

Ministry of Education



MATHEMATICS

YEAR 4

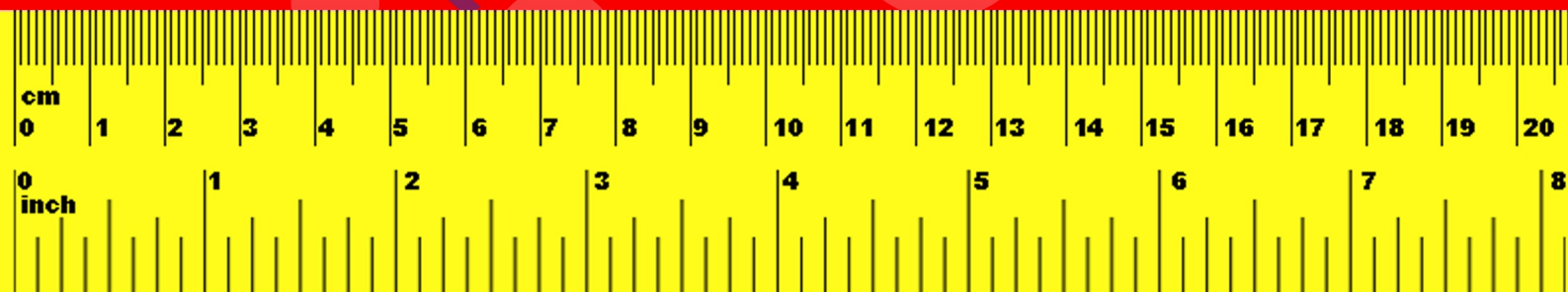


$\frac{1}{2}$



$\frac{2}{4}$

$$(3 \times 4) \times 2$$



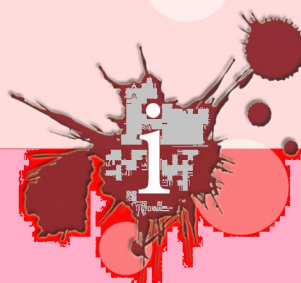
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Curriculum Development Unit

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Strand 1: Numbers

Unit 1.1 Whole Numbers

★ Achievement Indicator: *Compare and classify numbers*

Activity 1:

Numbers

Even Numbers:

Example: 2, 4, 6, 8, 10, 12....

Odd Numbers:

Example: 1, 3, 5, 7, 9, 11, 13....

Counting Numbers:

Example: 1, 2, 3, 4 ...

Whole Numbers:

Example:.....0, 1, 2, 3, 4,.....

1. Write odd or even beside the numbers:

- a) 42 - _____ b) 231 - _____ c) 534 - _____
d) 2316 - _____ e) 4577 - _____ f) 8149 - _____

2. Use the braces to:

- a) Write five even numbers less than 20 = _____
b) Write five odd numbers less than 40 = _____
c) Write five whole numbers more than 80 but less than 100 = _____
d) Write the first five counting numbers = _____

Strand 1: Numbers

Unit 1.1 Whole Numbers

★ Achievement Indicator:

Show cardinality of a collection and name the number name in the correct order.

Activity 2:

Sets

A set is a collection of things or objects. Let's look at the example below:

Example

Set K



Write the members of Set K between braces like this:

Set K = {     }

1. List the members of the Sets shown below using braces.

(a) Set R

11 27 16 43
25 10 42

Set R = {.....}

(b) Set X

C H L R P Q
V T M U D

Set X = {.....}

2. From Set P, write all the members:

Here is a set of numerals.

Set P = { 1, 2, 3, 4, 5, 6, 7, 8, 9 }

a) that are **even** numbers. Use **braces and commas**.

{ _____ }

b) that are **odd** numbers. Use **braces and commas**.

{ _____ }

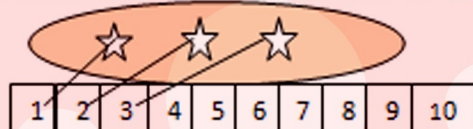
 Achievement Indicator: Describe that the end count is the total of a collection

Activity 3:

Sets

Example:

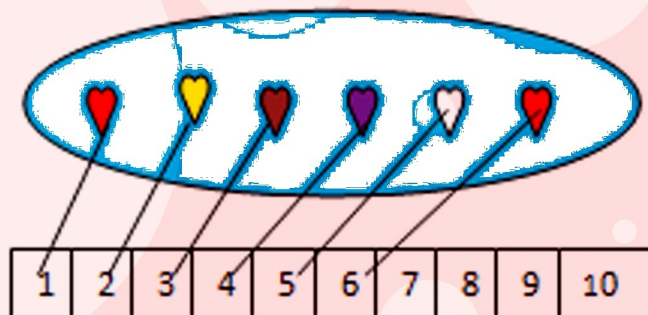
Draw a line between each member of the set and its counting number.



The number of elements in the set is 3. Therefore the end count of the collection is 3.

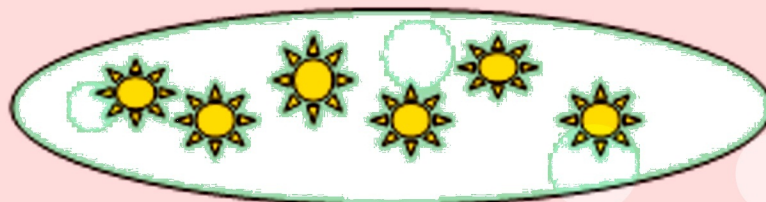
Complete the following by drawing the line between the members of the set and the counting numbers.

1.



The total number of this set is

2.



The total number of this set is

★ **Achievement Indicator:** Describe that the end count is the total of a collection

Activity 4: Sets and their Number Property

The cardinal number or number property of a set tells how many

Example: SET A members are in a set.



The cardinal number of set A is 4

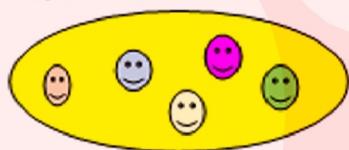
The number property of set A is 4

Using mathematical symbols we

Write: $n(A) = \underline{4}$

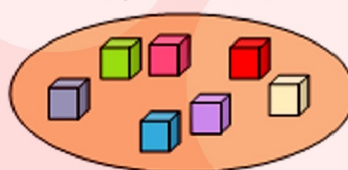
1. Write the cardinality of the following sets using symbols

a) Set T



$n(T) = \underline{\hspace{2cm}}$

b) Set Y

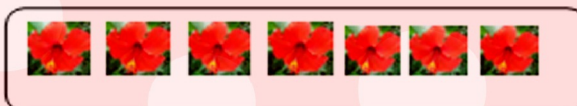


$n(Y) = \underline{\hspace{2cm}}$

c) Set K



d) Set Z



The cardinal number of Set K is ____

The number property of Set K is ____

Using symbols: $n(K) = \underline{\hspace{2cm}}$

The cardinal number of Set Z is ____

The number property of Set Z is ____

Using symbols: $n(Z) = \underline{\hspace{2cm}}$

2. Set M = {

} The cardinal number of Set M is 0

The number property of Set M is ____

Using the symbols: $n(M) = \underline{\hspace{2cm}}$

A set with no member
is called an

EMPTY SET!!!



Strand 1: Number & Numeration

Unit 1.1 Whole Number

Achievement Indicator: To read and order 3 digit number in ascending order.

Activity 5: Reading numbers in Ascending Order.

Study the Table below.

1. Read the 3 digit number and then write the missing number.

Number Name	and									
	one	two	three	four	five	six	seven	eight	nine	ten
Four Hundred	401	402	403	404	405	406	407	408	409	410
Five Hundred	501			504	505	506	507	508	509	
Six Hundred	601	602	603	604				608	609	
Seven Hundred	701	702				706	707	708	709	710
Eight Hundred			803	804	805	806	807			
Nine Hundred		902	903	904				908	909	910

2. Read the following 3 digit numbers in words

- a) Four hundred b) Six hundred and three
c) Five hundred and eight d) Nine hundred and ten

3. Write the following 3 digit numbers in words

- a) 401 - _____ b) 705 - _____
c) 907 - _____ d) 809 - _____
e) 700 - _____ f) 301 - _____
g) 402 - _____ h) 503 - _____

Strand 1: Numbers

Unit 1.1 Whole Numbers

Achievement Indicator:

* To read 4 digit numbers in ascending order.

* To write 4 digit number in words

Activity 6: Reading Numbers in Ascending Order.

1. Read the 4 digit numbers and then fill the missing numbers.

Number name	One hundred and.....									
	eleven	twelve	thirteen	fourteen	fifteen	sixteen	seventeen	eighteen	nineteen	twenty
Four Thousand	4111	4112	4113	4114	4115	4116	4117	4118	4119	4120
Five Thousand	5111			5114		5116	5117			5120
Six Thousand	6111				6115	6116	6117	6118		
Seven Thousand		7112	7113				7117	7118		7120
Eight Thousand	8111			8114	8115				8119	8120
Nine Thousand					9115	9116	9117			

2. Read the following 4 digit numbers in words and write the numerals

a) Seven thousand one hundred and sixteen _____

b) Nine thousand one hundred and thirteen _____

c) Six thousand one and twenty _____

d) Five thousand one hundred and ten _____

3. Write the following 4 digit numbers in words

a) 1 401 - _____ b) 3 705 - _____

c) 8 907 - _____ d) 5 809 - _____

e) 7 600 - _____ f) 4 301 - _____

Achievement Indicator: a) To read and Write 3 digit number.

b) To orde 3 digit number in descending order.

Activity 7: Reading Numbers In Descending Order

Study the Table below.

1. Read the 3 digit number and then write the missing number.

Number name and									
	Sixty nine	Sixty eight	Sixty seven	Sixty six	Sixty five	Sixty four	Sixty three	Sixty two	Sixty one	sixty
Nine Hundred	969	968	967			964	963			960
Eight Hundred			867	866	865	864			861	860
Seven Hundred		768	767	766	765	764		762		
Six Hundred	669	668			665	664		662	661	660
Five Hundred	569	568		566			563	562		560
Four Hundred	469		467		465	464	463		461	
Three Hundred			367	366			363	362	361	

2. Skip counting by 10's in descending order

a) 958, 948, 938, _____, _____, 908, _____, _____

b) 622, 612, _____, _____, 582, 572, _____

3. Skip counting by 100's in descending order

a) 934, 924, _____, _____, _____, _____

b) 445, 435, _____, _____, _____, _____

Strand 1: Numbers

Unit 1.1 Whole Numbers

Achievement Indicator:

- To read and write 3 digit numbers
- To order 3 digit number in descending order.

