sometimes	could

Write a word in these sentences that means the same as **certain**.

(3) "Can I go to the movies?" asked Clare. "_____" said dad.

(4) James _____ has a tidy bedroom.

(5) In the holidays I _____ be going to the zoo.

Write a word in these sentences that means the same as **possible**.

(6) "Can I go to the movies?" asked Clare. "_____" said dad.

(7) James _____ has a tidy bedroom.

(8) In the holidays I _____ be going to the zoo.

Write a word in these sentences that means the same as **impossible**.

(9) "Can I go to the movies?" asked Clare. "_____" said dad.

(10) James _____ has a tidy bedroom.

(11) In the holidays I _____ be going to the zoo.

The aim of this activity sheet is to revise ordering of events based on the likelihood of their occurrence using simple probability scales and using previously introduced probability words.

Suggested HOME activity:

Create a list of up to 5 events that can be ordered. Ask your child to place the events in order, based on their likelihood of occurring, from certain to impossible or vice versa.

Create some more events that your child can order and display this order on simple probability scales.

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39 Finding possible outcomes

Name:

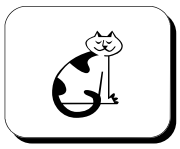
AWS

A coin is tossed in the air.

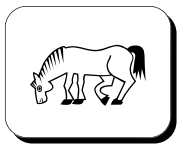
When it lands, what could be showing on the coin?

Answer: It could show heads or it could show tails.

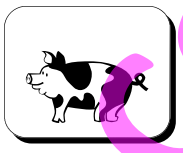
Brian placed these 3 picture cards face down on the table.



cat



horse



pig

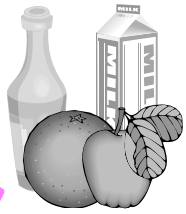
(1) If he turns over **one** card, what animal picture could it be?

(2) If he turns over any **two** cards at the same time, what two animal pictures could be on these cards?

April placed these 4 letter cards face down on the table.

(3) If she turns over **one** card, what letter could it be?

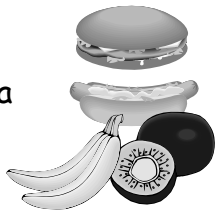
(4) If she turns over any **two** cards at the same time, what **two** letters could be on these cards?



At playtime, Grant has a choice of either an apple, an orange or a banana **and** a choice of either a drink of milk or juice.

(5) Use this **table** to work out what Grant can eat at playtime. (Write letters only)

	Milk (M)	Juice (J)
Apple (A)	A and M	
Orange (O)		
Banana (B)		



For lunch, Grant has a choice of either a hot dog, a salad roll or a hamburger **and** a choice of either a kiwifruit or a banana.

(6) Use this **table** to work out what Grant can eat at lunchtime. (Write letters only)

	Kiwifruit (K)	Banana (B)
Hotdog (Ho)		
Salad Roll (S)		
Hamburger (Ha)		

*The aim of this activity sheet is to work out all possible outcomes given an event. The **event** can be as simple as tossing a coin, where there are two possible **outcomes**, heads or tails.*

Suggested HOME activity:

Model each question to help your child work out the outcomes.

Come up with events from around the home for which your child can name all possible outcomes.

Using a table as above can be a good way to make sure all outcomes can be found.

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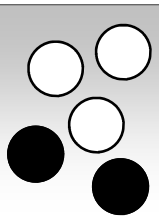
40 Simple probability

Name: _____ AWS

Carol places 2 black marbles and 3 white marbles in a paper bag.



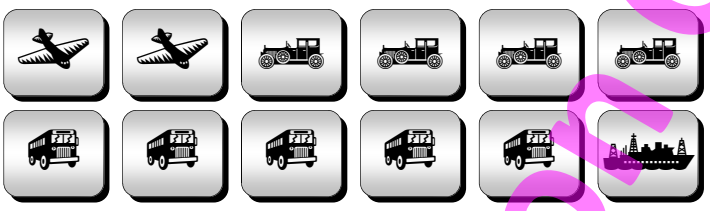
How many marbles are in the bag?

Answer: 5 marbles.

If she picks out one marble from the bag, what is the chance that it is a white marble?

Answer: 3 out of 5 chances.

These picture cards are going to be turned over to play a game of memory.



