

KAZO DISTRICT LOCAL GOVERNMENT

LESSON NOTES FOR P.4 MATHETIMATICS TERM II 2023

Lesson 1

Period 2

Topic: patterns and sequences

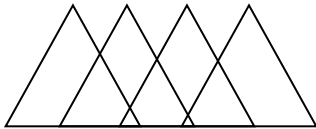
Sub topic : different patterns and shapes

Language competence: The learner reads spells pronounces, writes new words like triangle, circle, squares

Content : forming patterns and shapes

Examples

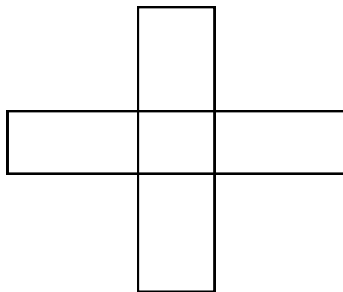
1. How many triangles are in this pattern?



4 big triangles

+ 3 small squares

2. How many rectangles are in this patterns?



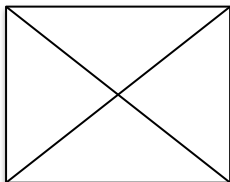
2 big rectangles

+ 4 small rectangles

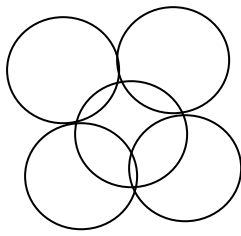
6 rectangles

Exercise

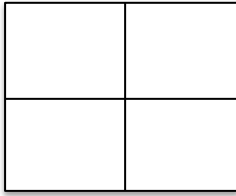
1. How many triangles are there?



2. How many circle are there?



3. How many square are there?



Lesson 2

Period 2

Topic: patterns and sequences

Sub topic: forming patterns with colours and shapes

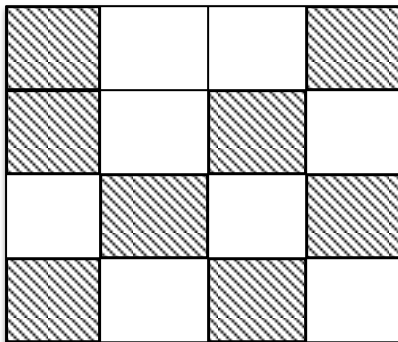
Vocabulary: The learner reads words like colour yellow, red, green etc

Examples

1. How many squares are coloured

(i) Green

(ii) Yellow



8 green squares

8 yellow squares

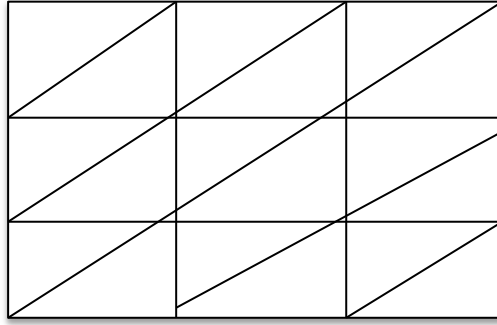
2. How many triangle are coloured?

(i) Green

(ii) Yellow

(iii) white

(iv) red



6 green

3 red

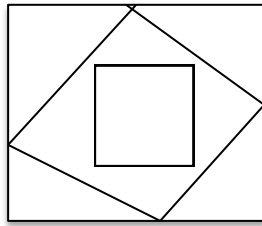
4 Yellow

5 white

Exercise

1. How many triangles are coloured?

(i)



(i) purple?

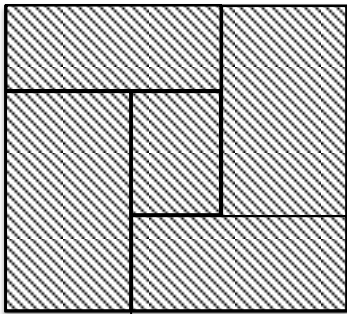
(ii) pink?

(iii) How many squares are there?

2. How many

(i) Rectangles are there?

(ii) squares are there?



Lesson 3

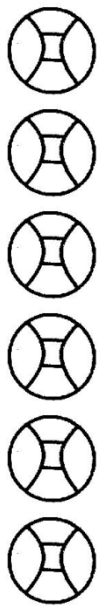
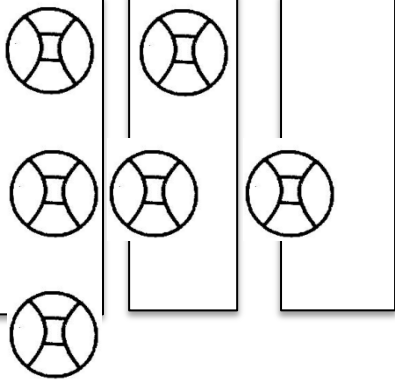
Period 3

Sub topic: even and odd numbers

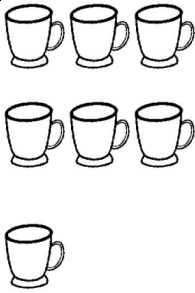
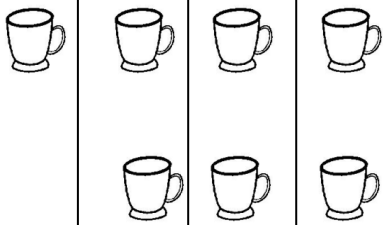
Language competence: The learners reads, spells, writes and pronounces new words like even, odd groups, members

Content: identify even and odd numbers

Examples


Group	Members	Pairs	Remainder	Set	Numbers
	6		0	Even set	even


2.

Group	Member	Pairs	Remaider	Set	numbers
	7		1	Odd set	odd

Exercise

Copy and complete the table

Group	Members	Pairs	Remainder	Set	Numbers
	1	-	-	odd	odd

a, b	2	-	-	even	-
1, 2, 3	3	-	-	odd	-
	-	-	-	even	-

Lesson 4

Period 4

Topic: patterns and sequences

Sub topic: even and odd numbers

Language competence: The learners reads, pronounces , writes, new words like missing numbers next words

Content:

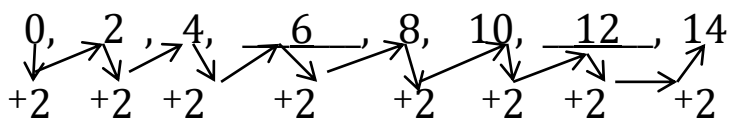
Examples

Writing sequences and even numbers

1. Fill in the missing numbers

0, 2 , 4, _____, 8, 10, _____, 14

Keep adding 2

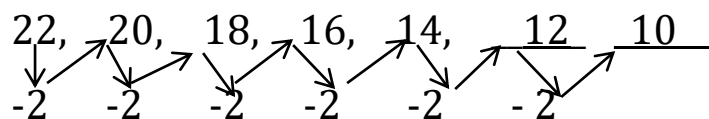


2. What are the next numbers in the sequence?

22, 20, 18, 16, 14, _____

Keeping subtracting 2

22, 20, 18, 16, 14, _____



Exercis

Find the missing numbers in the sequence

1. 20, 22, _____, _____, 28, 30, 32

2. 14 , 12, 10, 8,, _____, 4, _____, 0

3. 8, __, 12, 16, 20, __

Lesson 5

Period 5

Topic: patterns and sequences

Sub topic: even and odd numbers

Language competence: The learner reads, pronounces, writes new words like remainder, opposite etc

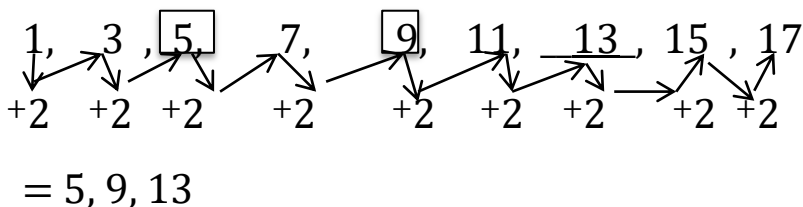
Content: writing sequences of odd numbers

Examples

1. Find the missing odd numbers

1, 3, __, 7, 11, __, 15

(Begin with 1 and keep adding 2)

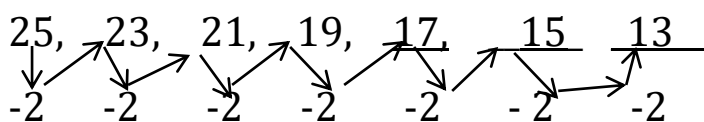


2. Find the next odd numbers in the sequence

Keep subtracting 2

Keeping subtracting 2

25, 23, 21, 19, 14, __, __, __



Exercise

1. Find the missing odd numbers

11, __, 15, 19, __, 23

2. What three odd numbers comes after

19 , 17, 15, 13, 11?

3. Fill in the missing odd numbers

23, 25, 27, ____, 31, ____, 35

Lesson 6

Period 6

Topic: patterns and sequences

Sub topic: even numbers and odd numbers

Language competence: The learner reads, pronounces, writes new words like sum, remainder etc

Content: finding sum of even and odd numbers

Examples

1. An even number _ an odd number

$$4 + 6 = 10 \text{ (even)}$$

An even number + an odd number

$$6 + 7 = 13 \text{ (odd)}$$

2. An odd number + an odd number

$$5 + 7 = 12 \text{ (even)}$$

An odd number + an even number

$$9 + 6 = 15 \text{ (odd)}$$

Exercise

1. Fill in the missing numbers in the table below

Even + even

+	0	2	4	6	8
0	0				
2		4			
4				10	
6			10		
8	8			14	16

$$\downarrow$$

$$8 + 6 = 14 \text{ (even)}$$

2. Odd + Odd

+	1	3	5	7	9
1				8	
3		6			
5				10	
7			12		
9					

$$\downarrow$$

$$7 + 5 = 12 \text{ (even)}$$

Lesson 7

Period 7

Topic: patterns and sequences

Sub topic: forming patterns and sequences using the four operation

Language competence: The learner reads , pronounces and writes new words like missing numbers, common , difference, between

Content: finding sequences of numbers by adding

Examples

1. Find the next 3 missing numbers

1, 5, 9, 13, 17, __, __, __

1, 5, 9, 13, 17, 21, 25, 29
 $\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +4 & +4 & +4 & +4 & +4 & +4 & +4 \end{array}$

= 21, 25, 29

2. Find the next 3 missing numbers

15, 25, 35, 45, 55, 65, 75
 $\begin{array}{ccccccc} & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\ +10 & +10 & +10 & +10 & +10 & +10 & +10 \end{array}$

= 55, 65, 75

Excerice

Find the next 3 numbers in each sequences

- 3, 6, 9, 12, __, __, __
- 7, 12, 17, 22, __, __, __
- 8, 12, 16, 20, __, __, __

Lesson 8

Period 8

Topic: patterns and sequences

Sub topic: forming patterns and sequences using the four operations

Language competence: The learner reads, pronounces, writes new words like collect, copy, complete etc

Content: forming sequences between is 3

Examples

1. Find the missing numbers

25, 22, 19, 16, 13, _____, _____, _____

So keep subtraction

$$\begin{array}{ccccccc}
 25, & 22, & 19, & 16, & 13, & \underline{10}, & \underline{7}, & \underline{4} \\
 & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow & \nearrow \\
 -3 & -3 & -3 & -3 & -3 & -3 & -3 & \\
 \hline
 22 & 19 & 16 & 13 & 10 & 7 & 4 & \\
 & & & & & & & \\
 = 10, 7, 4 & & & & & & &
 \end{array}$$

2. Complete the sequence

56, 51, 46, 41, _____, _____, _____

The common difference is 5, so keep subtracting 5

$$\begin{array}{ccccccccc}
 56 & , & 51 & , & 46 & , & 41 & , & 36 & , & \underline{36} & , & \underline{31} & , & 26 \\
 -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & -5 & \nearrow & \\
 \hline
 51 & & 46 & & 41 & & 36 & & 31 & & 26 & & & & \\
 = 36 & , & 31 & , & 26 & & & & & & & & & &
 \end{array}$$

Exercise

Copy and complete the sequence.

1. 29, 25, 21, 17, _____, _____, _____
2. 48, 41, 34, 27, _____, _____, _____
3. 69, 63, 57, 51, _____, _____, _____

Lesson 9

Period 9

Topic: patterns and sequences

Sub topic: forming patterns and sequences using the four operations

Language competence: The learner reads, pronounces, writes new words like multiplying, same factors

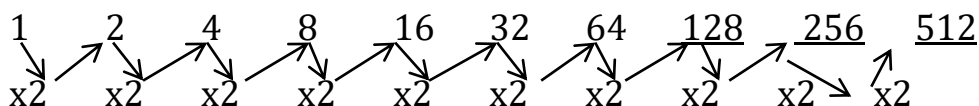
Content: forming sequences of numbers by multiplying

Examples

1. Find the next numbers in the sequence below

1, 2, 4, 8, 16, 32, 64, _____, _____, _____

Keep multiplying by 2



Exercise

Find the missing umbers in the following sequences

1. 1, 3, 9, ____, 81, ____, 729
2. 2, 6, 54, ____, 486, 1458
3. 3, 6, ____, 24, ____, 96, ____, 384

Lesson 10

Period 10

Topic: patterns and sequences

Sub topic: forming patterns and sequences using the four operations

Language competence: The learner reads, pronounces, writes new words like dividing, increasing, decreasing

Content: sequences of numbers by dividing

Examples

1. Find the missing numbers in the sequences below

256, 128, __, 32, __, __, 4, 2, 1

Keep dividing by 2

$= 256 \div 2, 128 \div 2, 64 \div 2, 16 \div 2, 8 \div 2, 4 \div 2, 2 \div 2, 1$

$= 256, 128, \underline{64}, 32, \underline{16}, \underline{8}, 4, 2, 1$

Exercise

Find the missing numbers in the following sequences

1. 729, 243, 81, __, 9, __, 1
2. 384, 192, __, 48, __, __, 6, 3
3. 1024, 256, 126, __, __, __

Lesson 11

Period 11

Topic: patterns and sequences

Sub topic: Forming patterns and sequences using the four operations

Language competence: The learner reads, pronounces, writes new words like arrange complete e.t.c

Content: forming patterns and sequences of numbers

Examples

1. Find the missing numbers 1, 3, 6, 10, _____, _____

1	1	1	1	1	1
	+2	2	2	2	2
	<u>3</u>	+3	3	3	3
		<u>6</u>	+ 4	4	4
			<u>10</u>	+ 5	5
				<u>15</u>	+6
					<u>21</u>

Exercise

workout the following

- 1. Fill in the next 2 numbers 1, 3, 6, 10, 15, _____, _____
- 2. What are the next 2 numbers in the sequences 1, 4, 9, 16, 25?
- 3. Fill in the next 3 numbers
1, 3, 6, 8, 11, 13, 16, 18, 21, _____, _____, _____
- 4. Find the next 3 odd numbers 1, 3, 5, 7, 9

Lesson 12

Period 12

Topic: patterns and sequences

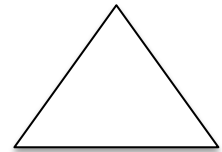
Sub topic: Forming patterns and sequences using the four operations

Language competence: The learner reads, spells, writes correct answer of patterns and sequences .