Activity 8: Reading Numbers In Descending Order

Study the Table below.

1. Read the 4 digit number and then write the missing number.

Number name	Five hundred and									
	thirty nine	thirty eight	thirty seven	thirty six	thirty five	thirty four	thirty three	thirty two	thirty one	thirty
Nine Thousand	9 539	9 538	9 537			9 534	9 533			9 530
Eight Thousand			8 537	8 536	8 535	8 534			8 531	8 530
Seven Thousand		7 538	7 537	7 536	7 535	7 534		7 532		
Six Thousand	6 539	6 538			6 535	6 534		6 532	6 531	6 530
Five Thousand	5 539	5 538		5 536			5 533	5 532		5 530
Four Thousand	4 539		4 537		4 535	4 534	4 533		4 531	
Three Thousand			3 537	3 536			3 533	3 532	3 531	

2. Skip counting by 50's in descending order

- a) 1 958, 1 908, 1 858, _____, _____, 1 708, _____
- b) 7 622, 7 572, _____, _____, 7 422, 7 372, _____

3. Skip counting by 200's in descending order

- a) 6 934, 6 734, _____, _____, _____, _____
- b) 4 345, 4 145, _____, _____, _____, _____

Achievement Indicator

- To order numbers from the smallest to the largest and from largest to smallest

Activity 9: Ascending Order

Example:

4 321
6 743 3 425

Order the numbers in the set from the smallest to the largest or in ascending order: 3 425, 4 321, 6 743

Order numbers from the largest to smallest

a)

743 433
920 321

b)

546 534
421 402

c)

5789 1764
7764 3321

d)

5789 1764
7764 3321

e)

4709 4097
4790 4907

f)

6099 6609
6064 6009

Achievement Indicator:

To order the numbers in the set from the largest to the smallest in descending order.

Activity 10: Ordering Numbers

Example:

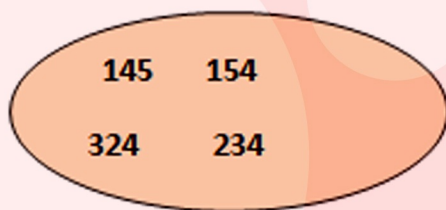
Order the numbers in the set from the largest to the smallest or in descending order:

9 703, 9 025, 5 029



Order numbers from the largest to smallest

(a)



(b)



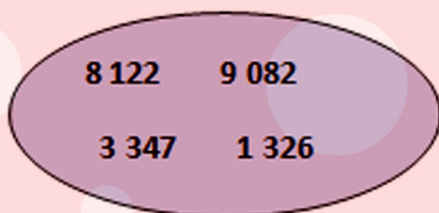
(c)



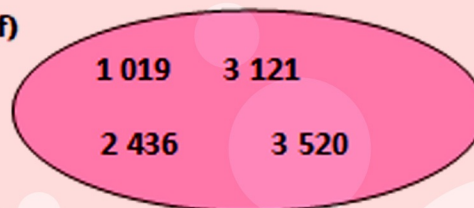
(d)



(e)



(f)





Achievement Indicator: Partition numbers into two or three sets of numbers:

Activity 11: Partitioning Numbers

Partitioning means breaking up

Example 1: Partition the following into three sets of numbers.

The number 1 328 can be thought of as:

1 000 + 300 + 28 or **1 300 + 20 + 8** or **1 000 + 328** etc..

1. Partition these numbers.

i)	1 324	=	1 000	324
ii)	7 345	=		
lii)	657	=		
iv)	9 002	=		
v)	6 411	=		

2. Partition these numbers.

i)	5 320	=	5 000	300	20
ii)	2 045	=			
lii)	607	=			
iv)	5 402	=			
v)	3 078				

Activity 12: Place Values

Example A: 347 stands for 3 hundreds, 4 tens and 7 ones
 $= 300 + 40 + 7$

1. Complete these:

a) $874 = \underline{\quad}$ hundreds $\underline{\quad}$ tens $\underline{\quad}$ ones
 $= 800 + \underline{\quad} + \underline{\quad}$

b) $652 = \underline{\quad}$ hundreds $\underline{\quad}$ tens $\underline{\quad}$ ones
 $= \underline{\quad} + \underline{\quad} + \underline{\quad}$

c) $193 = \underline{\quad}$ hundreds $\underline{\quad}$ tens $\underline{\quad}$ ones
 $= \underline{\quad} + \underline{\quad} + \underline{\quad}$

d) 5 hundreds + 7 tens + 4 ones
 $= \underline{\quad} + \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

e) 3 hundreds + 9 tens + 1 ones
 $= \underline{\quad} + \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

Example B

8742 stands for 8 thousands 7 hundreds 4 tens 2 ones
 $= 8000 + 700 + 40 + 2$

2. Complete these:

$6732 = \underline{\quad}$ thousand + $\underline{\quad}$ hundred + $\underline{\quad}$ tens + $\underline{\quad}$ ones
 $= 6000 + \underline{\quad} + \underline{\quad} + \underline{\quad}$

$4569 = \underline{\quad}$ thousand + $\underline{\quad}$ hundred + $\underline{\quad}$ tens + $\underline{\quad}$ ones
 $= \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad}$

★ Achievement Indicator: Show quantity of numbers using Dienes block,

Activity 13: Using Dienes block

1. Write the number represented by the Dienes block:

Example:

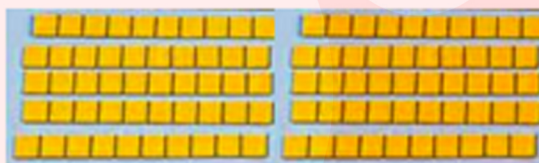
Ten ones



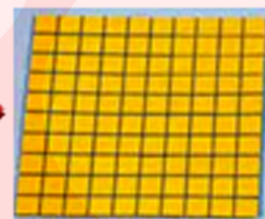
Ten ones



One ten



Ten tens

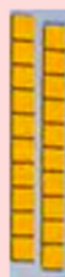
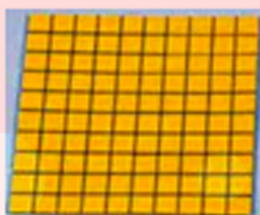


One hundred

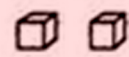
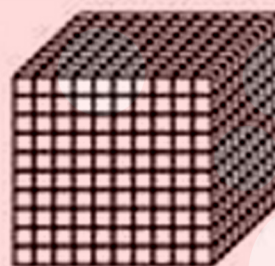
Activity

Write the number represented by the Dienes block:

1.



2.



★ Achievement Indicator: *Add three or four digit numbers with or without regrouping.*

Activity 1: Addition Wlth Regrouping

Example 1: Regrouping addition

$$\begin{array}{rcl}
 3 \text{ hundreds} + 4 \text{ tens} + 9 \text{ ones} & = & 300 + 40 + 9 \quad 349 \\
 + 4 \text{ hundreds} + 7 \text{ tens} + 7 \text{ ones} & = & 400 + 70 + 7 \quad + 477 \\
 \hline
 7 \text{ hundreds} + 11 \text{ tens} + 16 \text{ ones} & = & 700 + 110 + 16 \quad 826
 \end{array}$$

1. Use addition regrouping to find the sum:

1	5 hundreds + 3 tens + 2 ones <u>2 hundreds + 8 tens + 8 ones</u> _____ + +	500 + 30 + 2 <u>200 + 80 + 8</u> _____ + +	532 + 288 _____
2	1 hundred + 5 tens + 7 ones <u>3 hundreds + 8 tens + 4 ones</u> _____	100 + 50 + 7 + + _____ _____	157 + _____ _____
3	3 hundreds + 7 tens + 3 ones <u>4 hundreds + 4 tens + 9 ones</u> _____	_____ + _____ + _____ + + _____ _____	_____ + _____ _____
	_____ + _____ + _____ + + _____ + _____ + _____ + +	_____ + _____ + _____ + + _____ + _____ + _____ + +	_____ + _____ _____

 **Achievement Indicator:** *Add three or four digit numbers with or without regrouping.*

Activity 2: Addition With Regrouping

Example 2

$5\text{thousand} + 4\text{ hundreds} + 3\text{ tens} + 2\text{ ones}$ $+ 3\text{thousand} + 8\text{ hundreds} + 2\text{ tens} + 7\text{ ones}$ <u>$8\text{ thousand} + 12\text{ hundreds} + 5\text{ tens} + 9\text{ ones}$</u>	$5000 + 400 + 30 + 2$ $3000 + 800 + 20 + 7$ <u>$8000 + 1200 + 50 + 9$</u>	5432 $+ 3827$ <u> </u>
--	--	---

<p>1)</p> <p>3 thousand + 4 hundreds + 2 tens + 1 one</p> <p><u>2 thousand + 4 hundreds + 9 tens + 0 one</u></p> <p>_____</p>	<p>3000 + 400 + 20 + 1</p> <p><u>2000 + 400 + 90 + 0</u></p> <p>8000 + 1200 + 50 + 9</p>	<p>3421</p> <p>+ <u>2490</u></p> <p>_____</p>
<p>2)</p> <p>6 thousand + 4 hundreds + 3 tens + 2 one</p> <p><u>2 thousand + 3 hundreds + 7 tens + 8 one</u></p> <p>_____</p>	<p>4000 + 700 + 30 + 2</p> <p><u>2000 + 300 + 70 + 8</u></p> <p>_____</p>	<p>4 7 3 2</p> <p>+ <u>2 3 7 8</u></p> <p>_____</p>
<p>3)</p> <p>__ thousand + _ hundreds + __ tens + __ one</p> <p><u>__ thousand + __ hundreds + __ tens + __ one</u></p> <p>_____</p>	<p>6000 + 400 + 30 + 2</p> <p><u>3000 + 500 + 60 + 9</u></p> <p>_____</p>	<p>6432</p> <p>+ _____</p> <p>_____</p>
<p>4)</p> <p>__ thousand + __ hundreds + __ tens + __ one</p> <p><u>__ thousand + __ hundreds + __ tens + __ one</u></p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p>	<p>5 6 7 8</p> <p>+ <u>3 2 1 9</u></p> <p>_____</p>

★ Achievement Indicator: Subtract three or four digit numbers with or without regrouping.