(1) How many plane cards are there? _____

(2) How many car cards are there? _____

(3) How many bus cards are there? _____

(4) How many boat cards are there? _____

(5) How many cards are there altogether? _____

(6) What is the chance of turning over a car card?

_____ out of _____

(7) What is the chance of turning over a boat card?

_____ out of _____

(8) What is the chance of turning over a plane card?

_____ out of _____

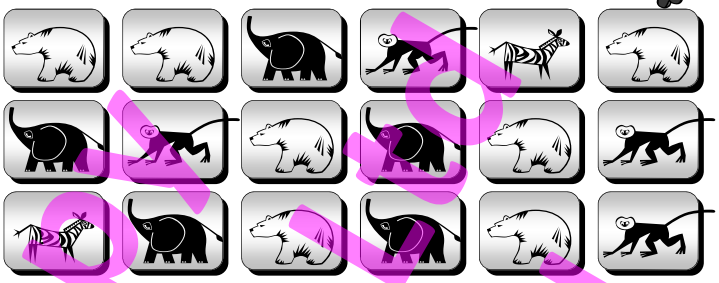
(9) Why do you have a better chance of turning over a bus card than a car card?

_____

_____

_____

Look at these cards for another game of memory.



(10) How many zebra cards are there? _____

(11) How many monkey cards are there? _____

(12) How many bear cards are there? _____

(13) How many cards are there altogether? _____

(14) What is the chance of turning over an elephant card?

_____ out of _____

(15) What is the chance of turning over a bear card?

_____ out of _____

(16) What is the chance of turning over a monkey card?

_____ out of _____

(17) Why do you have less chance of turning over an elephant card than a bear card?

_____

_____

The aim of this activity sheet is to investigate simple probability, working out the chance of something happening. Probability can be expressed as a fraction, such as ¼, which means one out of four.

Suggested HOME activity:

Create similar questions as on this activity sheet to reinforce simple probability.

Example: Place 5 red, 3 green and 2 white blocks in a bag.

Ask your child to select a particular coloured block and describe the chance of selecting that block ... 2 out of 10 chances (a white block).

Sign when completed: .....

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Curriculum Strand Worksheet Answers

1

(1)

Num	English	Maori
1	one	(ko)tahi
2	two	rua
3	three	toru
4	four	wha
5	five	rima
6	six	ono
7	seven	whitu
8	eight	waru
9	nine	iwa
10	ten	tekau

Num	English
11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen
16	sixteen
17	seventeen
18	eighteen
19	nineteen
20	twenty

(2) 1, **2**, **3**, 4, **5**, **6**, 7, **8**, 9, **10**, 11, **12**, **13**, 14, 15, **16**, 17, **18**, **19**, **20**

(3) 20, **19**, **18**, 17, **16**, 15, **14**, **13**, **12**, **11**, 10, **9**, **8**, 7, **6**, **5**, **4**, 3, **2**, 1

(4) 5, **6** 9, **10** 3, **4**
12, **13** 18, **19** 16, **17**

(5) **7**, 8 **2**, 3 **5**, 6
16, 17 **13**, 14 **19**, 20

(6) 2, **3**, 4 5, **6**, 7
16, **17**, 18 11, **12**, 13

2

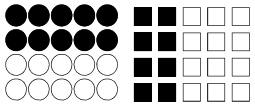
(1) = 9 = 11

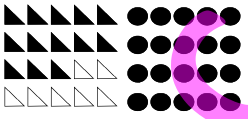
(2) = 12 = 8

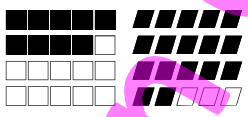
(3) = 5 = 15

(4) = 14 = 6

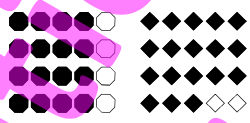
(5) = 3 = 17

(6) 

(7) 

(8) 

(9)

(10) 

3

(1) Refer to Number Matrix at the back of this book

(2) 55, **56** 39, **40** 68, **69**
41, **42** 80, **81** 52, **53**
67, **68** 16, **17** 70, **71**

(3) **31**, 32 **53**, 54 **81**, 82
66, 67 **78**, 79 **29**, 30
74, 75 **40**, 41 **94**, 95