Content: unit test

Exercise

1. Name the following shapes



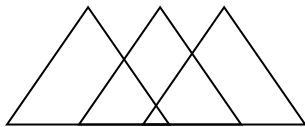
2. Write a set of even numbers between 20 and 40

3. What numbers comes next?

(a) 19, 21, 23, 25, ____, ____, ____, ____

(b) 48, 46, 44, 42, 40, ____, ____, ____, ____

4. How many triangles are in the diagram



Lesson 13

Period 13

Topic: Fractions

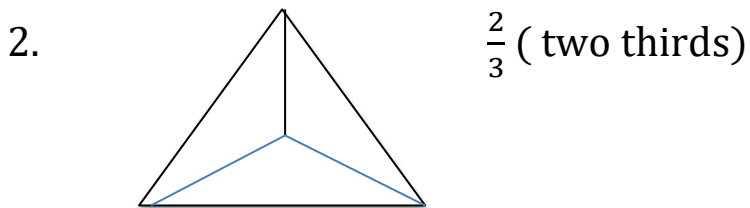
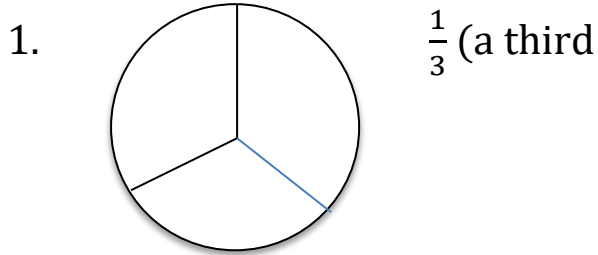
Sub topic: revision on naming , drawing and writing fractions

Language competence: The learner reads, spells, writes and pronounces new words like fractions , equal parts , shading .

Content:

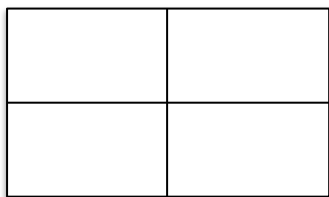
Naming and drawing shaded fractions

Examples



Exercise

1. Name the fractions



2. Draw and shade

- (i) four fifths
- (ii) three eights
- (iii) six sevenths

3. Draw , shade and write the fractions

(i) $\frac{2}{5}$

(ii) $\frac{1}{8}$

(iii) $\frac{4}{5}$

Lesson 14

Period 14

Topic: Fractions

Sub topic: revision improper and mixed numbers

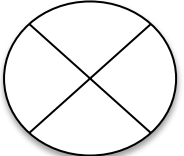
Language competence: The learner reads, spells, writes and pronounces words like proper circular cards, improper

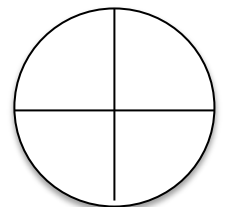
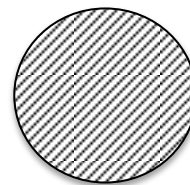
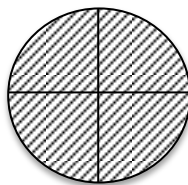
Content:

Identifying proper, improper and mixed numbers

Examples

1. Name the shaded fractions and write “improper”, “proper” or mixed fractions

1.  $= \frac{3}{4}$



$\frac{3}{4}$ is a proper fraction

$\frac{4}{4} + \frac{1}{4} = \frac{5}{4}$ is an improper fraction

$\frac{5}{4}$ is an improper fraction .

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

$1\frac{3}{4}$ is a mixed number

Example 2

Express the following fractions and numerals, then write “proper” or “improper” fractions

(a) two fifths

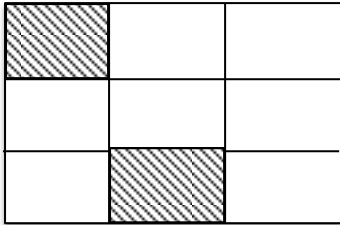
$$\text{Two fifths} = \frac{1}{5} + \frac{1}{5}$$

$\frac{2}{5}$ is a proper fraction

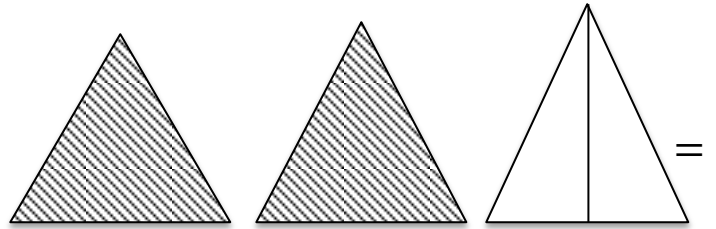
Exercise

Name the shaded fractions and write “proper” or “improper fraction or mixed numbers

1.



=



2. Express the following fractions as numerals, then write “proper” or improper fractions

(i) four fractions

(ii) seven halves

Lesson 15

Period 15

Topic: Fractions

Sub topic: proper improper and mixed numbers

Language competence: The learner reads, spells, and pronounces new words like half, quarter, a third, denominator, numerator etc

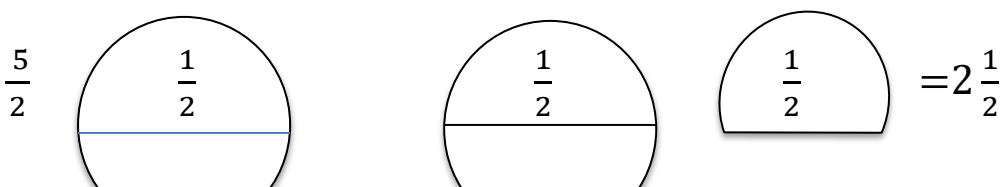
Content:

Changing improper fractions to mixed numbers

Examples

Change $\frac{5}{2}$ to a mixed fraction

$\frac{5}{2}$ means five halves



$$= \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2\frac{1}{2}$$

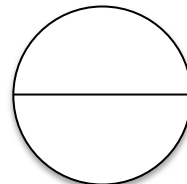
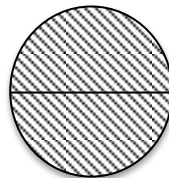
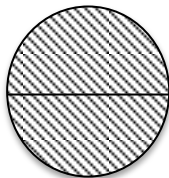
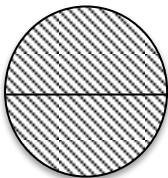
Or $\frac{5}{2} = 5$ divided by 2

$$\frac{5}{2} = \begin{array}{r} 2 \\ 2 \overline{) 5} \\ \underline{-4} \\ 1 \end{array} = 2\frac{1}{2}$$

Exercise

Write a mixed number for each of the following

(i)



(ii)



Change the following to mixed numbers

(i) $\frac{7}{3}$

(ii) $\frac{9}{2}$

(iii) $\frac{18}{9}$

Period 16

Topic: Fractions

Sub topic: proper improper and mixed numbers

Language competence: The learner reads, spells, pronounces, writes new words like change, half circular e.t.c

Content:

Changing mixed numbers to improper fractions

Examples

Change $3\frac{1}{4}$ to an improper fraction

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


$$\text{or } 3\frac{1}{4} = \frac{(4 \times 3) + 1}{4}$$

$$= \frac{12 + 1}{4}$$

$$= \frac{13}{4}$$



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

Change the following

(i) $2\frac{1}{3}$

(ii) $5\frac{2}{3}$

(iii) $7\frac{1}{4}$

(vi) $8\frac{1}{2}$

(v) $6\frac{1}{2}$

Lesson 17

Period 17

Topic: Fractions

Sub topic: equivalent fractions

Language competence: The learner reads, spells, pronounces, writes new cards shaded divide , equivalent etc

Content:

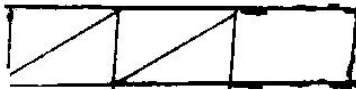
Drawing and writing equivalent fractions

Examples

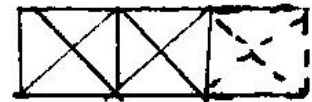
Name two fractions that are equivalent to $\frac{2}{3}$



$\frac{2}{3}$ is equivalent



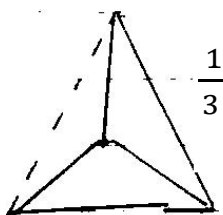
$\frac{4}{6}$ and is equivalent to $\frac{8}{12}$

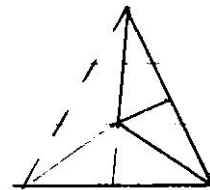


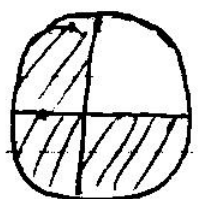
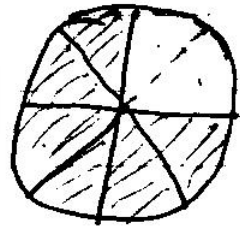
Exercise

Find the missing equivalent fractions

1.  $\frac{1}{2}$ is equivalent to 

2.  $\frac{1}{3}$ is equivalent to



3.  $\frac{3}{4}$ is equivalent to 

Period 1

Topic: Fractions

Sub topic: equivalent fractions

Language competence: The learner reads, spells, pronounces, writes new like numerators, multiplying, denominator etc

Content:

Forming equivalent fractions

Examples

Find 3 equivalent fractions for $\frac{1}{2}$

$$\frac{1}{2} = \frac{1}{2} \times \frac{1}{2} = \frac{2}{4}$$

$$\frac{1}{2} = \frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$$

$$\frac{1}{2} = \frac{1}{2} \times \frac{4}{4} = \frac{4}{8}$$

$$\text{There fore } \frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$$

Find 3 equivalent fraction for

$$\frac{1}{3} = \frac{1}{3} \times \frac{2}{2} = \frac{2}{6}$$

$$\frac{1}{3} = \frac{1}{3} \times \frac{3}{3} = \frac{3}{9}$$

$$\frac{1}{3} = \frac{1}{3} \times \frac{4}{4} = \frac{4}{12}$$

$$\text{Therefore } \frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$$

Exercise

Find the next two equivalent fractions

1. $\frac{1}{2} = \frac{2}{4}, \underline{\quad}, \underline{\quad}$

$$2. \quad \frac{2}{3} = \frac{4}{6}, \text{ —, —}$$

$$3. \quad \frac{1}{4} = \frac{6}{8}, \text{ —, —}$$

$$4. \quad \frac{2}{5} = \frac{4}{10}, \text{ —, —}$$

Lesson 19

Period 19

Topic: Fractions

Sub topic: equivalent fractions

Language competence: The learner reads, spells, pronounces, writes new like numerators, common numbers denominator etc

Content:

Finding the missing numerators and denominators

Examples

$$1. \quad \text{Find the missing number } \frac{2}{5} = \frac{\boxed{4}}{10}$$

(i) Compare the denominators

(ii) Multiply by 2

$$\text{So } \frac{2}{5} = \frac{2}{5} \times \frac{2}{2} = \frac{4}{10}$$

$$\text{Therefore } \frac{2}{5} = \frac{4}{10}$$

$$2. \quad \text{Find the missing number } \frac{1}{4} = \frac{3}{\boxed{12}}$$

$$\text{So } \frac{1}{4} = \frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$$

$$\text{Therefore } \frac{1}{4} = \frac{3}{12}$$

Exercise

1. $\frac{1}{2} = \frac{4}{\boxed{}}$

2. $\frac{1}{7} = \frac{\boxed{}}{28}$

3. $\frac{1}{2} = \frac{5}{\boxed{}}$

4. $\frac{3}{8} = \frac{15}{\boxed{}}$

Lesson:20

Period: 20

Topic: Fractions

Sub topic: equivalent fractions

Language competence: The learner reads, spells, pronounces, writes new like word problem, drawing , shading , numerator etc

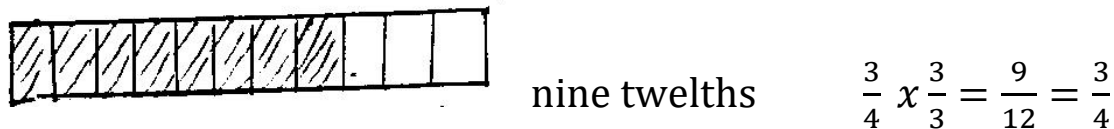
Content:

Working out problem involving equivalent fractions

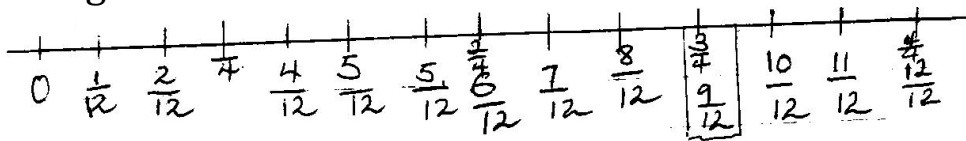
Examples

1. How many twelfths are equal to three quarters

(a) Drawing and shading



(b) Using the number line



$$3 \text{ quarters} = 9 \text{ twelfths or } \frac{3}{4} = \frac{9}{12}$$

Exercise

1. How many sixths equal to one half?
2. How many twelfths equal to quarters.
3. How many eighths equal to three quarters?
4. How many fifteenths equal to two fifths?
5. calculate the number of tenths that are equal to three fifths.