Activity 1: Subtraction With Regrouping

$\begin{array}{r} 8 \text{ hundreds} + 20 \text{ tens} + 6 \text{ ones} \\ -(4 \text{ hundreds} + 8 \text{ tens} + 8 \text{ ones}) \\ \hline \end{array}$	$\begin{array}{r} 700 + 110 + 16 \\ -(400 + 70 + 7) \\ \hline 300 + 40 + 9 \end{array}$	$\begin{array}{r} 826 \\ - 477 \\ \hline 349 \end{array}$
---	---	---

1. Find the differences using the example shown above for Questions 1, 2 and 3.

$$\begin{array}{r} 1. \quad 432 \\ - 186 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 526 \\ - 239 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 987 \\ - 676 \\ \hline \end{array}$$

2. Find the difference using subtraction with or regrouping.

$$\begin{array}{r} 4. \quad 4406 \\ - 4229 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 783 \\ - 598 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 2978 \\ - 1788 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 924 \\ - 358 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 777 \\ - 688 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 6438 \\ - 4937 \\ \hline \end{array}$$

★ Achievement Indicator: *Subtract three or four digit numbers with or without regrouping.*

Activity 2: Subtraction With Regrouping

Example 2

$\begin{array}{r} 8000 + 800 + 20 + 6 \\ -(4000 + 700 + 70 + 7) \\ \hline \end{array}$	$\begin{array}{r} 7000 + 700 + 110 + 16 \\ -(4000 + 700 + 70 + 7) \\ \hline 4000 + 0 + 40 + 9 \end{array}$	$\begin{array}{r} 8826 \\ -4777 \\ \hline 4049 \end{array}$
--	--	---

Subtract

1.
$$\begin{array}{r} 4332 \\ -3487 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 6249 \\ -1825 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 5423 \\ -2369 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 8239 \\ -2369 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 6721 \\ -3497 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 9276 \\ -3482 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6945 \\ -5714 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 8242 \\ -3021 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 5857 \\ -0512 \\ \hline \end{array}$$

★ Achievement Indicator: *Show addition and subtraction as inverses.*

Activity 1: Opposites

Example

$$\begin{array}{r}
 346 \\
 + 271 \\
 \hline
 617
 \end{array}
 \quad
 \begin{array}{r}
 617 \\
 - 271 \\
 \hline
 346
 \end{array}
 \quad
 \Rightarrow
 \quad
 \begin{array}{r}
 271 \\
 + 346 \\
 \hline
 617
 \end{array}
 \quad
 \begin{array}{r}
 617 \\
 - 346 \\
 \hline
 271
 \end{array}$$

Find the missing numerals:

a)
$$\begin{array}{r}
 691 \\
 + \boxed{} \\
 \hline
 949
 \end{array}$$

$$\begin{array}{r}
 949 \\
 - \boxed{} \\
 \hline
 691
 \end{array}$$

d.)
$$\begin{array}{r}
 305 \\
 + \boxed{} \\
 \hline
 600
 \end{array}
 \quad
 \begin{array}{r}
 600 \\
 - \boxed{} \\
 \hline
 305
 \end{array}$$

c)
$$\begin{array}{r}
 175 \\
 + \boxed{} \\
 \hline
 640
 \end{array}$$

$$\begin{array}{r}
 640 \\
 - \boxed{} \\
 \hline
 175
 \end{array}$$

d.)
$$\begin{array}{r}
 427 \\
 + \boxed{} \\
 \hline
 535
 \end{array}
 \quad
 \begin{array}{r}
 535 \\
 - \boxed{} \\
 \hline
 427
 \end{array}$$

e)
$$\begin{array}{r}
 3453 \\
 + \boxed{} \\
 \hline

 \end{array}$$

$$\begin{array}{r}
 1896 \\
 - \boxed{} \\
 \hline

 \end{array}$$

f)
$$\begin{array}{r}
 1989 \\
 + \boxed{} \\
 \hline

 \end{array}
 \quad
 \begin{array}{r}
 4067 \\
 - \boxed{} \\
 \hline

 \end{array}$$

★ Achievement Indicator: *Multiply 3 to 4 digit numbers by single and double digits.*

Activity 1: Multiplication

Example 1: $80 + 9$

$$\begin{array}{r} \times \quad 9 \\ 720 + 81 = 720 + 80 + 1 = 801 \end{array}$$

$$\begin{array}{r} 89 \\ \times 9 \\ \hline 81 \\ + 720 \\ \hline 801 \end{array}$$

1. Find the products:

1) 29

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

2) 45

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

3) 38

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

4) 46

$$\begin{array}{r} \times 6 \\ \hline \end{array}$$

5) 79

$$\begin{array}{r} \times 3 \\ \hline \end{array}$$

Example 2

$$1000 + 500 + 30 + 4$$

$$\begin{array}{r} \times \quad 6 \\ \hline 6000 + 3000 + 180 + 24 \end{array}$$

$$\begin{array}{r} 1534 \\ \times 6 \\ \hline 24 \\ 180 \\ + 3000 \\ \hline 6000 \\ \hline 9204 \end{array}$$

$$\begin{array}{r} 1534 \\ \times 6 \\ \hline 9204 \end{array}$$

2. Find the products. Multiply the second example the short way.

1) 1269

$$\begin{array}{r} \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 36 \\ + 240 \\ 800 \\ \hline 4000 \end{array}$$

1269

$$\begin{array}{r} \times 4 \\ \hline \end{array}$$

$$\hline$$

2.) 437

$$\begin{array}{r} \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ + 240 \\ \hline 3200 \end{array}$$

437

$$\begin{array}{r} \times 8 \\ \hline \end{array}$$

$$\hline$$

Achievement Indicator: *Multiply 3 to 4 digit numbers by single and double digits.*

Activity 2: Multiplication

Example 1: $80 + 9$

$$\begin{array}{r} \times \quad 9 \\ 720 + 81 = 720 + 80 + 1 = 801 \end{array}$$

$$\begin{array}{r} 89 \\ \times 9 \\ \hline 81 \\ + 720 \\ \hline 801 \end{array}$$

Find the products:

1) 29

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

2) 45

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

3) 38

$$\begin{array}{r} \times 9 \\ \hline \end{array}$$

4) 46

$$\begin{array}{r} \times 6 \\ \hline \end{array}$$

5) 79

$$\begin{array}{r} \times 3 \\ \hline \end{array}$$

Example 2

$$1000 + 500 + 30 + 4$$

$$\begin{array}{r} \times \quad 6 \\ 6000 + 3000 + 180 + 24 \end{array}$$

$$\begin{array}{r} 1534 \\ \times \quad 6 \\ \hline 24 \\ 180 \\ + 3000 \\ 6000 \\ \hline 9,204 \end{array}$$

$$\begin{array}{r} 1534 \\ \times \quad 6 \\ \hline 9,204 \end{array}$$

Find the products. Multiply the second example the short way.

1) 21

$$\begin{array}{r} \times 40 \\ 40 \\ + 800 \\ \hline \end{array}$$

21

$$\begin{array}{r} \times 40 \\ \hline \end{array}$$

3) 77

$$\begin{array}{r} \times 20 \\ 140 \\ + 1400 \\ \hline \end{array}$$

77

$$\begin{array}{r} \times 20 \\ \hline \end{array}$$

2) 25

$$\begin{array}{r} \times 60 \\ 300 \\ + 1200 \\ \hline \end{array}$$

25

$$\begin{array}{r} \times 60 \\ \hline \end{array}$$

★ Achievement Indicator: *Multiplication 1 to 3 digit numbers by 10's*

Activity 3: *Multiplication by 10s*

Example 1:

$$\begin{array}{l} 2 \times 10 = 20 \\ 12 \times 10 = 120 \\ 120 \times 10 = 1200 \end{array}$$

$$\begin{array}{l} 5 \times 10 = 50 \\ 15 \times 10 = 150 \\ 150 \times 10 = 1500 \end{array}$$

1. Multiply the following:

a)	b)
9 x 10 = _____	4 x 10 = _____
19 x 10 = _____	14 x 10 = _____
190 x 10 = _____	140 x 10 = _____
c)	d)
3 x 10 = _____	6 x 10 = _____
13 x 10 = _____	16 x 10 = _____
23 x 10 = _____	26 x 10 = _____
33 x 10 = _____	36 x 10 = _____
43 x 10 = _____	46 x 10 = _____
e)	f)
130 x 10 = _____	160 x 10 = _____
230 x 10 = _____	260 x 10 = _____
330 x 10 = _____	360 x 10 = _____
430 x 10 = _____	460 x 10 = _____

Word Problem

- Mr. Chand prepared ten plots in his garden. He planted 38 bean seeds in each plot. How many bean seedlings did he plant altogether?
- The Class 2 pupils received forty three small boxes. Each small box contains 10 packets of creamed biscuits. How many cream biscuits were there altogether?

 Achievement Indicator: *Divide three to four digit numbers by one to two divisors.*

Activity 1: Division

Example 1

$$\begin{array}{r} 900 \\ 5 \overline{) 4500} \\ \underline{4500} \end{array} \quad 900 \times 5$$

1. Work out the answers:

a) $3 \overline{) 600}$

b) $3 \overline{) 1500}$

c) $7 \overline{) 2800}$

d) $4 \overline{) 1200}$

e) $50 \overline{) 2500}$

f) $40 \overline{) 3600}$

g) $60 \overline{) 4800}$

h) $30 \overline{) 2700}$

Example 2:

$$9 \overline{) 71}$$

$$\begin{array}{r} 7R8 \\ 9 \overline{) 71} \\ - 63 \\ \hline 8 \end{array}$$

Think

$\times 9 < 71$

Find the quotient and remainder:

a. $5 \overline{) 48}$

b. $5 \overline{) 34}$

c. $9 \overline{) 87}$

★ Achievement Indicator: *Divide three to four digit numbers by one to two divisors.*

Activity 2: Division

d. $6 \overline{) 47}$

e. $5 \overline{) 643}$

f. $4 \overline{) 549}$

g. $8 \overline{) 1947}$

h. $6 \overline{) 5788}$

i. $7 \overline{) 6990}$

Example 3:

$$\begin{array}{r} 5R23 \\ 30 \overline{) 173} \\ \underline{-150} \\ 23 \end{array}$$



Think 00

$$30 \times \boxed{} < 173$$

$$30 \times 5 < 173$$

3. Find the quotient and remainder:

1. $50 \overline{) 281}$

2. $60 \overline{) 368}$

3. $90 \overline{) 728}$

4. $40 \overline{) 269}$

★ Achievement Indicator: *Division of 2 to 4 digit numbers by 10's*

Activity 3: Division by 10s

Example 1:

$$\begin{aligned} 20 \div 10 &= 2 \\ 120 \div 10 &= 12 \\ 1\,200 \div 10 &= 120 \end{aligned}$$

$$\begin{aligned} 50 \div 10 &= 5 \\ 150 \div 10 &= 15 \\ 1500 \div 10 &= 150 \end{aligned}$$