(4) 35, **36**, 37 22, **23**, 24
16, **17**, 18 80, **81**, 82
93, **94**, 95 71, **72**, 73
69, **70**, 71 44, **45**, 46

4

(1) 9, 10, 13, 18

(2) 14, 23, 32, 41, 50

(3) 19, 46, 57, 64, 75, 91

(4) 16 75 53

(5) 60, 51, 42, 24, 15

(6) 85, 81, 76, 67, 58, 18

(7) 90 27 63

(8) 29, 37, 48, 56, 65, 73, 84, 92

(9) B

(10) C

(11) C, D, E, A. B

5

(1)	32	(23)	17
(2)	64	(24)	94
(3)	12	(25)	46
(4)	57	(26)	15
(5)	25	(27)	68
(6)	93	(28)	23
(7)	19	(29)	47
(8)	74	(30)	52
(9)	51	(31)	13
(10)	86	(32)	28
(11)	31	(33)	71
(12)	95	(34)	89
(13)	37	(35)	21
(14)	61	(36)	16
(15)	82	(37)	73
(16)	75	(38)	41
(17)	36	(39)	39
(18)	81	(40)	63
(19)	49	(41)	91
(20)	14	(42)	72
(21)	98	(43)	18
(22)	27	(44)	59

6

(1)	5	(14)	7
(2)	3	(15)	9
(3)	2	(16)	3
(4)	1	(17)	10
(5)	4	(18)	3
(6)	2	(19)	10
(7)	6	(20)	7
(8)	4	(21)	8
(9)	7	(22)	6
(10)	3	(23)	7
(11)	8	(24)	1
(12)	4	(25)	6
(13)	9		

(26) Half of 4 is **2**

(27) Double 4 is **8**

(28) Half of 6 is **3**

(29) Double 5 is **10**

(30) Half of 8 is **4**

(31) Double 3 is **6**

(32) Half of 10 is **5**

(33) 6 + 3 = 9

(34) $8 - $6 = $2

(35) 5 + 5 = 10

(36) $10 - $7 = $3

7

(1) 3 + **2** = 5
(2) **4** - 1 = 3
(3) **1** + 1 = 2
(4) 3 - **2** = 1
(5) 2 + **2** = 4
(6) **6** - 4 = 2
(7) **5** + 1 = 6
(8) 7 - **3** = 4
(9) 2 + **5** = 7
(10) **5** - 2 = 3
(11) **6** + 2 = 8
(12) 8 - **4** = 4
(13) 4 + **5** = 9
(14) **9** - 2 = 7
(15) **1** + 8 = 9
(16) 7 - **4** = 3
(17) 5 + **5** = 10
(18) **9** - 6 = 3
(19) **6** + 4 = 10
(20) 10 - **3** = 7
(21) 5 + **3** = 8
(22) **10** - 4 = 6
(23) **1** + 6 = 7
(24) 8 - **7** = 1
(25) 3 + **3** = 6

(26)

2	5	9	**16**
4	3	8	**15**
1	6	5	**12**
7	**14**	**22**	**43**

(27) 10 - 4 = 6 red blocks

(28) $9 - $6 = $3

8

(1)	11	(11)	13
(2)	12	(12)	14
(3)	13	(13)	11
(4)	11	(14)	12
(5)	14	(15)	12
(6)	12	(16)	16
(7)	13	(17)	17
(8)	11	(18)	14
(9)	15	(19)	16
(10)	12	(20)	18