Lesson:21

Period: 21

Topic: Fractions

Sub topic: comparing and ordering fractions

Language competence: The learner reads, spells, pronounces, writes new like comparing , ordering, bigger, smaller

Content:

Comparing two fractions

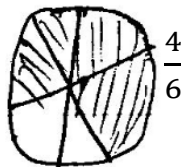
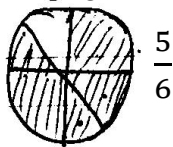
Examples

1. Which is smaller, $\frac{5}{6}$ or $\frac{4}{6}$?

Draw 2 equal circles A and B

Divide each circles A and B into 6 equal parts

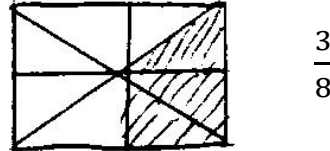
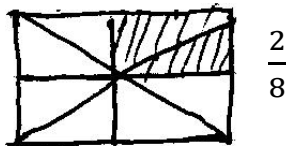
Shade $\frac{5}{6}$ of A and $\frac{4}{6}$ of B



$\frac{4}{6}$ is smaller than $\frac{5}{6}$

Draw 2 equal squares and divide each of them into eight equal parts.

Shade $\frac{2}{8}$ of the square the second square



$\frac{3}{8}$ is bigger than $\frac{2}{8}$

Exercise

Draw , shade and compare

- (a) Which is smaller

1. $\frac{3}{4}$ or $\frac{1}{4}$

2. $\frac{3}{7}$ or $\frac{5}{7}$

3. $\frac{3}{6}$ or $\frac{5}{6}$

4. $\frac{5}{9}$ or $\frac{3}{9}$

Which is bigger

5. $\frac{2}{5}$ or $\frac{3}{5}$

6. $\frac{5}{11}$ or $\frac{7}{11}$

Lesson: 22

Period: 22

Topic: Fractions

Sub topic: comparing and ordering fractions

Language competence: The learner reads, spells new words like greater, less and equal, etc

Content:

Comparing fractions using ($<$, $>$ or $=$)

Examples

1. $\frac{2}{3}$ — $\frac{2}{3}$

So $\frac{2}{3} = \frac{2}{3}$

2. $\frac{7}{15}$ — $\frac{5}{15}$

So $\frac{7}{15} > \frac{5}{15}$

Exercise

Compare the fractions using $<$, $>$ or $=$

1. $\frac{4}{2}$ — $\frac{3}{2}$

2. $\frac{5}{10}$ — $\frac{7}{10}$

3. $\frac{5}{6}$ — $\frac{1}{6}$

4. $\frac{3}{8}$ — $\frac{7}{8}$

5. $\frac{7}{9}$ — $\frac{7}{9}$

Lesson: 23

Period: 23

Topic: Fractions

Sub topic: comparing and ordering fractions

Language competence: The learner reads, spells, pronounces and writes new words like largest and smallest, etc

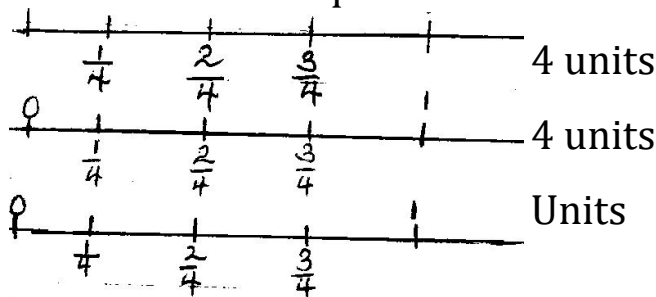
Content:

Ordering fractions using number lines

Examples

1. Arrange $\frac{1}{4}, \frac{3}{4}, \frac{2}{4}$ in order

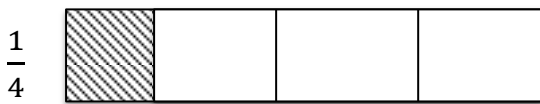
Method A use equal lines



The order from the lower = $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}$

The order from greatest = $\frac{3}{4}, \frac{2}{4}, \frac{1}{4}$

Method B use strips of paper



The order from lowest. $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}$

From greatest = $\frac{3}{4}, \frac{2}{4}, \frac{1}{4}$

Lesson: 24

Period: 24

Topic: Fractions

Sub topic: comparing and ordering fractions

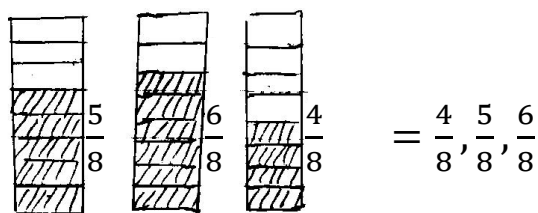
Language competence: The learner reads, spells, pronounces and writes new words like same denominator biggest, smallest, etc

Content:

Ordering fractions with same denominator

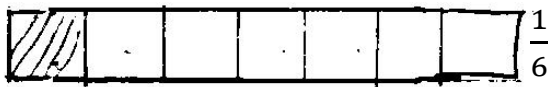
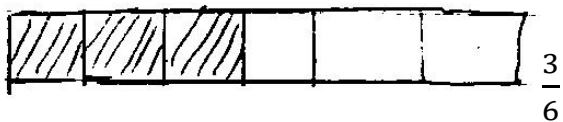
Example1

Order fraction $\frac{5}{8}, \frac{6}{8}, \frac{4}{8}$ from smallest



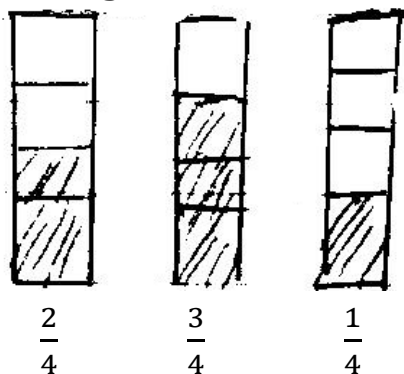
Examples 2

Order fractions $\frac{2}{6}, \frac{3}{6}, \frac{1}{6}$ from the biggest



Exercise

Arrange from the smallest



2. Consider the numerators to arrange fractions from the smallest

(i) $\frac{2}{4}, \frac{1}{4}, \frac{3}{4}$

(ii) $\frac{3}{6}, \frac{1}{6}, \frac{4}{6}$

Lesson: 25

Period: 25

Topic: Fractions

Sub topic: addition of fractions

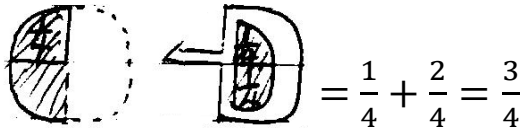
Language competence: The learner reads, spells, pronounces and writes new words like numerator, denominator etc

Content:

Adding fractions of the same denominator

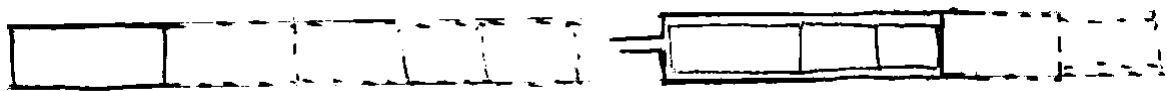
Example1

Add : $\frac{1}{4} + \frac{2}{4} = \square$



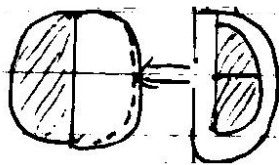
Examples 2

Add $\frac{1}{5} + \frac{3}{5} = \square$



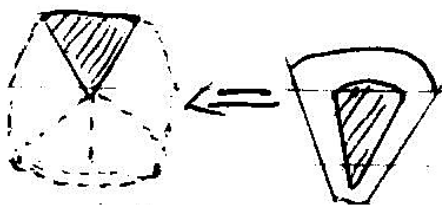
$$\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$$

Exercise



$$\frac{1}{2} + \frac{1}{2} = \square$$

2.



$$\frac{5}{6} + \frac{1}{6} = \square$$

Lesson: 26

Period: 26

Topic: Fractions

Sub topic: addition of fractions

Language competence: The learner reads, spells, pronounces and writes new words like circular cards, numerator, denominator etc

Content:

Adding fractions of the same denominator

Example1

$$\begin{aligned} 1. \quad \text{Add: } \frac{1}{3} + \frac{1}{3} &= \\ \frac{1}{3} + \frac{1}{3} &= \frac{1+1}{3} \\ &= \frac{2}{3} \end{aligned}$$

Example 2

$$\begin{aligned} \text{Add: } \frac{1}{6} + \frac{1}{4} &= \\ \frac{1}{6} + \frac{1}{4} &= \frac{1+6}{6} \\ &= \frac{5}{6} \end{aligned}$$

Exercise

Workout the following

1. $\frac{1}{4} + \frac{2}{4}$
2. $\frac{7}{15} + \frac{8}{15}$
3. $\frac{1}{3} + \frac{1}{3}$
4. $\frac{1}{3} + \frac{2}{3}$
5. $\frac{5}{11} + \frac{5}{11}$

Lesson: 27

Period: 27

Topic: Fractions

Sub topic: addition of fractions

Language competence: The learner reads, spells, writes ,and pronounces new words like altogether , denominator etc

Content:

Adding three fractions with the same denominator

Example1

Add $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

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

$$\frac{1 + 1 + 1}{5}$$

$$= \frac{3}{5}$$

Example 2

Add $\frac{1}{8} + \frac{3}{8} + \frac{1}{8}$

$$\frac{1}{8} + \frac{3}{8} + \frac{1}{8}$$

$$\frac{1 + 3 + 1}{8}$$

$$= \frac{5}{8}$$

Exercise

1. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

2. $\frac{1}{15} + \frac{2}{15} + \frac{4}{15}$

3. $\frac{1}{6} + \frac{2}{6} + \frac{3}{6}$

4. $\frac{1}{7} + \frac{2}{7} + \frac{4}{7}$

5. $\frac{1}{10} + \frac{2}{10}$

Lesson: 28

Period: 28

Topic: Fractions

Sub topic: addition of fractions

Language competence: The learner reads, spells, writes ,and pronounces new words like altogether , word problem etc

Content:

Working out word problem on addition of fractions

Example1

John dug $\frac{1}{6}$ of a garden and Mary dug $\frac{4}{6}$ of the same garden .

What part of the garden was dug?

$$\text{Altogether } \frac{1+4}{6} = \frac{5}{6}$$

Exercise

Read and work out

1. Kadidi ate $\frac{1}{3}$ of a fish for lunch and $\frac{1}{3}$ of it for supper

What fraction of the fish did kadidi eat altogether?

2. Andrew used $\frac{3}{8}$ of sugar in the evening. What fraction of the sugar did he use?

3. Flavia sold $\frac{5}{8}$ of her land to Henery and $\frac{2}{8}$ of it to Jane, what fraction of her land did she sell?

Lesson: 29

Period: 29

Topic: Fractions

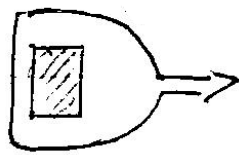
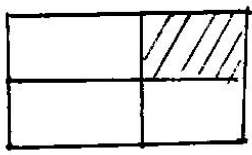
Sub topic: addition of fractions

Language competence: The learner reads , pronounces and spells new words like equal parts, remains take way etc

Content:

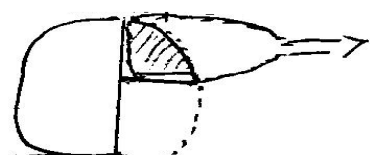
Subtracting fractions with the same dominators

Example1



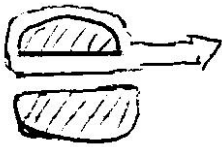
$$\frac{4}{4} - \frac{1}{4} = \frac{3}{4}$$

Example 2

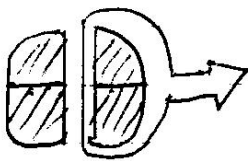


$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

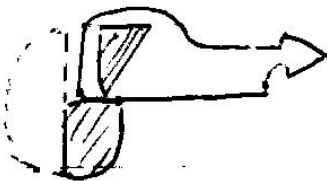
1. Workout



$$\frac{2}{2} - \frac{1}{4} =$$



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



$$\frac{2}{4} - \frac{1}{4}$$

Lesson: 30

Period: 30

Topic: Fractions

Sub topic: subtraction of fractions

Language competence: The learner reads, pronounces ,spells, new words like manila cards numerators, denominator etc.

Content:

Subtracting fractions with the same dominators

Example1

Subtract: $\frac{5}{7} - \frac{2}{7}$

$$\frac{5}{7} - \frac{2}{7} = \frac{5 - 2}{7}$$

$$= \frac{3}{7}$$

Example 2

$$\frac{9}{2} - \frac{5}{2}$$

$$\frac{9}{2} - \frac{5}{2} = \frac{9 - 5}{2}$$

$$= \frac{4}{2} \text{ (divide 4 by 2)}$$

Exercise

1. $\frac{4}{4} - \frac{1}{4}$

2. $\frac{4}{6} - \frac{1}{6}$

3. $\frac{8}{9} - \frac{3}{9}$

4. $\frac{5}{7} - \frac{1}{7}$

5. $\frac{3}{11} - \frac{2}{11}$

Lesson: 31

Period: 31

Topic: Fractions

Sub topic: subtraction of fractions

Language competence: The learner reads, pronounces, spells, new words like word problems, remained, take way

Content:

Working out word problems on subtraction of fraction

Example 1

A boy had $\frac{5}{6}$ of a cake. He ate $\frac{2}{6}$ of it. What fraction remained?

$$\frac{5}{6} - \frac{2}{6} = \frac{5 - 2}{6} = \frac{3}{6}$$

Example 2

A girl had an orange . She gave away of it what fraction remained

$$\frac{4}{4} - \frac{3}{4} = \frac{4 - 3}{4} = \frac{1}{4}$$

Exercise

Read and workout

1. Subtract $\frac{2}{7}$ from $\frac{5}{7}$
2. Andrew had $\frac{7}{9}$ of a cake. He ate $\frac{5}{9}$ of it. what fraction remained?
3. What remains if $\frac{7}{15}$ is subtracted from $\frac{13}{15}$?
4. Our mother gave $\frac{3}{10}$ of a paw paw to John, $\frac{5}{10}$ to Musa and the remaining Part to Mary
 - (a) How much more did Musa get than Mary?
 - (b) How much more did Musa get than John?