1. Divide the following:

a)	b)
$80 \div 10 = \underline{\quad}$	$60 \div 10 = \underline{\quad}$
$180 \div 10 = \underline{\quad}$	$160 \div 10 = \underline{\quad}$
$280 \div 10 = \underline{\quad}$	$260 \div 10 = \underline{\quad}$
c)	d)
$70 \div 10 = \underline{\quad}$	$50 \div 10 = \underline{\quad}$
$170 \div 10 = \underline{\quad}$	$150 \div 10 = \underline{\quad}$
$270 \div 10 = \underline{\quad}$	$950 \div 10 = \underline{\quad}$
$370 \div 10 = \underline{\quad}$	$850 \div 10 = \underline{\quad}$
e)	f)
$130 \div 10 = \underline{\quad}$	$760 \div 10 = \underline{\quad}$
$230 \div 10 = \underline{\quad}$	$560 \div 10 = \underline{\quad}$
$330 \div 10 = \underline{\quad}$	$360 \div 10 = \underline{\quad}$
$430 \div 10 = \underline{\quad}$	$460 \div 10 = \underline{\quad}$

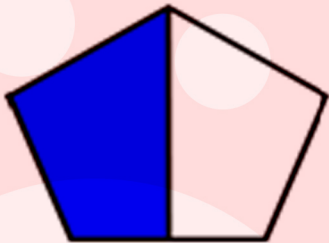
Word Problem

1. A village loaded a total of 140 logs in ten trucks. How many logs did each truck loaded to deliver to the timber yard?
2. Mrs. Brown sold 10 dozen of eggs last Saturday. How many eggs did she sell altogether?

★ Achievement Indicator: *Show parts of a whole by shading the parts.*

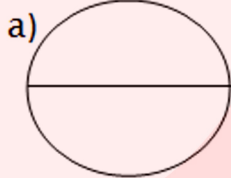
Activity 1: *Parts of a Whole*

Example: If we color one part out of two, we have colored one half. We write this as $\frac{1}{2}$.



One half is colored = $\frac{1}{2}$ is colored

1. Complete these:

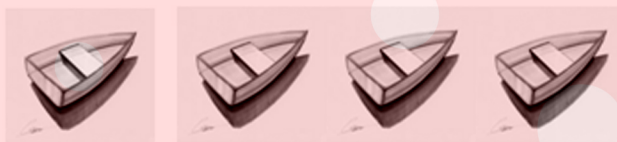


Color one-half of this circle.
_____ is colored



Color one half of this square.
_____ is colored.

c)

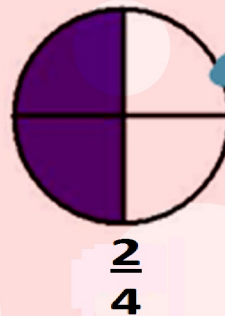
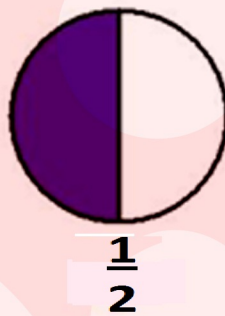


Color one half of these boats.
_____ is coloured.

Achievement Indicator: *Show a pair of equivalent fraction using a diagram:*

Activity 2: Equivalent Fractions

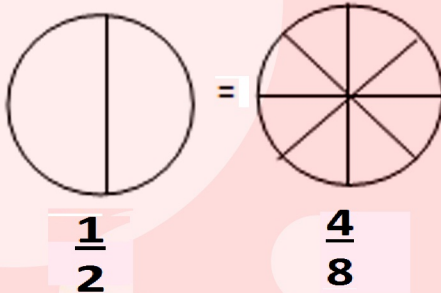
Example:



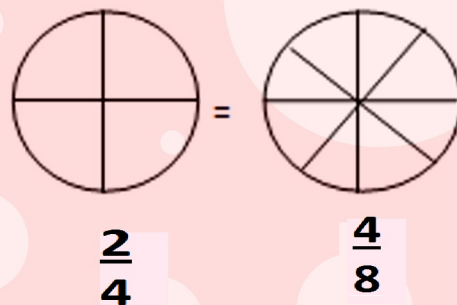
Equivalent fraction
are fractions that
are equal

1. Shade the diagrams to show that the following pair of fractions are equivalent.

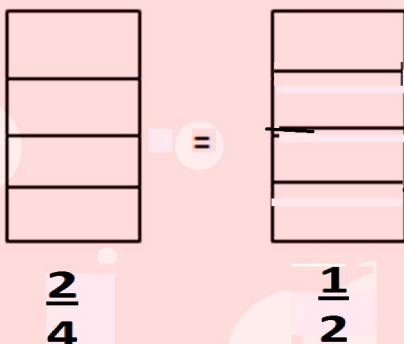
a)



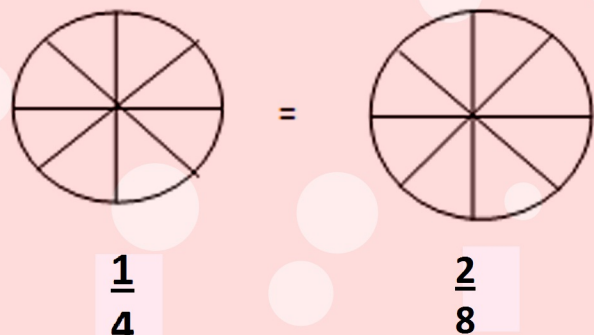
b)



c)



d)



★ Achievement Indicator: *Order fractions in any order*

Activity 3: Equivalent Fractions

1 Whole															
$\frac{1}{2}$								$\frac{1}{2}$							
$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$				$\frac{1}{4}$			
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

1. Order these fractions from the smallest to the largest:

a) $\frac{2}{4}$, $\frac{2}{8}$, $\frac{1}{2}$

b) $\frac{1}{16}$, $\frac{2}{8}$, $\frac{1}{4}$

c) $\frac{1}{16}$, $\frac{1}{2}$, $\frac{1}{8}$

d) $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{8}$

2. Order these fractions from the largest to the smallest:

a) $\frac{3}{8}$, $\frac{3}{16}$, $\frac{3}{4}$

b) $\frac{2}{16}$, $\frac{5}{8}$, $\frac{6}{16}$

c) $\frac{2}{8}$, $\frac{1}{2}$, $\frac{4}{4}$

★ Achievement Indicator: *Add fractions with the same denominator.*

Activity 4: Equivalent Fractions

Example:

$$\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$$

Remember: Add the **numerator** while the **denominator**

1. Add the following Fractions:

1) $\frac{1}{4} + \frac{2}{4} =$ _____

2) $\frac{3}{5} + \frac{1}{5} =$ _____

3) $\frac{2}{9} + \frac{2}{9} =$ _____

4) $\frac{3}{6} + \frac{2}{6} =$ _____

5) $\frac{2}{7} + \frac{3}{7} =$ _____

6) $\frac{1}{3} + \frac{1}{3} =$ _____

7) $\frac{3}{6} + \frac{1}{6} =$ _____

8) $\frac{5}{8} + \frac{2}{8} =$ _____

★ Achievement Indicator: Subtract fractions with the same denominator

Activity 5: Equivalent Fractions

Example:

$$\frac{4}{8} - \frac{2}{8} = \frac{2}{8}$$

Remember: Subtract the **numerator** while the **denominator** remains the same

1. Subtract the following fractions:

a) $\frac{6}{8} - \frac{2}{8} =$ _____

b) $\frac{15}{20} - \frac{12}{20} =$ _____

c) $\frac{4}{15} - \frac{2}{15} =$ _____

d) $\frac{25}{30} - \frac{16}{30} =$ _____

e) $\frac{3}{4} - \frac{1}{4} =$ _____

f) $\frac{19}{19} - \frac{15}{19} =$ _____

g) $\frac{5}{16} - \frac{2}{16} =$ _____

h) $\frac{35}{40} - \frac{29}{40} =$ _____

i) $\frac{3}{7} - \frac{2}{7} =$ _____

j) $\frac{11}{14} - \frac{9}{14} =$ _____

★ Achievement Indicator: *Solve problems dealing with fractions.*

Activity 6: *Dealing With Fractions*

Example



I have a pizza. I gave $\frac{1}{4}$ piece to my friend. What fraction was left with me?

1. Solve the following problems.

1. Mary had a piece of pie. She gave $\frac{1}{3}$ to her mother. What fraction of the pie is left with her?
2. Rajendra had some lollies. He gave $\frac{2}{5}$ of the lollies to his sister. What fraction of the lollies is left with him?
3. Four students bought a chocolate cake for their class party. What fraction of the cake was left with them if they gave $\frac{3}{6}$ to their teacher?

★ Achievement Indicator: *Add decimal numbers and express to two decimal places.*

Activity 1: Addition of Decimals

Example:

Add:

$$\begin{array}{r} 0.88 \\ + 0.04 \\ \hline 0.92 \end{array}$$

Remember:

1. Line up the decimal point.
2. Add as you add whole numbers.
3. Remember to write

1. Add:

$$\begin{array}{r} 1) \ 0.93 \\ + 0.06 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \ 0.57 \\ + 0.29 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \ 2.58 \\ + 0.39 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \ 4.69 \\ + 0.20 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \ 3.06 \\ + 0.18 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \ 7.10 \\ + 2.63 \\ \hline \end{array}$$

7. Joseph had 3 pieces of ribbon. They are 1.22cm, 4.71cm and 5.60cm in length. What is the total length of the ribbon?

8. Reshma was thinking of 2.34, 3.42 and 4.24 in her head. What is the sum of the numbers?

★ Achievement Indicator: Subtract decimals and express to two decimal places.

Activity 2: Subtraction of Decimal

Example

Subtract

$$\begin{array}{r} 3.84 \\ -0.13 \\ \hline 3.71 \end{array}$$

Remember:

1. Line the decimal point.
2. Subtract the bottom number from the top whole number.
3. Remember to place the decimal point exactly below the top decimal point.