(21) Half of 12 is **6**

(22) Double 7 is **14**

(23) Half of 18 is **9**

(24) Double 6 is **12**

(25) Half of 16 is **8**

(26) Double 9 is **18**

(27) Half of 20 is **10**

(28) Double 8 is **16**

(29) Half of 14 is **7**

(30) Double 10 is **20**

(31) 8 + **5** = 13

(32) **13** - 9 = 4

(33) **9** + 5 = 14

(34) 15 - **8** = 7

(35) 9 + **6** = 15

(36) **16** - 8 = 8

(37) **9** + 7 = 16

(38) 16 - **7** = 9

(39) 8 + **9** = 17

(40) 18 - **9** = 9

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9

(1) 10 + **1** = **11**
(2) 10 + **5** = **15**
(3) 20 + **8** = **28**
(4) **10** + **7** = **17**
(5) **10** + **8** = **18**
(6) **20** + **5** = **25**
(7) **20** + **7** = **27**
(8) **20** + **4** = **24**
(9) 4 + 4 + **1** = **9**
(10) **7** + 7 + **1** = **15**
(11) 6 + **6** + **3** = **15**
(12) **5** + **5** + 3 = **13**
(13) **7** + **7** + **2** = **16**
(14) **8** + **8** + **1** = **17**
(15) **22** + **22** - 2 = **42**
(16) **37** + **37** - **7** = **67**
(17) 10 + 1 = 11
(18) 10 + **3** = **13**
(19) 20 + **4** = **24**
(20) **30** + **4** = **34**
(21) **20** + **2** = **22**
(22) **20** + **5** = **25**
(23) **30** + **8** = **38**
(24) **40** + **5** = **45**

(25)	29	(28)	35
(26)	21	(29)	62
(27)	51	(30)	39

10

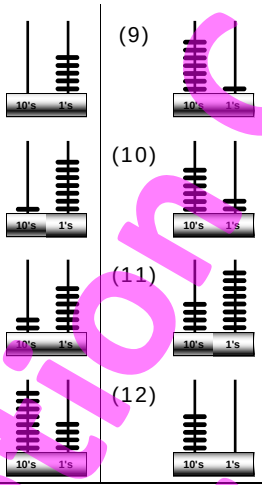
(1) 10's = 3
1's = 7
number = 37

(2) 10's = 8
1's = 2
number = 82

(3) 10's = 5
1's = 6
number = 56

(4) 10's = 9
1's = 4
number = 94

(5) (6) (7) (8) (9) (10) (11) (12)



11

(1) **1** $10 note + **2** $1 coins
(2) **1** $10 note + **4** $1 coins
(3) **1** $10 note + **6** $1 coins
(4) **2** $10 notes + **2** $1 coins
(5) **2** $10 notes + **7** $1 coins
(6) $27
(7) $34
(8) $46
(9) $90
(10) 23 = **2** 10's + **3** 1's
(11) 56 = **5** 10's + **6** 1's
(12) 72 = **7** 10's + **2** 1's
(13) 80 = **8** 10's + **0** 1's
(14) 45
(15) 62
(16) 9
(17) 70

12

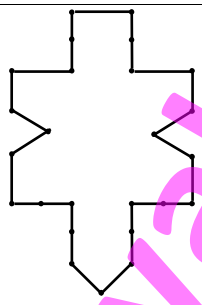
(1) 20c, $2, 10c, 50c, $1
(2) 40c, 50c, 70c, $4.50
(3) 20c
(4) 20c
(5) 50c
(6) 10c
(7) 50c

The following are some possible answers:

(8) 30c = **20c** + **10c**
(9) 60c = **50c** + **10c**
(10) 90c = **50c** + **20c** + **20c**
(11) $1.20 = **$1** + **20c**
(12) $1.50 = **$1** + **50c**

13

(1)



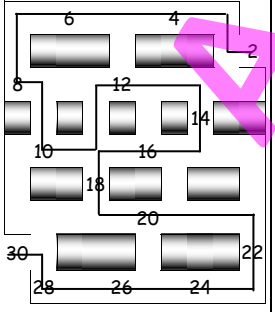
(2) 8, **10** 20, **22** 34, **36**
16, **18** 42, **44** 26, **28**

(3) **4**, 6 **16**, 18 **32**, 34
26, 28 **34**, 36 **10**, 12

(4) 2, 4, **6**, **8**, **10**, 12, **14**, **16**, 18, **20**

(5) 20, **18**, **16**, **14**, **12**, 10, **8**, 6, **4**, **2**

(6)



14

(1) 2, **4**, **6**, 8, **10**, **12**, 14, **16**, 18, **20**

(2) 8 is the same as 2 x 4 = 8
(3) 14 is the same as 2 x 7 = 14
(4) 10 is the same as 2 x 5 = 10
(5) 4 is the same as 2 x 2 = 4
(6) 16 is the same as 2 x 8 = 16
(7) 6 is the same as 2 x 3 = 6
(8) 18 is the same as 2 x 9 = 18
(9) 12 is the same as 2 x 6 = 12
(10) 20 is the same as 2 x 10 = 20