Lesson: 33

Period: 33

Topic: Fractions

Sub topic: fractions of a group

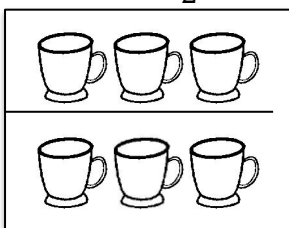
Language competence: The learner reads, pronounces, spells, new words like group , find multiply

Content:

Finding fractions of a group

Example 1

What is $\frac{1}{2}$ of 6



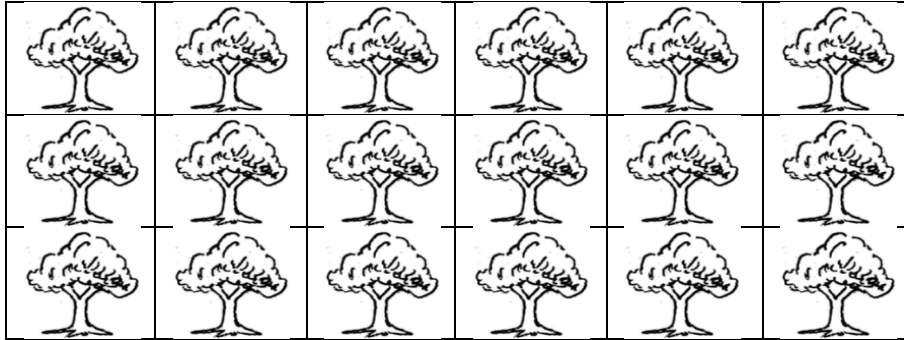
$$\frac{1}{2} \text{ of } 6 = \frac{1}{2} \times 6$$

$$= 6 \div 2$$

$$= 3$$

Example 2

What is $\frac{1}{5}$ of 15?



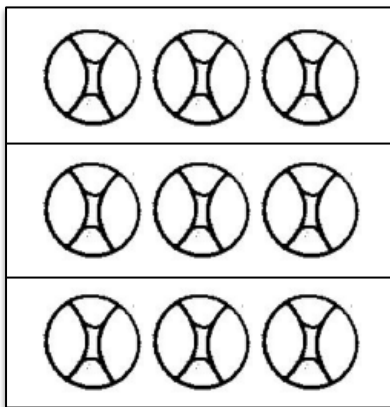
$$\frac{1}{5} \times 15 = \frac{1}{5} \times 15$$

$$= 15 \div 5$$

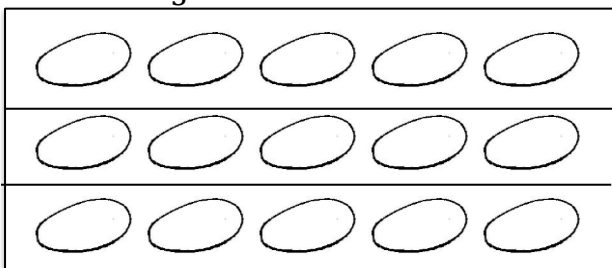
$$= 3$$

Exercise

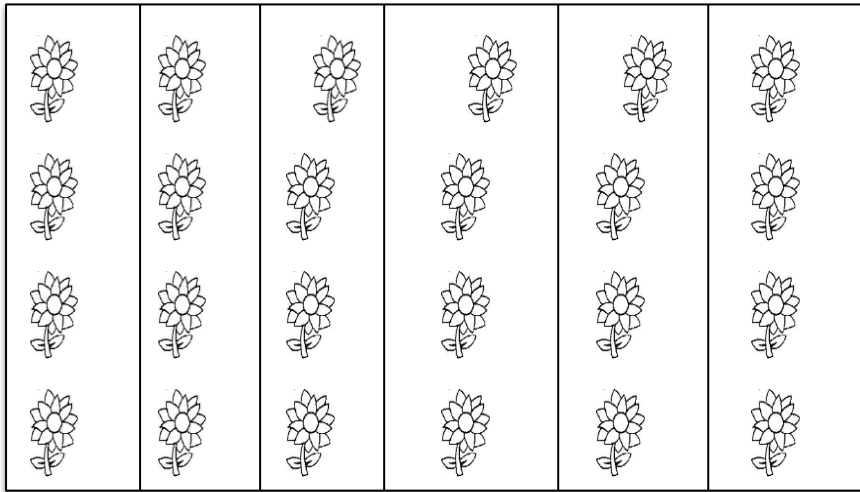
1. What fraction is $\frac{1}{3}$ of 9?



2. What is $\frac{1}{3}$



3. What is $\frac{1}{6}$ of 24?



Lesson: 34

Period: 34

Topic: Fractions

Sub topic: A fraction of a group

Language competence: The learner reads, pronounces, spells, new words like multiplying, numerators ,

Content:

Working out word problem involving fractions of a group.

Examples

1. Nandutu was given sh. 1500. She spent two thirds of the money on transport. How much did she spend?

She spent $\frac{2}{3}$ of 1500

$$\frac{2}{3} \text{ of } 1500 = \frac{2}{3} \times 1500$$

So ,she pent sh. 1000

2. Baguma had 48 chicken .. He sold $\frac{3}{4}$ of them . How many chickens did he sell

He sold $\frac{3}{4}$ of 480

$$\frac{3}{4} \text{ of } 480 = \frac{3}{4} \times 480 = 360$$

So, he sold 360 chickens

Exercise

1. Kavuma had 15 toys. He gave away $\frac{1}{3}$ of his toys . how many toys did he give away?
2. My mother had sh. 96000. She used her money as follows
- (a) $\frac{1}{3}$ for food (b) $\frac{2}{12}$ of bills (c) $\frac{2}{5}$ for transport

Find the amount used for each item

3. A farmer harvest 42 bunches of banana . she sold $\frac{1}{2}$ of them . How many Bunches did she sell?

Lesson: 35

Period: 35

Topic: Fractions

Sub topic: fractions

Language competence: The learner reads, pronounces, spells, new words like related to fractions

Content:

Exercise

1. Write the numerals of the following
- (a) three halves
- (b) seven halves
- (c) nine quarters

2. Add

(a) $\frac{1}{5} + \frac{3}{5}$

(b) $\frac{4}{5} + \frac{2}{7}$

3. Arrange

$$\frac{8}{12}, \frac{6}{12}, \frac{9}{12}$$

(a) From the biggest

(b) From the smallest

4. Write the next two equivalent fractions

(a) $\frac{1}{4} = \frac{2}{8} = \underline{\hspace{1cm}}, \underline{\hspace{1cm}}$

5. Busingye milked $\frac{4}{5}$ litres for her cow. She sold off $\frac{1}{5}$ litres . How much milk was left?

Lesson: 36

Period: 36

Topic: 2 - dimensional geometry

Sub topic: 2 -dimensional

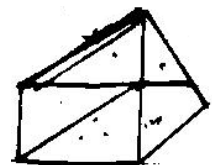
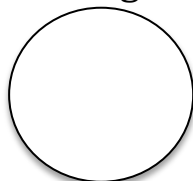
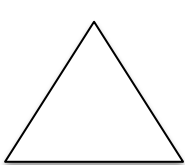
Language competence: The learner reads, pronounces, spells, new words like geometry, dimensional, figures

Content:

Identifying 2- dimensional figures

Examples

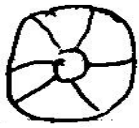
Pick out 2 dimensional figures from the figures below



These are two – dimensional figures

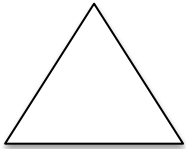
Exercise

1. Identify the 2- dimensional shapes by filling in “is” or “is not” in the space provides



a ball __ a 2 – dimensional shape

2.



This triangle – a 2 – dimensional shape

3.



This rectangle – a 2- dimensional shape .

Lesson: 37

Period: 37

Topic: 2 - dimensional geometry

Sub topic: 2 –dimensional

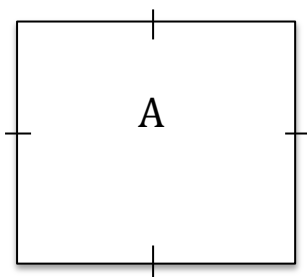
Language competence: The learner reads, pronounces, spells, new words like geometry, dimensional, figures

Content:

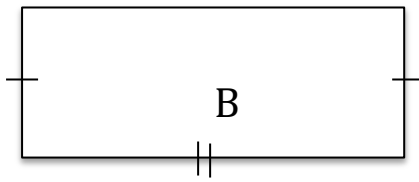
Identifying 2- dimensional figures

Examples

A is a square

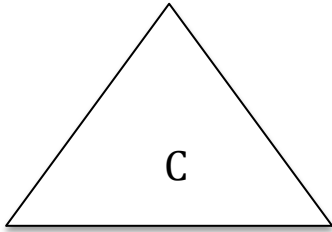


A square has 4 equal sides



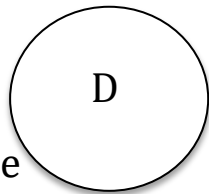
B is a rectangle

A rectangle has 2 equal short sides and 2 long sides



C is triangle

A triangle has 3 sides



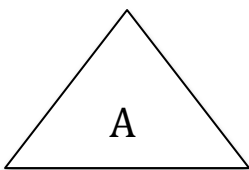
D is a circle

A circle is made up of a curved line the same distance from the centre at every point

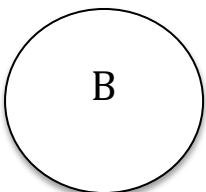
Exercise

Name the shapes and faces marked by the letters

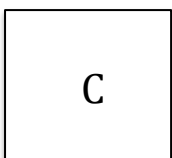
1.



2.



3.



4.

D

Lesson: 38

Period: 38

Topic: 2 - dimensional geometry

Sub topic: 2 –dimensional

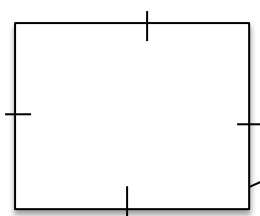
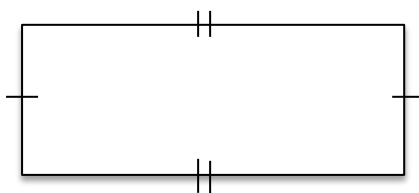
Language competence: The learner reads, pronounces, spells, reads new words like pictures, matching , shapes

Content:

Matching the pictures of figures to their names

Examples

1. Match the shape with correct name

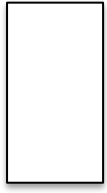


Square

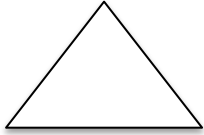
Rectangle

Exercise

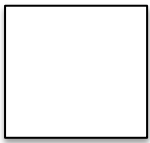
Match the shapes to their names



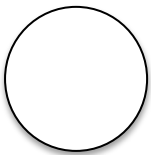
Circle



Square



Rectangle



Circle

Lesson: 39

Period: 39

Topic: 2 - dimensional geometry

Sub topic: constructing dimensional figures

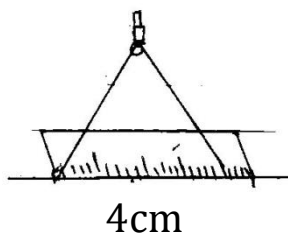
Language competence: The learner reads, pronounces, spells, reads new words like vertical, horizontal

Content:

Draw a square

Example 1

(a) Use a ruler and draw a line 4cm



(b) Mark 90° using a pair compasses



4cm

Exercise

Construct squares of the sides given below

1. 3cm
2. 6cm
3. 7cm
4. 5cm
5. 8cm

Lesson: 40

Period: 40

Topic: 2 - dimensional geometry

Sub topic: constructing 2 dimensional figures

Language competence: The learner reads, pronounces, spells, reads new words like vertical lines, compasses, construct

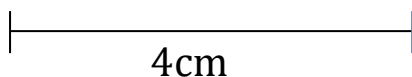
Content:

Draw a rectangle

Example 1

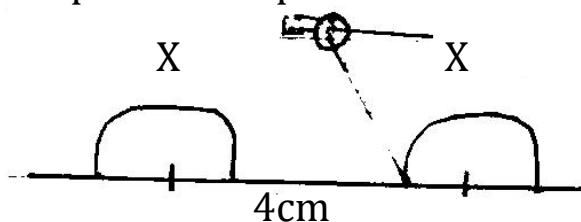
1. Use a ruler and draw

Step I

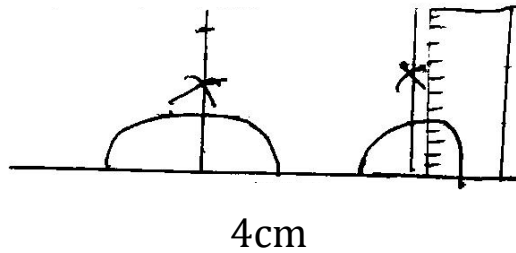


Step 2

Use a pair of compasses to construct 90°

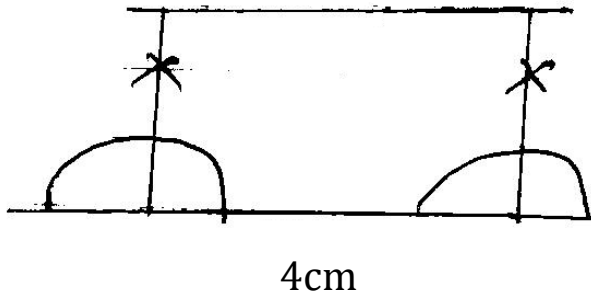


Step 3



Step 4

Complete the rectangle by joining the remaining side



Lesson: 41

Period: 41

Topic: 2 - dimensional geometry

Sub topic: constructing 2 dimensional figures

Language competence: The learner reads, pronounces, spells, reads new words like equilateral triangle , straight line