1. Subtract:

1)

$$\begin{array}{r} 2.35 \\ -0.13 \\ \hline \end{array}$$

2)

$$\begin{array}{r} 4.26 \\ -1.19 \\ \hline \end{array}$$

3)

$$\begin{array}{r} 4.27 \\ -2.38 \\ \hline \end{array}$$

4)

$$\begin{array}{r} 7.68 \\ -1.79 \\ \hline \end{array}$$

5)

$$\begin{array}{r} 9.86 \\ -5.41 \\ \hline \end{array}$$

6)

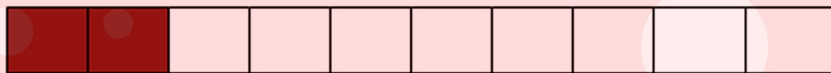
$$\begin{array}{r} 8.54 \\ -0.10 \\ \hline \end{array}$$

7. A boy had a piece of rope which was 5.65 m long. He cut off 2.12m and gave it to his brother. What length of rope is left?

8. Subtract 8.90 from 5.55?

★ Achievement Indicator: *Convert decimals to fractions and vice versa.*

Activity 3: Decimals to Fractions



There are 10 equal parts in the shape above.

2 parts are shaded $\frac{2}{10}$

Fraction of the shaded part is $\frac{2}{10}$

We often use tenth. To write $\frac{2}{10}$ in decimal is 0.2

1. Write these decimals in fraction:

a) 0.3

b) 0.8

c) 0.1

d) 0.7

2. Complete the table below.

	Write in words	Write in fraction	Write in decimal
1	Two tenth		
2		$\frac{5}{10}$	
3	Six tenth		
4		$\frac{9}{10}$	

ALGEBRA

★ Achievement Indicator : *Work out the next missing number in a given number pattern.
Predict the next possible event.*

Activity 1: Number Patterns

Number Patterns:

- A list of numbers that follows a sequence/ pattern.

Example – 1, 4, 7, 10, 13.....

1. Write the numbers that come next.






a) 1, 3, 5, 7, ____, ____, ____



b) 24, 34, 44, 54, ____, ____, ____

c) 35, 40, 45, 50, ____, ____, ____

d) 12, 18, 24, ____, ____, ____

2. Identify the pattern and draw the next three shapes that come next.

a.  ,  ,  ,  ,  , ____

b.  ,  , ____

c.  ,  ,  ,  ,  , ____

★ Achievement Indicator: : *Work out the next missing number in a given number pattern.
Predict the next possible event.*

Activity 2: Logical Reasoning

Group Activity

Discuss the question in groups to find the possible answer.

1. Maryam is 10 years old. Emily is 2 years older than Maryam and 3 years older than Harold. How old is Harold?
2. I am a two digit number. I have a six in the ones place. I am less than 24. What number am I talking about?
3. What is the **largest** whole number you can make with the following digits? 6 7 8 2 3
4. I have an eight in the ones place. I am greater than 69 but less than 87. What number am I?
5. The mango tree is taller than the lemon tree. Which tree is shorter?
6. The brown dog is heavier than the white dog but lighter than the grey dog. Which dog is the lightest?

★ Achievement Indicator: To show commutative property e.g. $3 + 5 = 5 + 3$

Activity 3: Commutative Property

Commutative Property:

–is the rule that states that the order in which the numbers are combined does not affect the outcome.

Eg. $3 + 5 = 5 + 3$
 $8 = 8$

$3 \times 2 = 2 \times 3$
 $6 = 6$

Write $=$ or \neq for the given expressions.
 Draw the expression in the box provided

a) $7 + 3$ $3 + 7$  +   + 

b) $13 + 7$ $7 + 31$

c) $29 + 14$ $29 + 4$

d) 8×4 4×7

e) 9×3 3×9

f) 5×8 8×3

★ Achievement Indicator:

To show Associative property
e.g. $(3 + 5) + 9 = 3 + (5 + 9)$

Activity 4: Associative Property

Associative Property:

– is the rule that states that the grouping of numbers does not affect the outcome when adding or multiplying.

Eg. $(3 + 5) + 7 = 3 + (5 + 7)$

$$8 + 7 = 3 + 12$$

$$15 = 15$$

$$(2 \times 3) \times 4 = 4 \times (3 \times 2)$$

$$6 \times 4 = 4 \times 6$$

$$24 = 24$$

Write = or \neq for the given expressions.

a) $(3 + 4) + 5$

$3 + (5 + 6)$

b) $(9 + 5) + 6$

$9 + (5 + 6)$

c) $13 + (42 + 90)$

$(13 + 24) + 90$

d) $(3 \times 4) \times 2$

$3 \times (4 \times 2)$

e) $(2 \times 2) \times 3$

$2 \times (3 \times 3)$

f) $(4 \times 5) \times 2$

$4 \times (5 \times 3)$

★ Achievement Indicator:

To identify an equation in a mathematical sentence

Activity 5:

Equations



An EQUATION shows that two amounts are EQUAL. E.g. $1+3=4$

OK... which means that
 $3+2$ are not Equations.
 It does not have any equal amount to show the sum.



Study the maths sentence and write an equation or not an equation in the space below

a) $13 + 4 = X$

c) $0 + 7$

e) $3 + 2 + 5$

g) $4 \times 2 = 1 \times 8$

i) $7 + 8 = 3 + 12$

k) $p \times 4 = 12$

b) $14 - 9$

d) $8 + n = 10$

f) $16 + 3 = 3 + 16$

h) 9×5

j) $0 + 7$

l) $s + s + s$

MEASUREMENT

Strand 3: Measurement

Unit 3.1 Length / Area

★ Achievement Indicator:

To estimate lengths using standard and non standard units.

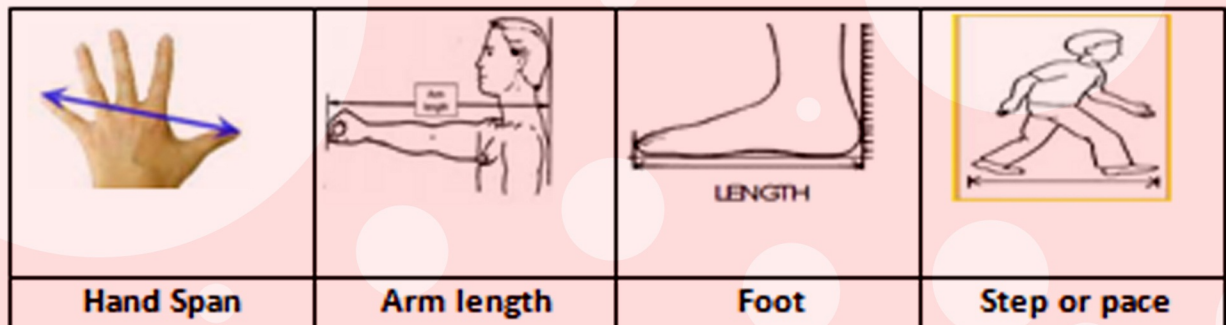
Activity 1: Length

Remember the non-standard units of lengths from Year 3. They include

- your hand span
- your forearm length
- your stride

Work with a friend to cut lengths of string to match each of these units mentioned above:

Label each one to describe it.



Now estimate each of these lengths. Then use your string to check each estimate.

Unit	Distance to measure	Estimate	Check
Hand span	Length of the desk		
Forearm length	Height of the door		
Stride	Length of the classroom		

★ Achievement Indicator: Express measurement using standard units in various lengths.

Activity 2: Length

The standard measure for length is a meter.

The short way for writing meter is m.

An example of a meter ruler

10	20	30	40	50	60	70	80	90	100
----	----	----	----	----	----	----	----	----	-----

Measuring in Meters

Use a meter ruler to measure and cut a length of string **1m** long. Use your string to measure each of these and place a tick in the correct column.

Measure	Less than 1m	Equal to 1m	More than 1m
Your height			
Length of the room			
Length of the table			
Length of a ruler			

Measuring to the Nearest Meter

Sometimes a short length will be left at the end of the object; you can measure this short length to the nearest meter.

Measure in meters the length and the width of your classroom:

The length of the classroom is meters.

The width of the classroom is meters

★ Achievement Indicator: Express measurement using standard units in various lengths.

Activity 2: Length

Measuring in Centimeters

Sometimes people need to measure short distances and the meter is too long. A shorter unit will be needed. This unit of length is called a centimeter (cm).

$$\begin{array}{l} 100 \text{ centimeters} = 1 \text{ meter} \\ 100\text{cm} = 1\text{m} \end{array}$$

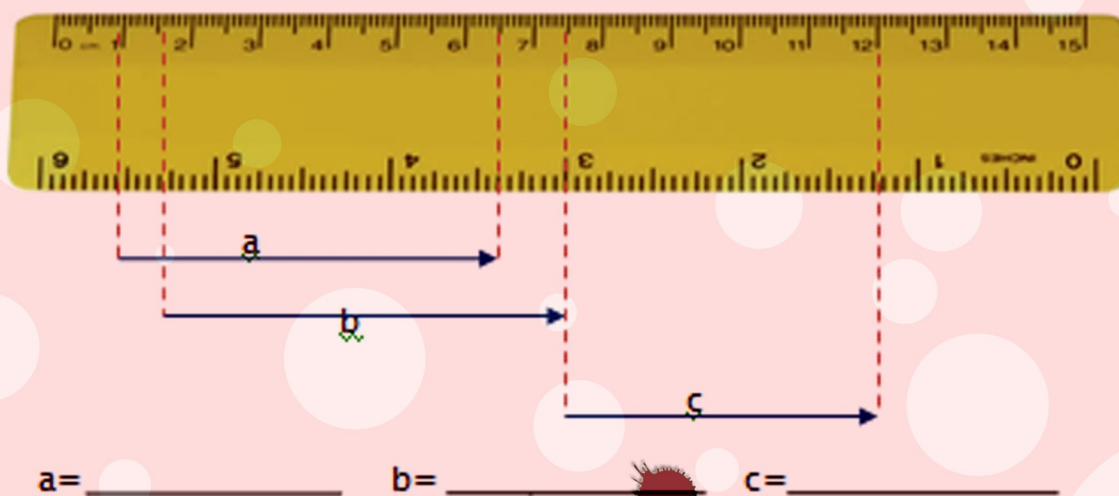
1. Measure in centimeters the length of each line.

a. _____ cm

b. _____ cm

c. _____ cm

2. Write the length of the lines drawn below.

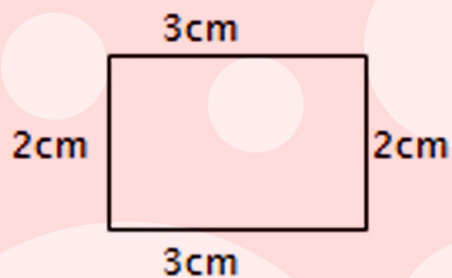


★ Achievement Indicator: Calculate the perimeter of a shape.

Activity 3: Perimeter of a Shape

Perimeter is the total distance around a shape or object.