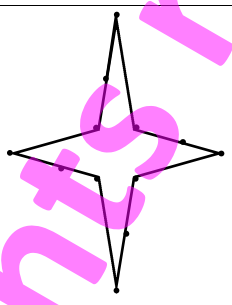
(11)	2	(21)	2
(12)	8	(22)	8
(13)	12	(23)	3
(14)	18	(24)	7
(15)	20	(25)	6
(16)	10	(26)	4
(17)	4	(27)	10
(18)	14	(28)	5
(19)	6	(29)	1
(20)	16	(30)	9

(31) $2.00 x 6 = $12.00

(32) $2.00 x 10 = $20.00

15

(1)



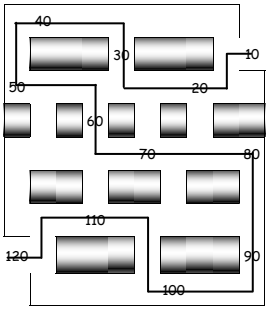
(2) 50, **60** 90, **100** 10, **20**
70, **80** 30, **40** 80, **90**

(3) **90**, 100 **20**, 30 **60**, 70
30, 40 **80**, 90 **50**, 60

(4) 10, **20**, 30, **40**, **50**, 60, **70**, **80**, 90, **100**

(5) 100, **90**, **80**, **70**, 60, **50**, 40, **30**, **20**, **10**

(6)



16

(1) 10, **20**, **30**, 40, **50**, **60**, 70, **80**, 90, **100**

(2) 40 is the same as 10 x 4 = 40
(3) 70 is the same as 10 x 7 = 70
(4) 50 is the same as 10 x 5 = 50
(5) 20 is the same as 10 x 2 = 20
(6) 80 is the same as 10 x 8 = 80
(7) 30 is the same as 10 x 3 = 30
(8) 90 is the same as 10 x 9 = 90
(9) 60 is the same as 10 x 6 = 60
(10) 100 is the same as 10 x 10 = 100

(11)	10	(21)	2
(12)	40	(22)	8
(13)	60	(23)	3
(14)	90	(24)	7
(15)	100	(25)	6
(16)	50	(26)	4
(17)	20	(27)	10
(18)	70	(28)	5
(19)	30	(29)	1
(20)	80	(30)	9

(31) $10.00 x 7 = $70.00

(32) $10.00 x 9 = $90.00

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17

(1) to (16) Check to ensure half of each shape and group of shapes are coloured in.

(17) yes

(18) no

(19) 2 apples

(20) 3 milk cartons

(21) $5.00

(22) $4.00

18

(1) to (16) Check to ensure one quarter of each shape and group of shapes are coloured in.

(17) yes

(18) no

(19) 1 apple

(20) 2 milk cartons

(21) $2.00

(22) $3.00

19

(1) 5

(2) 4

(3) 4

(4) $3^1/_2$

(5) 5

(6) Draw own line

(7) Own answers

(8) Own answers

(9) Own answers

(10) 7

(11) Own answers

(12) Own answers

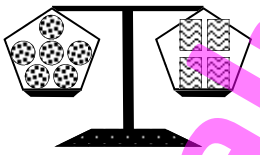
(13) Own answers

20

(1) to (8) Own answers

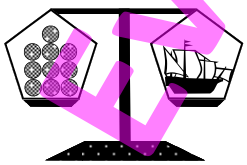
21

(1) 2

(2) 

(3) 4

(4) 9, 11

(5) 

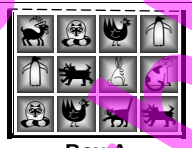
(6) 10

(7) Own answers

(8) Own answers

(9) Own answers

22

(1) 
Box A

Box B

Box C

Box D

(2) 12

(3) 9

(4) 10

(5) 8

(6) A, C, B, D

(7) Own answers

(8) Own answers

(9) Own answers

23

(1)

T	s	T	u	e	s	d	a	y	S
S	a	t	u	r	d	a	y	e	u
s	y	h	W	u	e	d	e	y	e
u	d	a	S	u	n	d	a	y	T
W	e	d	n	e	s	d	a	y	r
W	e	r	a	S	t	y	c	r	M
e	a	T	h	u	r	s	d	a	y
d	u	r	f	e	u	s	d	S	u
j	T	M	o	n	d	a	y	n	e
e	e	F	r	i	d	a	y	u	W