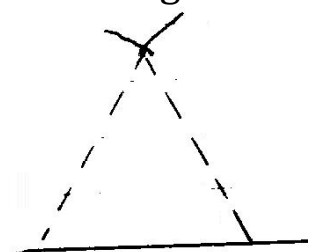
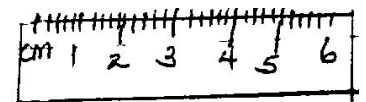
Content:

Drawing an equilateral triangle

Example

Draw an equilateral triangle of side 4cm

- get a ruler and draw a straight line
- Take a compass and stretch it to read 4cm and mark this length off
- Mark point A then point B 4cm apart
- From point A make an arc above in the line
- Make another arc from point B to form point c



Exercise

Using a pair of compasses , a ruler ad a pencil, draw equilateral triangle with the following dimensions

1. 2cm
2. 3cm
3. 5cm
4. 6cm
5. 9cm
6. 10cm

Lesson: 42

Period: 42

Topic: 2 - dimensional geometry

Sub topic: right angles

Language competence: The learner reads, pronounces, spells, reads new words like set entrustments, right angle

Content:

Name the object right angles

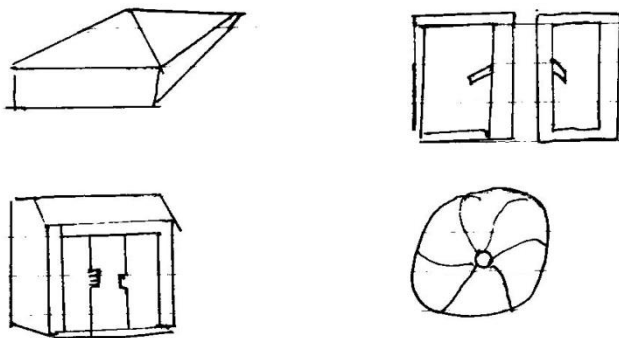
Example



The door has right angles

Exercise

1. Name the object with right angles



Lesson: 43

Period: 43

Topic: 2 - dimensional geometry

Sub topic: right angles

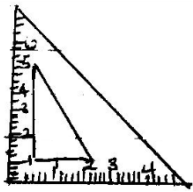
Language competence: The learner reads, pronounces, spells, writes new words like right angles, less than

Content:

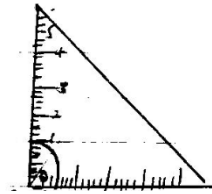
Identifying more right angles

Examples

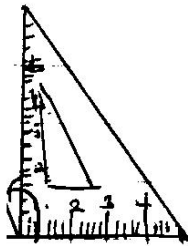
A right angle is the amount of turning measuring 90° . Use a set square to find out which is a right angle



The angle is 90°
It is a right angle



This angle is less than 90° .
It is a not right angle

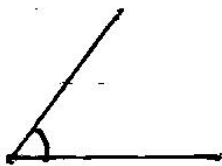


This angle more than 90°
It is not a right angle

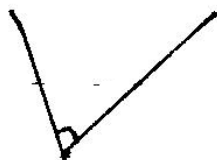
Exercise

Measure to find right angles

1.



2



3.



Lesson: 44

Period: 44

Topic: 2 - dimensional geometry

Sub topic: right angles

Language competence: The learner reads, pronounces, spells, writes new words like straight line right angles

Content:

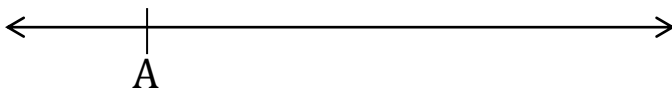
Drawing a right angles

Examples

1. Draw a right angle

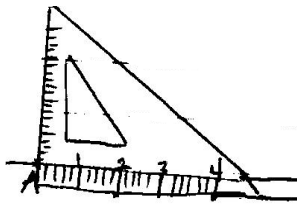
Get a ruler and draw a straight line

Mark point A anywhere on the line



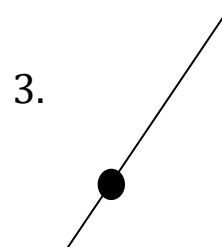
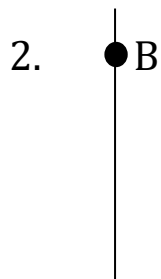
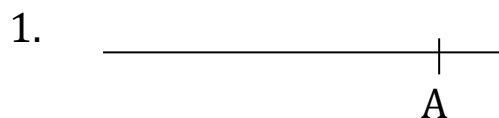
Put the right angle of the set square at A draw a line as shown

The angle formed is a right angle



Exercise

Copy and draw a right angle at the given oint



Lesson: 45

Period: 45

Topic: 2 - dimensional geometry

Sub topic: perimeter of figures

Language competence: The learner reads, pronounces, spells, and writes new words footsteps and strides

Content:

Finding perimeter of rectangle using footsteps and strides

Examples

1. What is the distance around your play ground?

Walk around the playground as you count the steps

Do not leave gaps between your feet

The distance around the playground is its perimeter

Exercise

Measure the distance around as instructed

1. The distance around the office building (using footsteps)

2. The distance around a football field. (Using stride)

4. The distance around your playground (using stride)

Lesson: 46

Period: 46

Topic: 2 - dimensional geometry

Sub topic: perimeter of figures

Language competence: The learner reads , spells, writes , and pronounces new words like squares, strides, perimeter

Content:

Finding perimeter of squares

Examples

How many strides can you make around the square?

There are 4 strides on one side

The total number of strides

= 4 strides + 4 strides + 4 strides = 16 strides

Exercise

Measure the distance around as instructed

Note write your answer in strides

1. The perimeter of a square room
2. Half of the football field
3. The length of one side of a square garden is 20 strides, what is the perimeter of the garden.
4. The distance around a square garden.

Lesson: 47

Period: 47

Topic: 2 - dimensional geometry

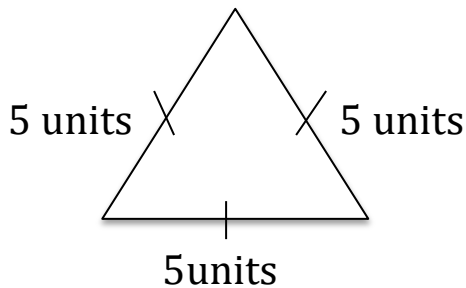
Sub topic: perimeter of figures

Language competence: The learner reads, spells, pronounces, and writes new words like standard units , equal sides etc

Content:

Finding perimeter of a triangle using non- standard units

Example1

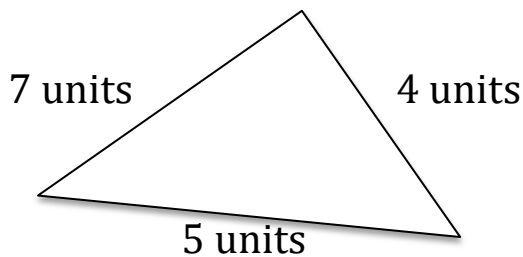


The rectangle has three equal sides

The distance around it is,

Side + side + side = perimeter

$5 \text{ units} + 5 \text{ units} + 5 \text{ units} = 15 \text{ units}$



The triangle has different lenth's,

The perimeter around it is,

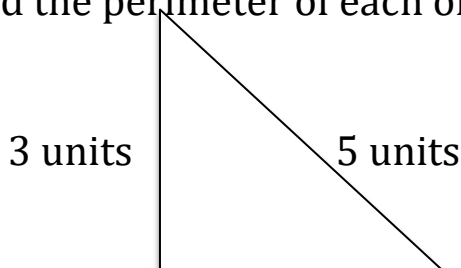
Side + side + side= perimeter

$4 \text{ units} + 7 \text{ units} + 5 \text{ units} = 16 \text{ units}$

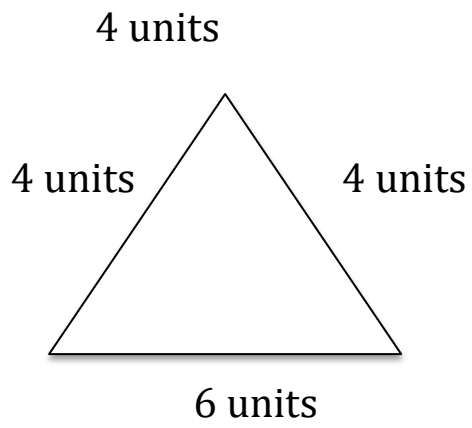
Exercise

Find the perimeter of each of the triangles below

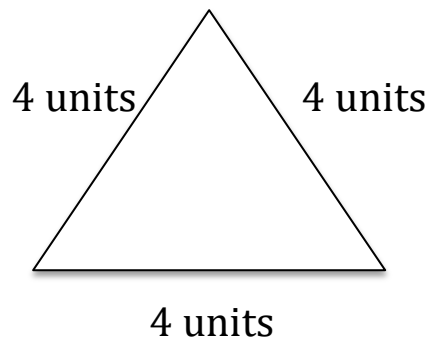
1.



2.



3.



Lesson: 48

Period: 48

Topic: 2 - dimensional geometry

Sub topic: area of figures

Language competence: The learner reads, spells, pronounces, and writes new words like area, square units etc

Content:

Finding area of a square

Example1

How many small squares will fill this big square?

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

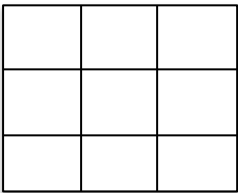
16 small will fit the big square

The area of the big is 16 square units

Exercise

Count the small squares to find the area of square below

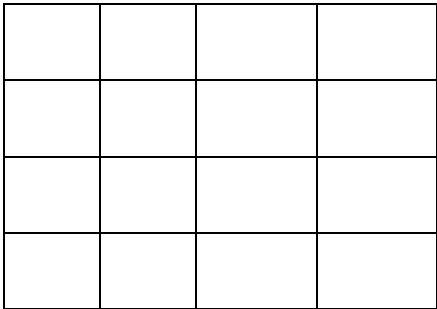
1.



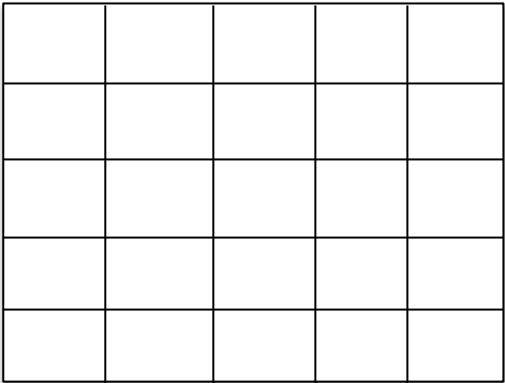
2



3.



4.



Lesson: 49

Period: 49

Topic: 2 - dimensional geometry

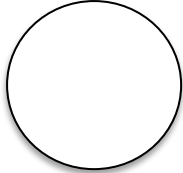
Sub topic: 2 - dimensional figures

Language competence: The learner reads, spells, writes and pronounces, new words related to the exercise or test

Content:

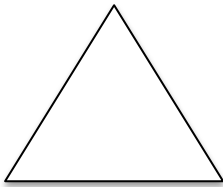
Test

1. Name this 2 – imensional shape



2. Draw an equilateral triangle

3. Name shape below



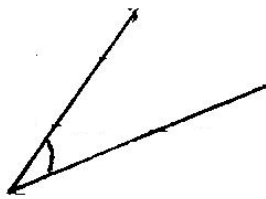
How many sides does it have?

4. Use a protractor to identify the following angles

(a)



(b)



(c)



Which of these angles is a right angle?

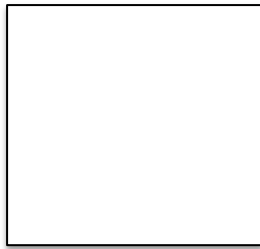
5. Copy and draw the line



Draw an angle of 90° at point A

6. Find the perimeter of the rectangle below

(a)



7 units

7 units

Lesson: 50

Period: 50

Topic: 2 - dimensional geometry

Sub topic: 2 – Area of figures

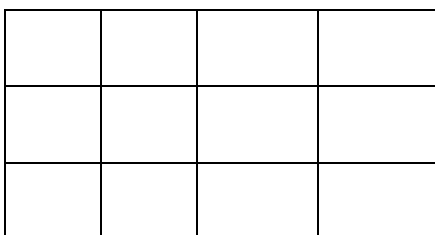
Language competence: The learner reads, spells, writes and pronounces, new words like equal sides, opposite sides, square , rectangle

Content:

Finding area of a rectangle

Example

Find the area of the rectangle



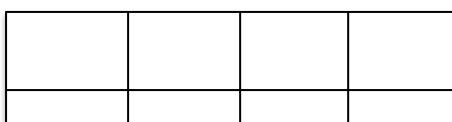
Count all the square pieces

12 small squares fill the rectangle

Therefore , the area of the rectangles is 12 square units

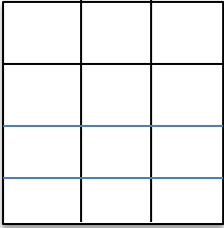
Exercise

Count the squares to find the area of the rectangles below

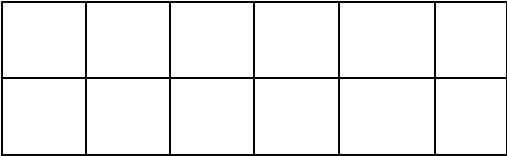


1.

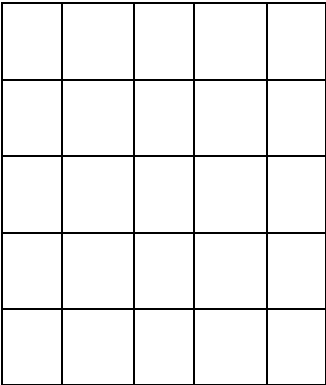
2.



3.



4.