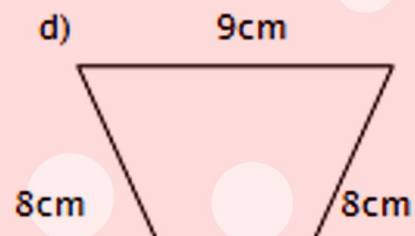
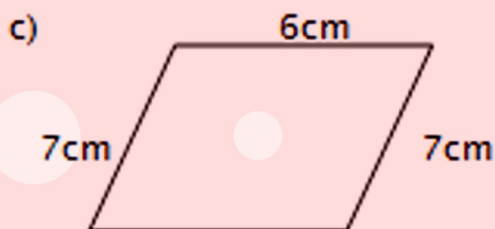
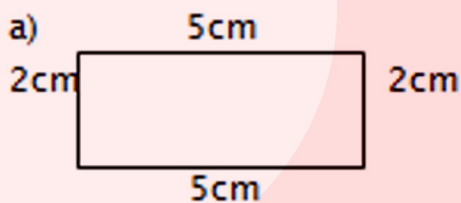
Example:



The perimeter of this shape is 10cm

$$\begin{aligned}\text{Perimeter} &= 3\text{cm} + 2\text{cm} + 3\text{cm} + 2\text{cm} \\ &= 10\text{cm}\end{aligned}$$

1. Find the perimeter



★ Achievement Indicator: Construct and use a square meter to measure various areas

Activity 4: Using Square Meter

Use a scrap paper to make a square with 1 m along each side. You have made a square meter and will use this unit to measure area.

1. Estimate the following areas and then use your square meter sheet to measure them.

Surface	Estimate	Measure
Table top		
Desk top		
Floor		
Door		
Window		
Door step		

★ Achievement Indicator: *Do problem solving that deals with length and area.*

Activity 5: Solving Problems with Length / Area

Example

A rectangle has 3cm length and 2cm wide. What is its perimeter?



2cm

3cm

$$\begin{aligned}\text{Perimeter} &= 3\text{cm} + 3\text{cm} + 2\text{cm} + 2\text{cm} \\ &= 10\text{cm}\end{aligned}$$

1. A rectangle has 5cm width and 7cm long. What is its perimeter? _____
2. A square has 4cm width and is 4cm long. What is the perimeter of the square? _____
3. The teachers table is 2meters long and 1 meter wide. What is its perimeter? _____
4. Anna has a stick which is 70cm long and Mary has a stick which is 80cm long. What is the total length of their sticks?

★ Achievement Indicator:

Express the use of non-standard units to measure volume/capacity.

Activity 1: Problem solving using millilitres and litres

The Capacity is the amount something can hold; such as a jug or bottle or a container. It is measured in millilitres and Litre

1. Use a **1** litre jug and fill it with each of these objects to see how many it holds.

	Number of			
	Tennis balls	Match boxes	Pencils	Marbles
Estimate				
Measure				

2. Find the capacity of an ice-cream container, first estimate and then measure how many of these units full of water you need to fill the container.

Complete the Chart below:

Unit	Estimate	Measure
Cup		
Milk packet		
Empty tin/can		

★ Achievement Indicator: *Estimate and compare the relative magnitude of two volume units using different volumes.*

Activity 2:

Problem Solving using millilitres and litres

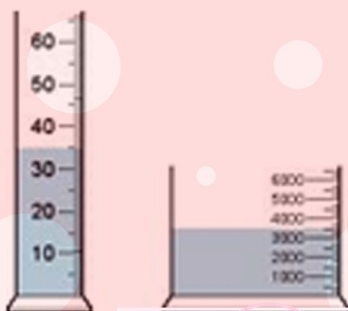
The main unit for measuring volume is called the litre.
We write 1 litre as 1 L.

1. Complete the table.

Estimate and then measure how many litres of water will each of these containers hold.

Container	Estimated Capacity	Actual Capacity	Estimation		
			Larger	Smaller	Close
Bucket					
Basin					
Sauce					

a) Measuring cylinder



b) Measuring jug



★ Achievement Indicator: *Measure weight using non-standard unit*

Activity 1: *Problem Solving Using Mass & weight*

Mass is the weight of any object



1. Looking at the three objects above; cements block, stone and wood block, which do you think is:

The heaviest-

The lightest-

Arrange the three objects in their order of weight from the lightest to the heaviest:

The cement block is heavier than the _____

The _____ is lighter than the _____

Achievement Indicator:

Use half kilogram and a kilogram to compare and express weight.

Activity 9: Half A Kilogram and A Kilogram

The standard measures for mass is kilogram (kg)
1 kilogram = 1 kg

1. Estimate the mass of each object in kilograms.
Check with a balance and 1kg mass.

Object	Estimate	Actual Mass
a) Maths Textbook		
b) 5 Library books		
c) Bottle filled with water		
d)		
(e)		

2. To make a $\frac{1}{2}$ kg mass, use the following steps:
 - a) Measure 1kg of sand and place in a bag.
 - b) Pour sand from the 1 kg bag into another bag until the two bags balance.
3. Using one of these bags of sand.
 - (i) Find the objects in the classroom which has a mass of more than, less than or about half a kilogram.

★ Achievement Indicator:

Use half kilogram and a kilogram to compare and express weight.

Activity 9: Half A Kilogram and A Kilogram

(ii) Write the names of objects in one of the columns:

Less than half a kg	About half a kg	More than half a kg

1 kilogram mass.

Use the 1 kilogram measure to estimate the mass of each object below;

- Box of chalk
- Blackboard duster
- Pair of shoes
- Twenty marbles
- 5 mathematics books
- Collect four different items to estimate their weight



More than 1 kg	About 1 kg	Less than 1 kg

★ Achievement Indicator: *Order the days of the week and months of the year.*

Activity 1: *Days of the Week & Months Of A Year*

There are 7 days in a week.
7 days = 1 week

1. Complete the names of each days of the week:

Sun_____

Wed_____

Mon_____

Thurs_____

Tues_____

Fri_____

Sat_____

There are 12 months in one year
12 months = 1 year

2. Write the missing months of the year from the list:

1. January

7. July

2. February

8. August

3. _____

9. _____

4. April

10. _____

5. May

11. _____

6. _____

12. December

★ Achievement Indicator: *Order the days of the week and months of the year.*

Activity 2:

Days of the Week & Months Of A Year

Study the calendar below.

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

Use the calendar to answer the questions:

- How many days does this month have? _____
- Write the missing numbers. _____
- How many Wednesdays does the month of January have? _____
- What is the date of the first Saturday of this month? _____

Word Problem

- How many days are there in a week?
- The nurse will visit our village every fortnight for 2 months beginning from April.
 - A fortnight is equal to _____ days.
 - A fortnight is equal to _____ weeks
 - There are ___ days in the two months and a total of ___ weeks.

★ Achievement Indicator: *Tell the time on 5 minutes duration and o'clock*

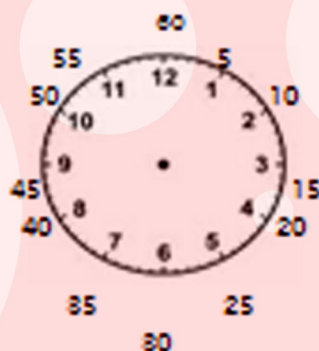
Activity 1: *Tell Time on 5 minutes Duration*

60 minutes = 1 hour

Count by fives to check the numbers on the top of this number line.

0	5	10	15	20	25	30	35	40	45	50	55	60
0	1	2	3	4	5	6	7	8	9	10	11	12

If we make this number line into a circle it will look like this:



We can now see how 60 minutes make 1 hour:

Example:

Write the time shown on the clock face in two ways:

Example:



Time shown is (i) 10:10 or

(ii) ten minutes past

★ Achievement Indicator: *Read or tell the time using am or pm.*

Activity 1:

Tell Time on 5 minutes Duration

“a.m” stands for the Latin phrase Ante Meridiem means “before noon”
“p.m” stands for Post Meridiem means “after noon”

1. Write the following times in figures using a.m or p.m:

- a) Half past 6 in the morning _____
- b) 25 minutes past 8 in the morning _____
- c) 10 minutes to nine in the night _____
- d) 20 minutes to 4 in the afternoon _____

2. Write these times in words

- a) 7.30 a.m. _____
- b) 12.45 p.m. _____
- c) 8.15 pm _____
- d) 2.30.am _____
- e) 6.10 a.m _____

Strand 3: Measurement

Unit 3.4 Time

Achievement Indicator: Solve problems to calculate time interval.

Activity 2:

Calculate Time Interval

Solve:

1. The island bus left Nausori at 7.00 a.m and it reached Suva at 7.30am.



Left Nausori

Reached Suva

How long did it take the bus to reach Lautoka?

2. I left school yesterday afternoon at 3.00pm. I reached home after 15 minutes.



Left school

Reached home

What time did I reach home?

★ Achievement Indicator: Compare and order the value of dollars and cents.

Activity 1: Know your money



\$ means dollars

100 cents = 1 dollar



1. What are the missing coins to make \$5?



Strand 3: Measurement

Unit 3.5 Money

★ Achievement Indicator: *Compare and order the value of dollars and cents.*

Activity 2: *Know Your Money*







	Notes	Description
1.	\$5	
2.	\$10	
3.	\$20	
4.	\$50	
5.	\$100	

★ Achievement Indicator:

Reading prices and giving changes

Activity 1: *Value of Dollars and Cents*

ITEMS			
Ice-cream \$1.50	Chocolate bar \$2.50	Ruler 50c	Exercise book \$1.00
			

Answer the following:

- What change will you get from \$5 note if you buy the following items:
 - An ice-cream
 - A chocolate
 - A ruler and a Maths 4C
 - An ice-cream and a chocolate
 - An ice-cream, Maths 4C and a ruler
- How much will an ice-cream, 2 rulers and 3 exercise books cost?
- Seini bought 2 chocolate bars and 3 ice-creams. How much would she pay altogether for the items?
- What change will Mr Maciu get from a \$10 note if he bought 5 rulers and 3 exercise books for his children?