(2) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

(3) Own Answer

(4) Thursday

(5) Saturday, Sunday

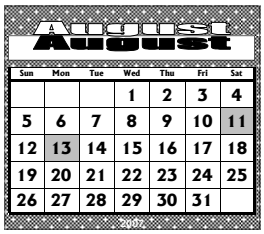
(6) Own Answer

(7)

O	c	t	o	b	e	r	t	h	j
s	a	F	e	b	r	u	a	r	y
J	u	n	e	r	A	p	r	i	l
A	u	g	u	s	t	t	g	h	k
e	w	M	a	y	d	J	u	l	y
e	a	N	o	v	e	m	b	e	r
r	J	a	n	u	a	r	y	w	r
S	e	p	t	e	m	b	e	r	u
r	M	a	r	c	h	k	m	a	q
u	D	e	c	e	m	b	e	r	d

(8) January, February, March, April, May, June, July, August, September, October, November, December

24

(1) 

(2) Saturday

(3) As above

(4) Monday

(5) Saturday

(6) 21st

(7) 12th

(8) 31st

(9) Haircut at 3 p.m.

(10) Sunday 11th at 12 p.m.

(11) Saturday 10th, Monday 26th

(12) New Years Day

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25

(1) 9 o'clock

(2) 1 o'clock

(3) 8 o'clock

(4) 2 o'clock

(5) $^1/_2$ past 3

(6) $^1/_2$ past 7

(7) $^1/_2$ past 9

(8) $^1/_2$ past 1

(9)

(10)

(11)

(12)

(13) 2 o'clock

(14) 12 o'clock

(15) $^1/_2$ past 1

26

(1) 5:00

(2) 11:00

(3) 8:00

(4) 4:00

(5) 7:30

(6) 1:30

(7) 3:30

(8) 12:30

(9)

(10)

(11) 1 o'clock

(12) $^1/_2$ past 4

(13) 2 o'clock

(14) $^1/_2$ past 10

(15) 8 o'clock or 8:00

(16) $^1/_2$ past 11 or 11:30

27

(1) warm /hot

(2) warm /hot

(3) cold

(4) cold / warm

(5) cold / warm
cool / cold

(6) warm / hot

(7) cool / cold

(8) warm

(9) hot, warm, cool, cold

(10) up

(11) down

(12) down

(13) up

(14) B

(15) D

(16) A

(17) C

28

(1) square, 2
diamond, 1
hexagon, 1
circle, 1
rectangle, 1
pentagon, 2

(2) Colour in shapes as directed

(3) Draw own pictures

(4) Draw own pictures

(5) 5 sides - pentagon,
6 sides - hexagon,
8 sides - octagon

29

(1) 8 corners, 12 edges, 6 faces, all opposite faces are the same size - this object is a box.

8 corners, 12 edges, 6 faces, all faces are squares of the same size - this object is a cube.

(2) Top and bottom of this object are the shape of a circle, both the same size, a curved face between the two circles. Two edges but no corners - this object is a cylinder.

(3) No corners, no edges, 1 face, easily rolled, completely round - this object is a sphere.

(4) box, sphere, cylinder, sphere, box, box, cylinder

(5) all sphere shaped

(6) A, B, E, G, I

(7) A, I

(8) B, C, D, F, G, H

(9) Own answers

30

(1) Ben

(2) Lucy

(3) Hannah and Ben

(4) Hannah and Lucy

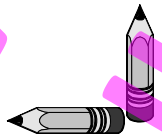
(5) Mark

(6) Own answer

(7) Own answer

(8) Own answer

(9)

(10) 

(11)

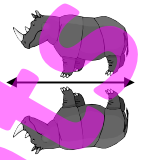
(12)

(13)

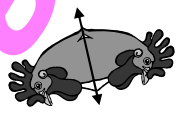
(14) Own pattern

31

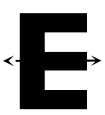
(1)

(2) 

(3)

(4) 

(5)

(6) 

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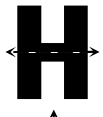
(8) 

(9)

(10)