Lesson: 51

Period: 51

Topic: 2 - dimensional figures

Sub topic: 2 – Area of figures

Language competence: The learner reads, spells, writes and pronounces, new words like line, segments

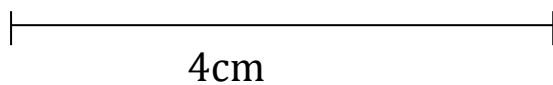
Content:

Line segment

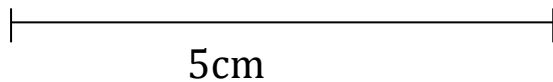
Example

Use a ruler and measure lines of segments

(a) 4cm

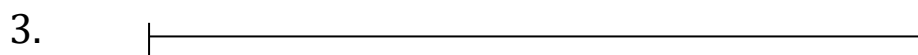
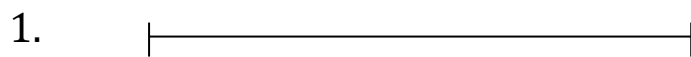


(b) 5cm



Exercise

Use a ruler and measure the following lines of segments



Lesson: 52

Period: 52

Topic: 2 - dimensional geometry

Sub topic: 2 – dimensional figures

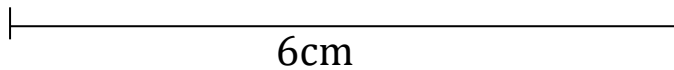
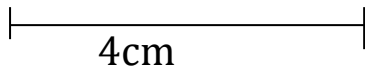
Language competence: The learner reads, spells, writes and pronounces, new words like drawing line

Content:

Drawing lines of segment

Example

Use a pencil and a ruler, draw lines of segments of



Exercise

- (i) 10cm
- (ii) 8cm
- (iii) 5cm
- (iv) 9cm

Lesson: 53

Period: 53

Topic: 3 - dimensional geometry

Sub topic: 2 – common solids

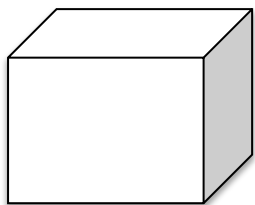
Language competence: The learner reads, spells, writes and pronounces, new words like common solids, cube, sphere, cone, cylinder, cuboid,

Content:

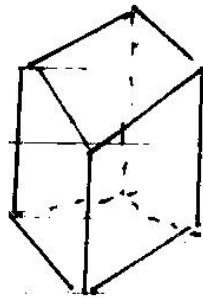
Identifying and naming solids

Examples

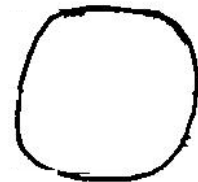
Name the 3 dimensional shapes



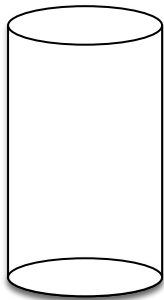
Cuboid



cube



sphere



Cylinder

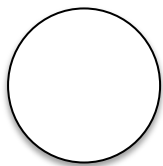


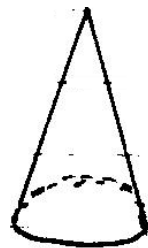
cone

Exercise

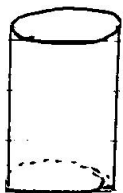
Name the objects below

1.





2.

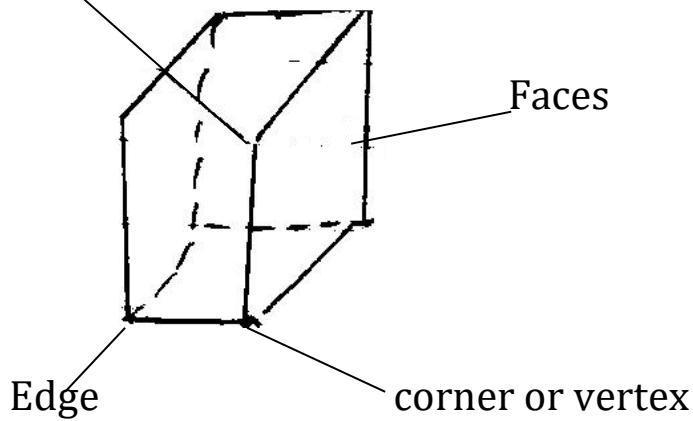


Name the parts of the cube

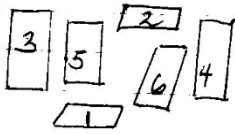
A cube has

- (a) 6 faces
- (b) Corners or vertices

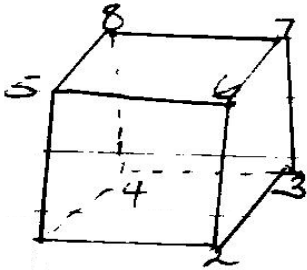
(c) 12 edges



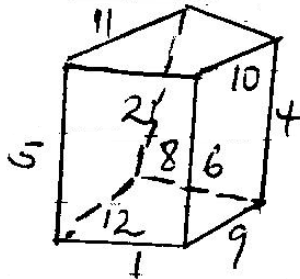
(b) 6 equal square faces



(c) 8 corners or vertices



(d) 12 edges



Exercise

Copy and complete

1(a) the flat squares on a cube are its _____

(b) The corners of a cube are its _____

2. Complete using 6, 8 or 12

(c) A cube has _____ vertices

(b) A cube has _____ faces

(c) A cube has _____ vertices

Period: 55

Topic: 3 - dimensional geometry

Sub topic: models solids

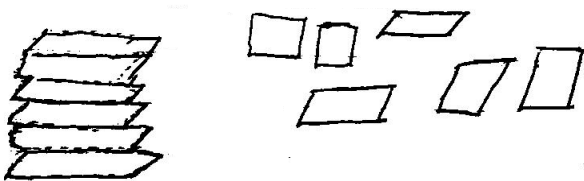
Language competence: The learner reads, spells, writes and pronounces, new words like cubes, equal, faces, opposites, etc

Content:

Making cubes

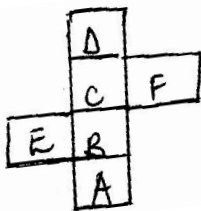
Example 1

Cut equal square faces



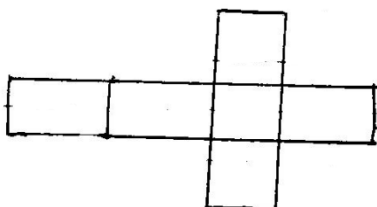
Draw m, cut and join parts of a box form a cube

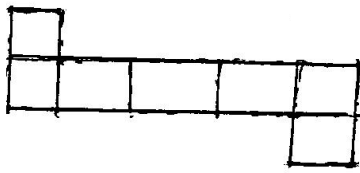
- (i) If B is the bottom
- (ii) D is the top
- (iii) A is a opposite C
- (iv) F is opposite E



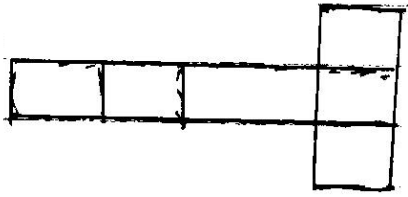
Exercise

Copy , draw, cut and join nets to form cubes





2.



3.

Lesson: 56

Period: 56

Topic: 3 - dimensional geometry

Sub topic: models solids

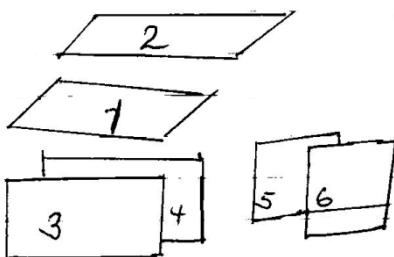
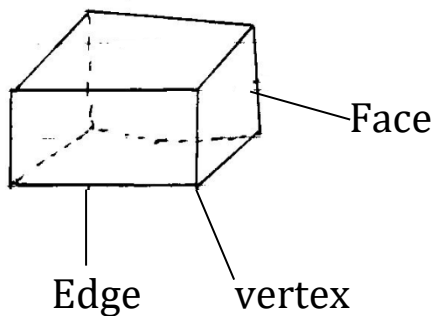
Language competence: The learner reads, spells, writes and pronounces, new words like properties of cuboid, edges, vertices

Content:

Identifying properties of cuboids

Examples

Draw the shape and names its parts

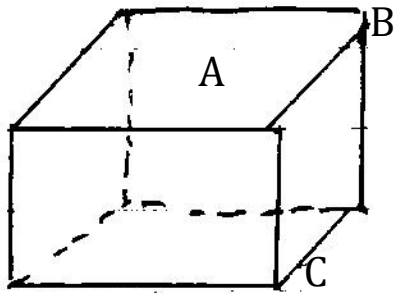


This solid has 6 faces , 12 edges and 8 vertices. It is a cuboid

Exercise

Attempt these

1. Draw and name the parts of the cuboid



- (i) part A is the _____
- (ii) Part B is the _____
- (iii) Part C is the _____
2. A cuboid has (a) _____ faces
- (b) _____ vertices or corners
- (c) _____ edges

Lesson: 57

Period: 57

Topic: 3 - dimensional geometry

Sub topic: models solids

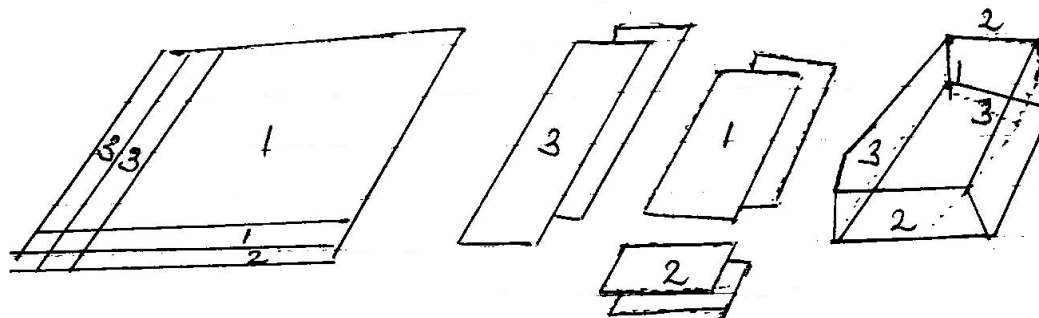
Language competence: The learner reads, spells, writes and pronounces, new words like cuboid, altogether

Content:

Making a cuboid

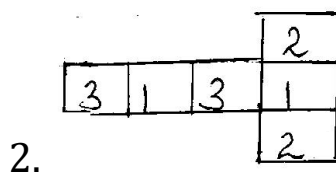
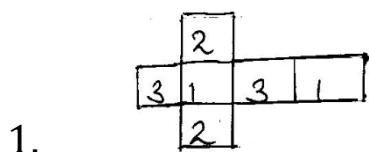
Example

Place two equal sheets of hard paper together cut 3 different parts of rectangle as shown join the using a cello tape to form a cuboid



Exercise

Copy, draw , cut and join the nets to form cuboids use cello tape



Lesson: 58

Period: 58

Topic: 3 - dimensional geometry

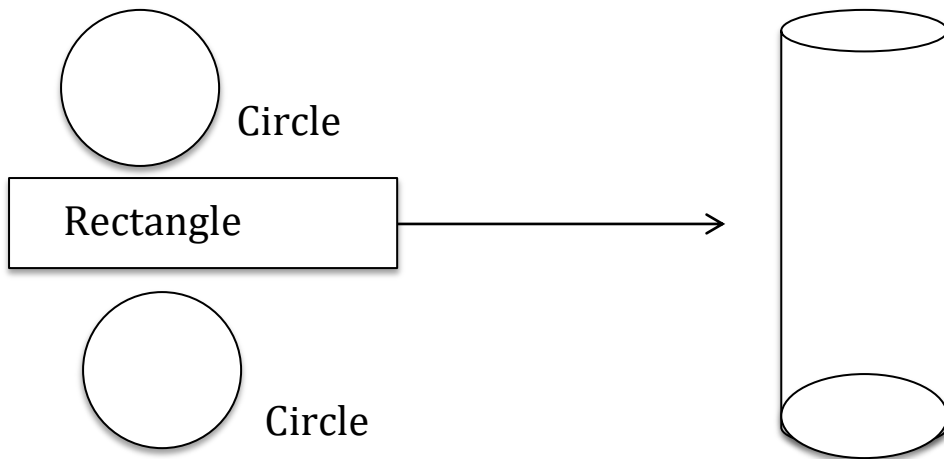
Sub topic: models solids

Language competence: The learner reads, spells, writes and pronounces, new words like properties , net of cylinder , equal circles

Content:

Properties and nets of cylinders

Example I



(a) A cylinder has three faces

(b) It has 1 curved rectangle

(c) It has 2 equal circles

Exercise

1. How many faces has a cylinder?

2. Draw the following objects with a cylindrical shape

(a) a water tank

(b) a glass

3. Make a cylinder using pieces of paper

4. The largest face of a cylinder has a ____ shape

5. How many circular faces does a cylinder have?

Lesson: 59

Period: 59

Topic: 3 - dimensional geometry

Sub topic: models solids

Language competence: The learner reads, spells, writes and pronounces, new words like cone and spheres

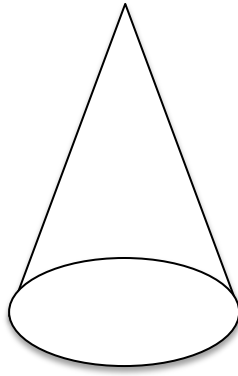
Content:

Properties of cones and spheres

Describe a cone

A cone has

- (i) two faces
- (ii) a curved sector of a circle
- (iii) A circular base
- (iv) No vertex but an apex



Exercise

Attempt the following

1. How many faces has a cone?
2. How many faces has a sphere
3. Give 4 objects that are spherical?

Lesson: 60

Period: 60

Topic: 3 - dimensional geometry

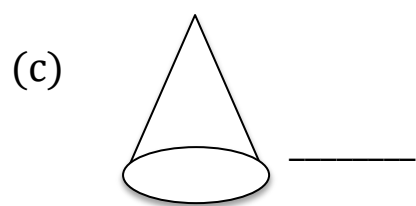
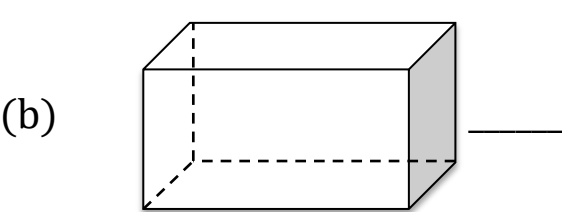
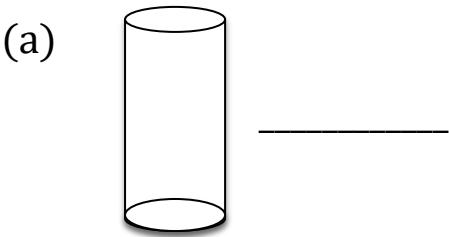
Sub topic: models solids

Language competence: The learner reads, spells, writes and pronounces, new words like related to the given test

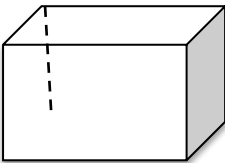
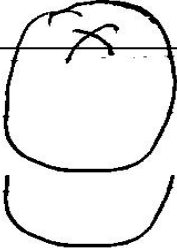

Content:

Properties of cones and spheres

1. Name each of the 3 – dimensional figures below



2. Study the table and fill in the number of faces, vertices and edges

	Number of faces	Number of vertices	Number of edges
			
			

Lesson: 61

Period: 61

Topic: Data handling

Sub topic: Tally marks

Language competence: The learner reads, spells, writes and pronounces, new words tally marks, represent , counting

Content:

Counting and representing numbers with tally marks

Examples

Blue // green //// Yellow ~~////~~ / Pink ~~////~~ // red ~~////~~ ///

How many pupils like yellow?