 Achievement Indicator: *Add and subtract dollars and cents*

Activity 2: *Addition & Subtraction of Money*

Example

$\begin{array}{r} \$5.16 \\ + 2.05 \\ \hline 1.10 \\ \hline \$8.31 \end{array}$	$\begin{array}{r} \$0.78 \\ - \$0.25 \\ \hline \$0.53 \end{array}$	 <p>Add or Subtract as in whole</p>
---	--	---

1. Add or subtract the following:

$$\begin{array}{r} 1) \quad \$3.25 \\ + 2.04 \\ \hline 1.01 \\ \hline \end{array}$$

$$\begin{array}{r} \$5.07 \\ + 6.70 \\ \hline 2.39 \\ \hline \end{array}$$

$$\begin{array}{r} \$6.03 \\ + 12.00 \\ \hline 0.70 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad \$12.10 \\ - 3.28 \\ \hline \end{array}$$

$$\begin{array}{r} \$15.78 \\ - 8.82 \\ \hline \end{array}$$

$$\begin{array}{r} \$19.72 \\ - 13.68 \\ \hline \end{array}$$

3. Thomas went to the supermarket and bought a 10kg rice which costs him \$13.75. How much change will he get if he gave the shopkeeper a \$50 note?

4. Mum went shopping and bought the following items:

- 2 cones of ice-cream at \$2.75c each.
- 1 bottle of coke at \$2.80c.
- 3 packets of cookies at \$3.60c each.

How much did she spend altogether? _____

 Achievement Indicator: *Multiply or divide money by single digit.*

Activity 3: *Multiplication & Division of Money*

Example 1

$$\begin{array}{r} \$1.88 \\ \times \quad 4 \\ \hline \$7.52 \end{array}$$

1. Multiply as in whole numbers
2. Put the decimal

1. Solve

$$\begin{array}{r} 1. \quad \$0.20 \\ \times \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \$1.65 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \$2.06 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \$12.05 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad \$15.50 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad \$25.20 \\ \times \quad 7 \\ \hline \end{array}$$

7. Miss Soko wanted to buy 8 bundles of dalo to take to a family function. The farmer was selling a bundle for \$12.00, how much will Ms. Soko pay for the bundles of dalo?
8. An umbrella cost \$15.60. How much will Mr. Johnson pay for if he wants to buy 7 umbrellas for his school?
9. Mrs. Rauluni bought 6 pairs of shoes at \$20.85 each. What is the total cost of the shoes she bought?

★ Achievement Indicator: *Multiply or divide money by single digit.*

Activity 4: *Multiplication & Division of Money*

Example 2

$$\begin{array}{r} \$1.12 \\ 4 \overline{) \$4.48} \\ \underline{4.00} \\ 48 \\ \underline{-48} \end{array}$$

$$= \$1.12$$

1. Divide as in whole numbers
2. Put the decimal point after 2 decimal places

1. Solve

a) $7 \overline{) 35c}$

b) $4 \overline{) \$0.48}$

c) $9 \overline{) \$9.45}$

d) $5 \overline{) \$0.75}$

e) $6 \overline{) \$24.00}$

f) $7 \overline{) \$16.10}$

g.) $4 \overline{) \$54.00}$

h) $9 \overline{) \$81.00}$

i) $5 \overline{) \$45.50}$

7. Vika bought 7 pencils for \$0.84c. What was the cost of 1 pencil?

8. Sala sold 8 pairs of scissors at \$48.80c. What was the cost of one pair scissors?

★ Achievement Indicator: *Solve problems using mathematical operations up to \$20.*

Activity 5: Problem Solving

Example

3 skipping rope costs 69c.

How much does one skipping rope cost?

$$\begin{array}{r} 23\text{c} \\ 3 \overline{) 69} \\ \underline{-60} \\ 9 \\ \underline{-9} \\ 0 \end{array}$$

1. Solve

1. Mere bought a bottle of coke for \$1.50, a packet of match for 25c and 5 eggs for \$1.00. How much did she spend?
2. How much money will you pay for 8 books if 1 book costs 80c?
3. Five Maths 4C exercise books costs \$3.55. How much will one Maths 4C cost?
4. One cone ice-cream costs \$1.30. How much will four cones of ice-cream costs?

★ Achievement Indicator:

List some forms of basic tax

Activity 6: Problem Solving

Basic Tax is the money collected by government to be used on government expenses.

Examples of Basic Tax:

- VAT (Value Added Tax)
- City rate
- Town rate
- Wheel tax
- PAYE

Example:

When we buy goods from the shop we pay Value Added Tax (VAT)

ACTIVITY

Identify the type of basic tax that will be used in the following areas:

1. Owning a house in Suva.
2. Receipts from shops, bus tickets, boat, plane or ship ticket.
3. Owning a taxi.
4. Paying FEA Bills or water bills.

Strand 3: Measurement

Unit 3.6 Temperature

★ Achievement Indicator:

Use comparative language to express hotness or coldness of things.

Activity 1: Temperature

Temperature tells us how hot or cold.

Temperature is measured with a thermometer.

The unit of measure for temperature is degrees Celcius and written as $^{\circ}\text{C}$

Write the temperature using $^{\circ}\text{C}$ Celcius ($^{\circ}\text{C}$).

1)



2)



3)



1. Which thermometer shows the lowest temperature?

2. Which thermometer shows the highest temperature?

3. What is the difference in temperature between -----
thermometer 2 and thermometer 3?

★ Achievement Indicator:

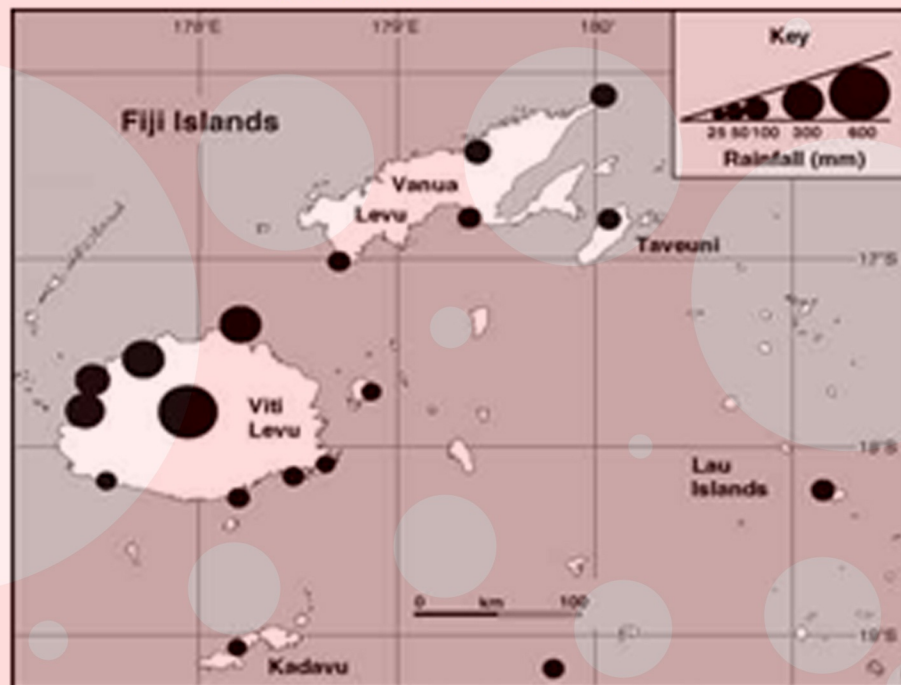
Use comparative language to express hotness or coldness of things.

Activity 2: Temperature

B. Group Activity

Study the map of Fiji below. Discuss the questions given and record your answer to share with the class.

RAINFALL RECORD - FIJI



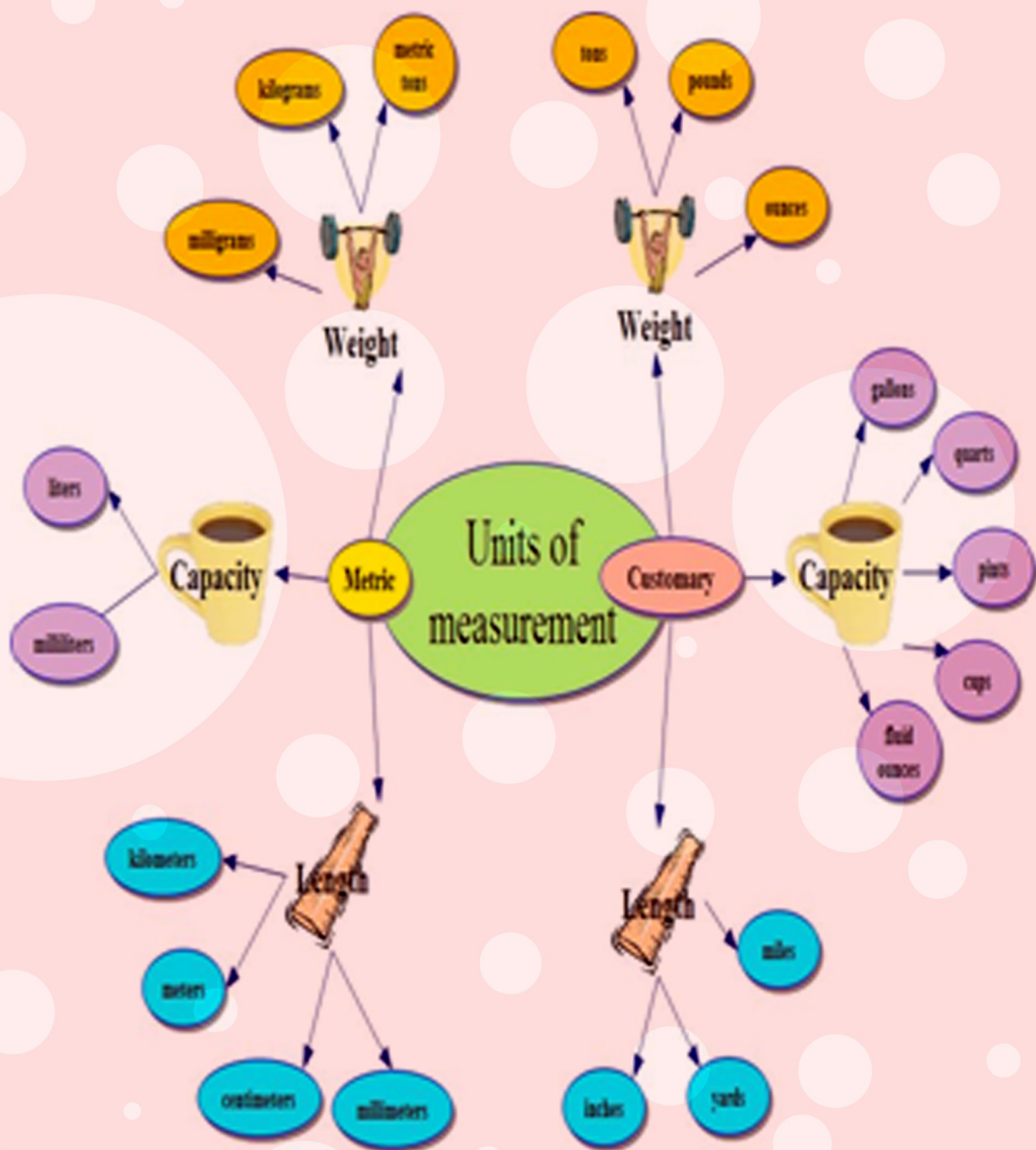
Maximum 1-day rainfall delivered by Tropical Cyclone Gavin across the Fiji Islands in early March 1997. Source: www.brianwilliams.us

Questions:

1. Rain fall is measured in _____. (mm; cm; or kg)
2. Which area receives a lot of rainfall? Explain your answer.

3. Which area receives the lowest rainfall?

Units of Measurement



Source: legssclassroom wiki ; www.leggework.net

GEOMETRY

★ Achievement Indicator:

Identify and name correctly the number of sides of every 2D and 3D shapes

Activity 1: Two Dimensional Shapes (2D)

Two Dimensional Shapes (2D):

2D shapes are flat figures and are named according to the number of sides they have.