(11) Own pattern

(12) Own pattern

32

(1) yes

(2) no

(3) no

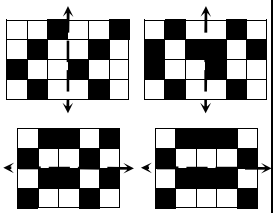
(4) yes

(5) no

(6) no

(7) no

(8) 1) translation
2) rotation
3) reflection
4) translation
5) rotation
6) reflection
7) rotation

(9) 

(10) Own patterns

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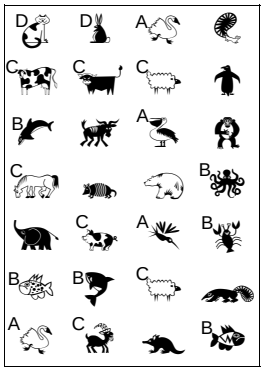
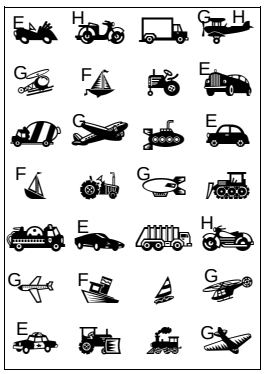
(1) to (4)



(5) Own answer

(6) to (9)



(10) Own answer

34

(1) 6

(2) 4

(3) 8

(4) 7

(5) 25

(6) 4

(7) 8

(8) 3

(9) 6

(10) 5

(11) 26

(12)

Card	Total
	10
	4
	6
	4

(13) 24

35

(1)

Fruit	Tally	Total
	𝍸 I	6
	𝍸 II	7
	IIII	4

(2)

Vegetables	Tally	Total
	𝍸 III	8
	𝍸 II	7
	𝍸 IIII	9
	𝍸 𝍸 I	11

(3)

Animals	Tally	Total
	𝍸 II	7
	𝍸 𝍸	10
	𝍸 III	8

(4)

Planes	Tally	Total
	𝍸 𝍸 I	11
	𝍸 𝍸 𝍸	15
	𝍸 𝍸 III	13

(5)

Items	Tally	Total
	𝍸 I	6
	𝍸	5
	𝍸 III	8
	III	3
	𝍸 III	8

(6) 7

(7) 11

(8) 6

(9) 15

(10) 7

(11) 8

36

(1) 3

(2) pineapples

(3) 5

(4) 12

(5) 8

(6) elephants

(7) 3

(8) zebras

(9) 22

(10)

(11)

(12)

37

(1) 10

(2) Jack

(3) 6

(4) 24

(5) 3

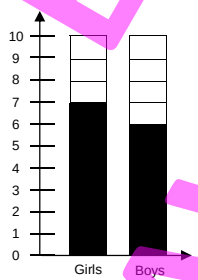
(6) horses

(7) 10

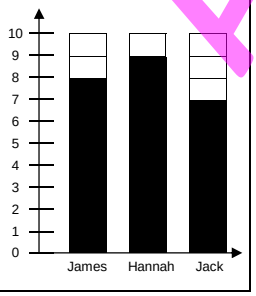
(8) cats

(9) 26

(10)



(11)



38

(1) B, C, E, D, A

(2)

(3) yes

(4) always

(5) will

(6) maybe

(7) sometimes

(8) might

(9) no

(10) never

(11) won't

39

(1) cat / horse /pig

(2) cat / horse, cat / pig, horse / pig

(3) A / B / C / D

(4) A / B, A / C, A / D, B / C, B / D, C / D,

(5)

	Milk (M)	Juice (J)
Apple (A)	A and M	A and J
Orange (O)	O and M	O and J
Banana (B)	B and M	B and J

(6)

	Kiwifruit (K)	Banana (B)
Hotdog (Ho)	Ho and K	Ho and B
Salad Roll (S)	S and K	S and B
Hamburger (Ha)	Ha and K	Ha and B

40

(1) 2

(2) 4

(3) 5

(4) 1

(5) 12

(6) 4 out of 12

(7) 1 out of 12

(8) 1 out of 6

(9) Because there are more bus cards than car cards

(10) 2

(11) 4

(12) 7

(13) 18

(14) 5 out of 18

(15) 7 out of 18

(16) 4 out of 18

(17) Because there are less elephant cards than bear cards

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