6 pupils

Example

Find the numbers represented by the following tally marks

(a) //// (b) ~~////~~
//// = 4 ~~////~~ 1 = 6

(c) ~~////~~ ~~////~~ ////
~~////~~ ~~////~~ //// = 14

(d) ~~////~~ ~~////~~ ~~////~~ ~~////~~ // = 22

Example 3

Use tally marks to represent these numbers

(a) 3 (b) 7 (c) 12 (d) 18
3 = /// 7 = ~~////~~ // 12 = ~~////~~ ~~////~~ // 18 = ~~////~~ ~~////~~ ~~////~~ ///

Exercise

1. Find the numbers represented by the following marks

(a) //
(b) ~~////~~ ~~////~~ ///
(c) ~~////~~ ~~////~~ ~~////~~

2. Use tally marks to represent the numbers of items

(a) 7

(b) 11

(c) 13

(d) 68

Lesson: 62

Period: 62

Topic: Data handling

Sub topic: Tally marks

Language competence: The learner reads, spells, writes and pronounces, new words represented , tally marks, drawing tables

Content:

Drawing tables for data represented by tally marks

Example I

An assortment of boxes of books were put in a book store as shown. Draw a table for the information below.

Mathematics book */// // //*

English books */// //*

Social studies books *////*

R.E books */// /// ///*

Science */// /*

Subject	Mathematics	English	Science	Social studies	R.E
Number of boxes	13	8	6	4	15

Exercise

Draw tables for the information represented by tally marks

1. Mr. Ochen recorded the number of boxes of items he bought for his shop

Tooth paste */// //* Biscuits */// /// /* soap */// ///*

Matches */// /// //* books */// /// ///*

2. A school recorded the number of pupils absent for a week

Monday */// /* Tuesday *////* Wednesday */// //*

Thursday */// ///* Friday */// /// //*

3. A fruit seller recorded the following number of fruits she sold in a day

Pineapples	/// // //
Oranges	/// //// /// /// /
Lemons	/// //
Watermelons	/// //
Passion fruits	/// /// /// /// /// /

Lesson: 63

Period: 63

Topic: Data handling

Sub topic: Tally marks

Language competence: The learner reads, spells, writes and pronounces, new words like recording, information, tally marks

Content:

Recording information using tally marks

Example I

The ages of children in a village were recorded in years as follows

2 4 7 3 4 2 3 4 5 3 4 4
4 5 6 4 3 6 5 2 3 3 5 6

Use tally marks to record the information above

Age of pupils	Tallies	Frequency
2 years	///	3
3 years	//// /	6
4 years	//// //	7
5 years	////	4
6 years	///	3
7 years	/	/1

(i) How many children of 3 years are in the village?

There are 6 children who are 3 years

(ii) What is the total number of children that were recorded

There were 24 children that were recorded

(iii) Which age has the highest number of children

Age 4 has the highest number of children

Exercise

Use tallies to record the information given below

1. A pupil rolled a dice 20 times and the results were recorded as follows

1, 3, 6, 4, 2, 3, 4, 6, 5, 3, 2, 1, 1, 3, 4, 6, 2, 4, 1, 1,

2. A traffic police officer recorded number of traffic offenses weekly for 20 weeks. The results were 25, 30, 40, 50, 20, 25, 40, 60, 70, 30, 40, 150, 40, 60, 30, 40, 50, 20, 25, 30

Lesson: 64

Period: 64

Topic: Data handling

Sub topic: Tally marks

Language competence: The learner reads, spells, pronounces and writes new words like interpreting tables

Content:

Reading and interpreting tables

Example

The table shows litres of milk mrs. Kawuma's cow produced in a week

days	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Number of litres	12	10	9	15	10	13	5

- (a) On which day did the cow produce the highest number of litres of milk
It produced the highest number of litres on Thursday
- (b) How many litres of milk did the cow produce in the first two days of the week

On Sunday it produced 5 litres

On Monday it produced + 12 litres

On two days, it produced 17 litres

- (c) How many more litres of milk did the cow produce on Saturday than Wednesday ?

13 litres – 9 litres = 4 more litres

Exercise

1. The table below shows the number of domestic animals kept in a certain village farm

Farm animals	Goats	Sheep	Rabbits	Donkeys	Cows
No. of animals	9	6	12	4	5

- (a) How many rabbits are kept on the farm
- (b) What is the number of donkeys on the farm
- (c) How many more goats than sheep are on the farm?
- (d) What is the total number of animals on the farm?
2. The table below shows the number of pupils who passed different subjects out of 60 pupils in the class

Subject	English	Maths	Science	Social studies
No. of pupils	35	28	42	55

- (a) Which subjects was passed by most of the pupils?
- (b) Which was the worst done subject by the class?
- (c) How many pupils passed science and mathematics
- (d) How many pupils failed social studies

3. The table shows farmers who grow different fruits in a village

Fruits	oranges	pineapples	passion fruits	watermellon	tomatoes
No. of farmers	15	30	25	25	35

- (a) Which fruit is grown by the smallest number of people?
- (b) Howmany farmers grow water melons, oranges and pineapples?

Period: 65

Topic: Data handling

Sub topic: Tally marks

Language competence: The learner reads, spells, writes and pronounces new words drawing, tables, information

Content:

Drawing tables for given information

Examples

The number of pupils who came late last week are as follows

Monday -10, Tuesday- 8, Wednesday 5, Thursday 5, Friday 12

Put the information in a table

Days	Mon	Tue	Wed	Thur	Fri
No. of pupils	10	8	5	5	12

Exercise

1. Mr. Odeke's expenditure for a week on different items is as follows , food- 50,000, water sh. 20000, transport- sh 30000, others 25000. Draw a table to record this information
2. The number of eggs sold at a poultry farm for a week is shown below
Monday – 200, Saturday- 180, Sunday -220,
Tuesday- 300, Wednesday- 250, Thursday- 150 , Friday- 200
Draw a table to represent this information

Lesson: 66

Period: 66

Topic: Data handling

Sub topic: pictograph





















Language competence: The learner reads, spells, writes , pronounces, and spells new words like pictograph, interpreting


Content:

Interpreting pictographs

Examples

The pictograph below represents the number of cups in the cupboard

Cupboard	Number of cups
Cupboard A	 
Cupboard B	   
Cupboard C	  
Cupboard D	    
Cupboard E	     

Scale  equal 20 cups

How many cups did each cupboard have?

Cupboard hadA $(2 \times 20) = 40$ cups

Cupboard B had $(4 \times 20) = 80$ cups






Cupbaord C had $(3 \times 20) = 60$ cups


Cupbaord D had $(3 \times 20) = 100$ cups

Cupboard E had $(6 \times 20) = 120$ cups

Exercise

1. The picture graphs represents the number of trees in the forest

Forest	Number of tress
Forest A	
Forest B	
Forest C	
Forest D	
Forest E	

Scale  = 200 trees

- (a) Which forest has the least number of trees
- (b) Which forest has he greatest number of trees
- (c) Find the difference of the number of tree at forest D and forest B

Period: 67

Topic: Data handling

Sub topic: pictograph





















Language competence: The learner reads, spells, pronounces, and writes new words like pictograph, interpreting

Content:

Interpreting pictographs

Examples

The pictograph below represents the number of books different schools got from the ministry of education

School	Number of books
Ntolomwe pls	 
Buwungu pls	   
Kayenje pls	  
Gombe umea	    
Mitala maria pls	     

Scale  equal 20 books

How many books did each school get?

Ntolomwe pls got $(2 \times 20) = 40$ books

Buwungu pls got $(4 \times 20) = 80$ books


















Kayenje pls got $(3 \times 20) = 60$ books

Gombe umea got $(5 \times 20) = 100$ books

Mitala maria pls got $(6 \times 20) = 120$ books

Exercise

The picture graph below represent the number of balls given to different school

Schools	Number of balls
Ireda pls	  
Adyel pls	    
Lira pls	 
Ambalala pls	      



Scale  = 3 balls

- (a) Which school got the least number of balls?
- (b) how many balls did Adyel primary school ge?
- (c) Which school got the biggest number of ball?
- (d) How many balls were given out altogthere?
- (e) How many more balls did Ambalal pls than ireda pls

Lesson: 68

Period: 68

Topic: Data handling

Sub topic: pictograph

Language competence: The learner reads, spells, pronounces, and writes new words like pictograph, drawing

Content:

Drawing picture graphs

Examples

Draw a picture graphs to represent the following information


Henery has 30 books, Mary has 45 books, Irene has 20 books and sam has 35 books . Eash book represents 5 books

Henery         

Mary      

Irene    

Sam       

Scale  = 5 books

Henery's books on the graph = $\frac{45}{5} = 9$ books

Mary's books on the pgrap = $\frac{30}{5} = 6$ books

Irene's books on the graph = $\frac{20}{5} = 4$ books

Sam's books on the graph $\frac{35}{5} = 7$ books

Exercise

Workout the following numbers

1. Show the number of chicken each of the following have on a picture graph

Scale 

= 500 chicken

A mos has 4000 chicken , john has 3500 children.

Deo has 6000 chicken and phiona has 2500

Lesson: 69

Period: 69

Topic: Data handling

Sub topic: pictograph


























Language competence: The learner reads, spells, pronounces, and writes new words like picture, graph, drawings

Content:

Drawing picture graphs

Examples

Brain has 35 cups , Mary has 15 cups , Junior has 40 cups, john has 25 cups and Ali has has 10 cups

Brain	      
Mary	  
Junior	       
John	    
Ali	 

Brians cups on the graph = $\frac{35}{5} = 7 \text{ cups}$

Mary's cups on the graph = $\frac{15}{3} = 3 \text{ cups}$

Junior's cups on the graph = $\frac{40}{5} = 8 \text{ cups}$

John's cups on the graph = $\frac{25}{5} = 5 \text{ pencils}$

Ali's cups on the graph = $\frac{10}{2} = 2 \text{ cups}$

Exercise

- draw a pictograph to show the number of pupils for Nakuvubo pls – 1800 pupils, Gulu public school, - 1200 pupils, Lira central school – 2000 pupils , mbarara pls – 1000 pupils



Scale =  200 pupils

LESSON :70

TOPIC: DATA HANDLING

SUB TOPIC:BAR GRAPHS

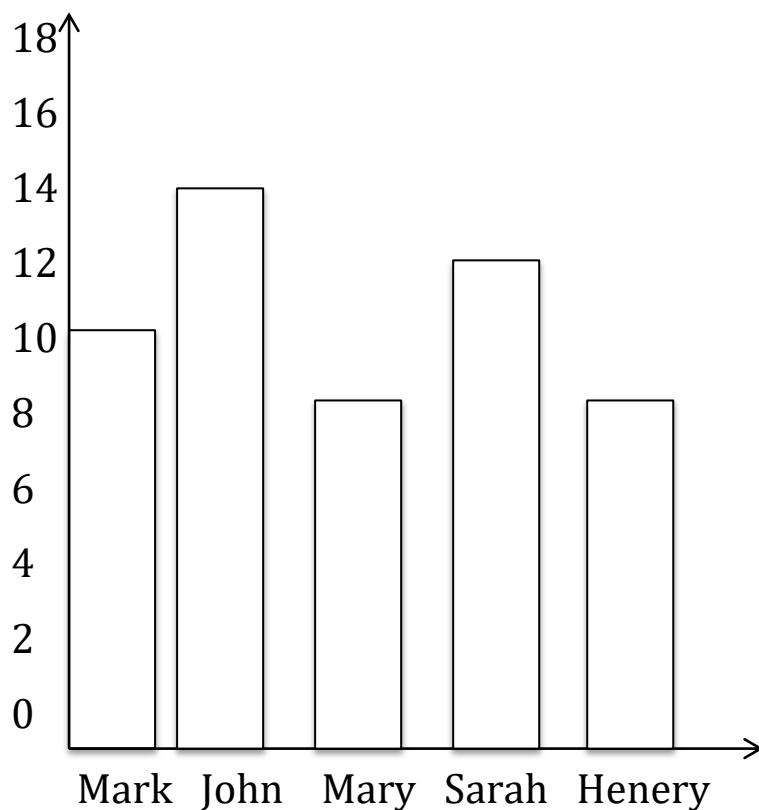
LANGUAGE COMPETENCE: the learner reads ,spells ,writes ,and pronounces new words like barographs, interpreting e t c

Content

interpreting bar graphs

Examples

The bar graph shows books each of the following pupils has



(a) How many books does John have?

John has 14 books

(b) Which two pupils have the same number of books?