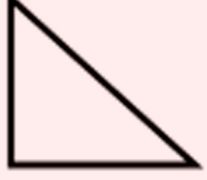

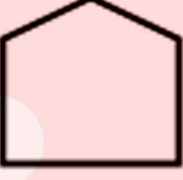
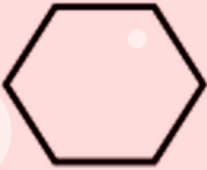
Eg.  This is a triangle. *Tri* means 3 so it has three sides.

Illustration	Name	Number of sides
		
		
		
		
		

Achievement Indicator:

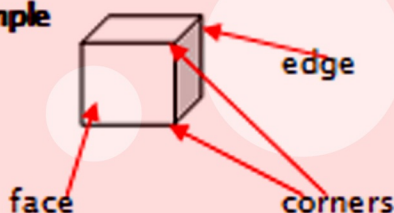
Identify and name the edges, corners and faces of some 3D shapes

Activity 2: Three Dimensional Shapes (3D)





3D shape properties:

This includes its faces, edges and corners.

Example



1. Make a model of each shape in the table below using plastercine or play dough.
2. Complete the table. Use the model to help you.

Shape	Name	Faces	Edges	Corners
				
				
				
				

Achievement Indicator:

- identify and name a line, ray, line segment, a curve, a circle or an angle
- name properties of lines, rays, angles and line segment.
- Identify and draw right angles and straight angles.

Activity 3:

Line and Line Segments

A **line** goes on and on in both direction. It has no end points.



Line segments are straight lines joining two points. It has a beginning and an end. _____

Rays



This is a ray. It starts with a point of origin and moves in one direction without an end. This is shown by the arrow.

This is ray AB and can be shown by the symbol \rightarrow

Curves

This is a curved line



This has curved sides



This is a straight line



Angles

An angle is formed when two lines meet at a common point.

Look at this angle. It is a right angle. **Right angles** make square corners.



A **straight angle** is an angle formed on a straight line.



Two right angles make a straight angle.

Strand 3: Geometry

Unit 3.1 Shapes

Achievement Indicator:

- identify and name a line, ray, line segment, a curve, a circle or an angle
- name properties of lines, rays, angles and line segment.
- Identify and draw right angles and straight angles.

Activity 3:

1. Label

a)



b)



c)



d)



e)



f)



g)



h)



i)



2. Complete the table.

Name	Draw
Curves	
Line segments	
Angle	
Ray	
Line	

Chāṇḍe

āṇḍ

Dāṭā



Achievement Indicator:

- Use words that express prediction about something happening during the day such as likely, unlikely in a sentence.
- State any future events with confidence from seeing the time on the clock.

Activity 1: Chance

Chance: -is the likelihood that something will happen.

1. If you roll a  dice, what is the chance of:

a) Getting a 2?

	certain
	likely
	unlikely

b) Getting a number less than?

	certain
	likely
	unlikely

c) Getting a number more than 3?

	certain
	likely
	unlikely

d) Getting a 7?

	certain
	likely
	unlikely

2. Deck of Cards



A deck of colorful cards has 2 blue, 7 red, 4 green, 6 yellow and 1 black.

Eg. Drawing a blue would be unlikely as there is only four 2 out of the 20 cards. Its chance is really low.

1. A card is drawn from the deck of cards. What is the chance of

a. drawing a red card?

	Certain
	Likely
	Unlikely

b. drawing a black card?

	Certain
	Likely
	Unlikely

Strand 5: Chance & Data

Unit 5.1 Chance

Achievement Indicator:

- Use words that express prediction about something happening during the day such as likely, unlikely in a sentence.
- State any future events with confidence from seeing the time on the clock.

Activity 1: Chance

c. drawing a green card?

<input type="checkbox"/>	Certain
<input type="checkbox"/>	Likely
<input type="checkbox"/>	Unlikely

d. drawing a yellow card?

<input type="checkbox"/>	Certain
<input type="checkbox"/>	Likely
<input type="checkbox"/>	Unlikely

3. Study the clock and tick the box with its correct answer.

a)

11.55 am

It is almost time for

<input type="checkbox"/>	Breakfast
<input type="checkbox"/>	Lunch
<input type="checkbox"/>	Dinner



b)

7.45 pm

It is almost time for

<input type="checkbox"/>	Playing
<input type="checkbox"/>	Bed
<input type="checkbox"/>	School



c)

2.45 pm

It is almost time for school to

<input type="checkbox"/>	Begin
<input type="checkbox"/>	Start
<input type="checkbox"/>	Finish

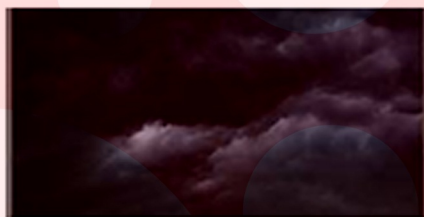


★ Achievement Indicator: *Demonstrate good understanding of predicting simple future events using the environment.*

Activity 2: Predictions

Study the pictures.
Tick the box with its correct answer.

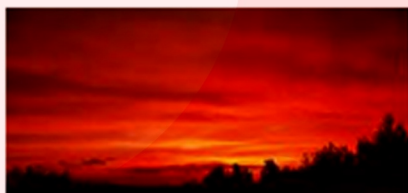
1.



When seeing black clouds, it is most likely to

<input type="checkbox"/>	be fine
<input type="checkbox"/>	Rain

2.



When seeing red sky in the evening, the next day will be

<input type="checkbox"/>	Fine
<input type="checkbox"/>	Raining

3.



When a flock of seagulls fly so low above the sea, there is a chance of a

<input type="checkbox"/>	School fish
<input type="checkbox"/>	No fish

Strand 5: Chance & Data

Achievement Indicator: • Draw a simple table from a set of information gathered.
• Interpret and read the data on a given table or data as it appears on a table, bar graph or pictograph.



Activity 3: Tally

Score Card: Another way of recording data. It usually uses a tally like this:

 = 1

 = 5

This table shows the number of goals made by some girls.

Girls	Goals
Ana	 
Mary	
Lusi	
Reena	
Setaita	

Complete the table by drawing the tally on the goals the girls have attempted. (*the 1st one is done for you*)

Ana scored 7 goals	Mary scored 11 goals
Reena scored 9 goals	Setaita scored 18 goals
Lusi scored 4 goals	Ashley scored 20 goals

Strand 5: Chance & Data



Achievement Indicator:

Draw a simple table from a set of information gathered.
Interpret and read the data on a given table or data as it appears
on a table, bar graph or pictograph.

Activity 4: Fruit Table:

The table shows the number of people who loved to eat fruits.

Use the table below to help you answer the questions.

Fruits	No. of people
	6
	7
	10
	12

- How many people like bananas? _____
- Which is the most liked fruit? _____
- How many like oranges and pineapples? _____
- How many people like pawpaw and banana? _____
- How many more people liked banana from pineapple? _____
- Which is the least liked fruit? _____
- How many people liked eating fruits as shown on the table? _____

Strand 5: Chance & Data

Unit 5.2 Data Representation and Interpretation

★ Achievement Indicator: *Draw conclusion and answer Simple questions using data from a tabulated graph and data gathered.*

Activity 5: Bar Graph

A graph using rectangular bars to show value. The bars can be horizontal or vertical.

Eg. This graph shows the number of students' favourite colours.

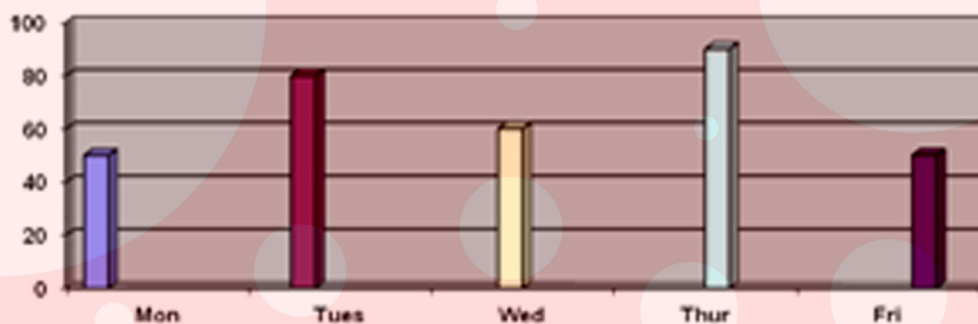


6 like red

8 like blue

4 like yellow

1. The graph shows the number of carrots sold daily.



- How many carrots were sold on Wednesday?

- On which day were the most carrots sold?

- How many carrots were sold on Thursday and Friday altogether?

- Which day had the same number of carrots sold?

- On which day were the least carrots sold?

★ Achievement Indicator: *Draw conclusion and answer Simple questions using data from a tabulated graph and data gathered.*

Activity 6: Tally & Bar Graph

3. Group Activity

- i. Choose one of the activities listed below and collect information on the following:
 - (a) how students come to school
 - (b) the different sports that the students in you class liked
 - (c) where the students live or where they come from or their province
- ii. Use the Tally method to show your results.

4. Individual Activity

- i. Collect information your arrival to school daily for a month. Record your answer in a Tally, as shown below.

Week	Early	On Time	Late
Week 1			
Week 2			
Week 3			
Week 4			

- ii. Once the tally table filled, then draw a bar graph to show the information from the Tally table
- iii. Discuss your answer with the class with reasons.

MULTIPLICATION TABLE

x	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144