Mary and Henry have the same numbers of books

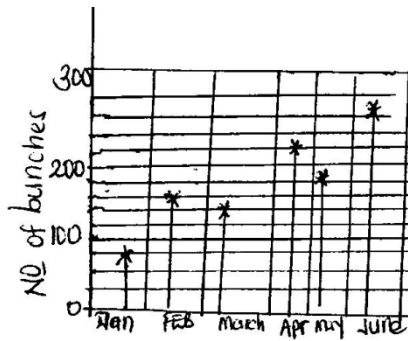
(c) Find the total number of books that mark and Sarah have

mark -10 books Sarah ,12 books $10+12=22$ books

Exercise

Interpret the bar graph below

1. The graph shows the number of bunches of bananas sold in the first 6 months of the year at gum's farm.



- In which month was the least number of bunches sold?
- How many bunches were sold in the first 3 months of the year ?
- How many more bunches were sold in April than in February?
- How many bunches were sold in march, april, and may.

LESSON 71

TOPIC DATA HANDLING

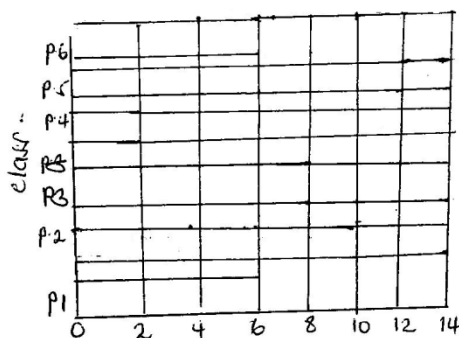
SUB TOPIC BAR GRAPHS

LAGUANGE COMPETENCE ;the learner reads ,spells, pronounces and writes new words like bar ,graph and interpreting

Content

Examples

The graph below shows the new leaner who joined Mt St .Mary's primary school last year



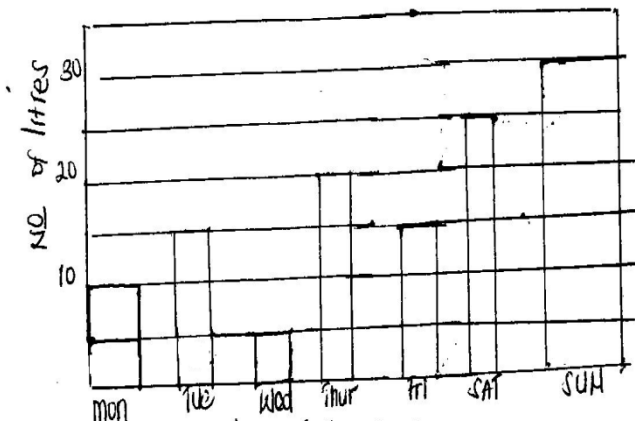
i) Which class had the highest no. of new learners?

P5 has highest no. of new learners

ii) Which class got 8 new learners?

P3 has got 8 new learners

Exercise



a) On which two days did the car use the same amount of fuel

b) On which day was the least amount of fuel used?

c) How many litres did the car use on Saturday?

LESSON 72

TOPIC ;DATA HANDLING

SUB TOPIC :BAR GRAPHS

LANGUAGE competence ; the learner reads ,spells writes and pronounces new words like drawing ,bar graphs e.t.c

Content

Drawing bar graphs

Example

The table shows the number of pupils who were present for a week, the class has 20 pupils. Draw a bar graph for the information

Days	Monday	Tuesday	Wednesday	Thursday
No of Pupils	18	14	20	15

Exercise

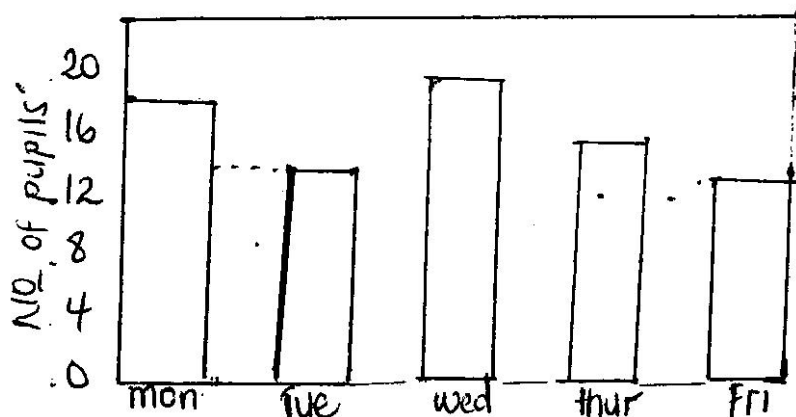
Read and draw bar graph

1 In a school, the no. of pupils in each class are as follows

Class	P1	P2	P3	P4	P5	P6	P7
No. of pupils	50	60	70	40	55	35	25

Use the information in the table to draw a bar graph

(Use scale 1 small square =10 pupils)



LESSON 73

TOPIC DATA: HANDLING

SUB TOPIC: BAR GRAPHS

LANGUAGE COMPETENCE: The learner reads, writes spells and pronounces new words like drawing, bar graph e t c

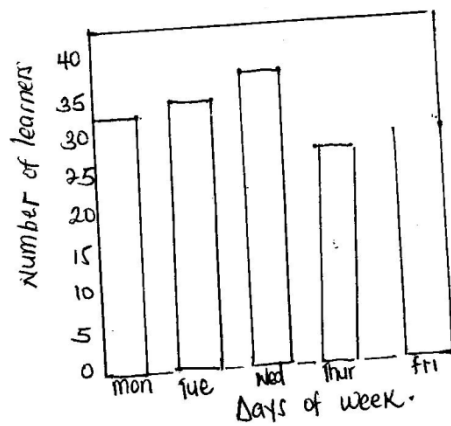
Content:

Drawing bar graphs

Examples

The table below shows the number of learners who were present for a week. The class has 40 pupils .Draw a bar graph for the information

Days of the week	Mon	Tue	Wed	Thur	Fri
No. of learners	32	35	39	26	30



Exercise

- 1 Draw a bar graph to shows the no. of chickens the following children have, Dorah 25 chickens peter 10 chickens
(Use a scale /small square =5chickens)
Find the total no. of chickens the chickens have

LESSON 74

TOPIC; DATA HANDLING

SUB TOPIC; LINE GRAPHS

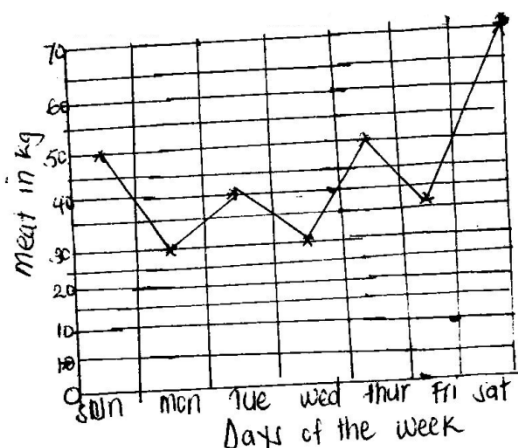
LANGUAGE COMPETENCE: The learner reads ,spells, writes, and pronounces new words like lines ,graphs ,interpreting e t c

Content

Interpreting line graphs

Example

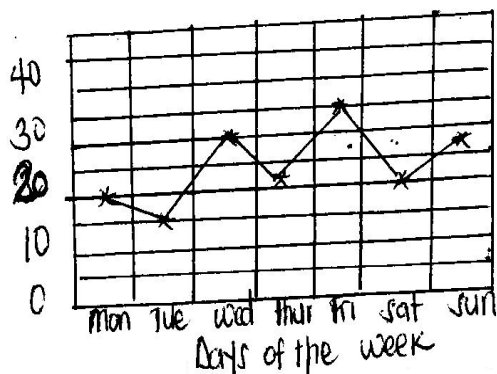
The graph below shows meat sale at Ankunda's butchery use it to answer the question



1. How many kilogrammes of meat did Ankunda sell on Tuesday?
he sold 40 kg on Tuesday
2. on which day did Ankunda sell the least amount of meat
Wednesday and Monday
3. find the amount of meat that Ankunda sold that week
 $45+30+40+30+50+35+70\text{kg}=300\text{kg}$

Exercise

The graph shows the temperature of a place recorded for a week



- a) What was the highest temperature of the week?
- b) What was the lowest temperature of the week?
- c) Which two days had the same temperature records?
- d) By how degrees was Wednesday hotter than Sunday?

LESSON 75

TOPIC : DATA HANDLING

SUB TOPIC; LINE GRAPHS

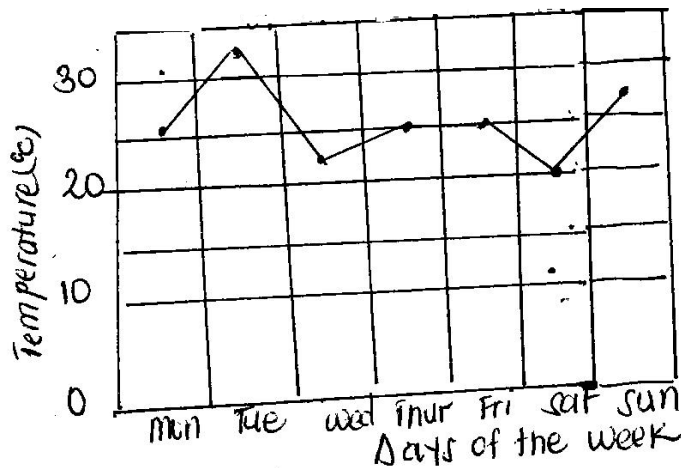
LANGUAGE COMPETENCE: the learner reads, spells, pronounces and writes new words like line, graphs, interpreting etc

CONTENT

Interpreting line graphs

Examples

The graph below shows the temperature recorded over a period of a week at Bulu Primary School.



- i) Write the temperature for each of the days of the week?

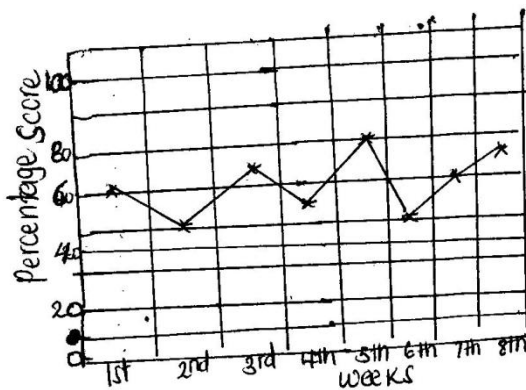
Monday had 25°C Wednesday had 23°C Friday had 25°C

Tuesday had 34°C Thursday had 25°C

Sunday had 28°C

Exercise

1. The graph below shows the marks Mulimira score in the weekly mathematics test. Study it and answer the questions that follow



- a) What was Mulimira's highest score?
- b) What did mulimira score in the third week?
- b) What was mulimira's lowest score?

LESSON : 76

TOPIC: DATA HANDLING

SUB TOPIC: LINE GRAPHS

LANGUAGE COMPETENCE; The learner reads, spells, pronounces new words like ,graph ,drawing

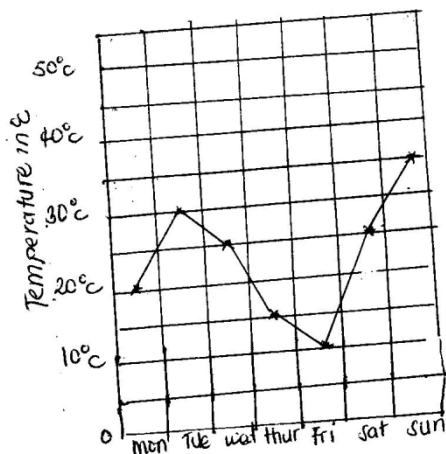
Content: Drawing line graphs

Examples 1

The table show the temperature recorded on different

Days of a certain week use the information in the table to draw a line graph

Days	MON	TUE	WED	THUR	FRI	SAT	SUN
Temp. in °C	20°C	30°C	25°C	15°C	10°C	25°C	35°C



Exercise

1. Draw line graphs

The table shows points which. Arula score in a tennis competition .use the information in the table to draw a line

Rounds	1 st	2 nd	3 rd	4 th	5 th	6 th
Points score	6	4	8	5	7	10

LESSON 77

TOPIC ; DATA HANDLING

SUB -TOPIC LINE GRAPHS

LANGUAGE COMPETENCE ;the learner reads ,spells, pronounces and writes new words like lines ,graph drawing

Content

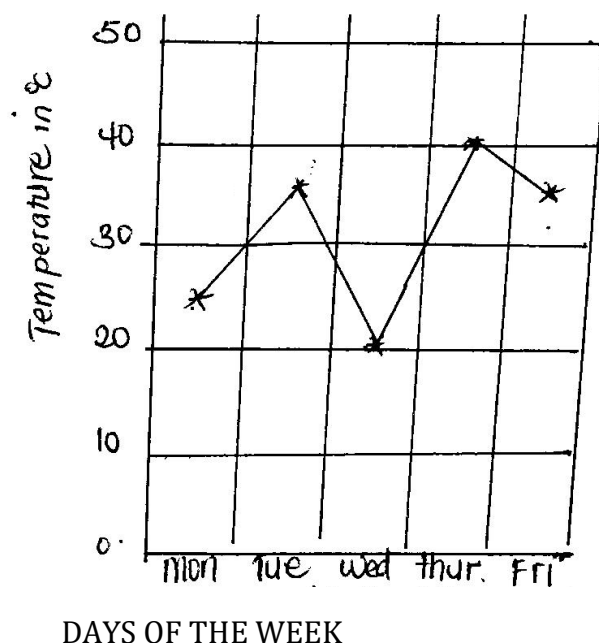
Drawing line graphs

Example

The table below shows the temperature at school for a week as follows.

Monday 25°C Tuesday 35°C Wednesday 20°C Thursday 40°C and Friday 25°C

Days of the week	mon	tue	wed	Thur	fri
Temp. in °C	25	35	20	40	25



EXERCISE

1. The table below shows number of blood who donated to the blood bank in the first half of the year

Months	Jan	Feb	Mar	Apr	May	June
No. of donors	50	40	60	35	40	55

Draw a line graph to represent the data above

LESSON 78

TOPIC ; DATA HANDLING

SUB TOPIC DATA HANDLING

LANGUAGE COMPETENCE: the learner reads, spells, pronounces and writes new words related to the test.

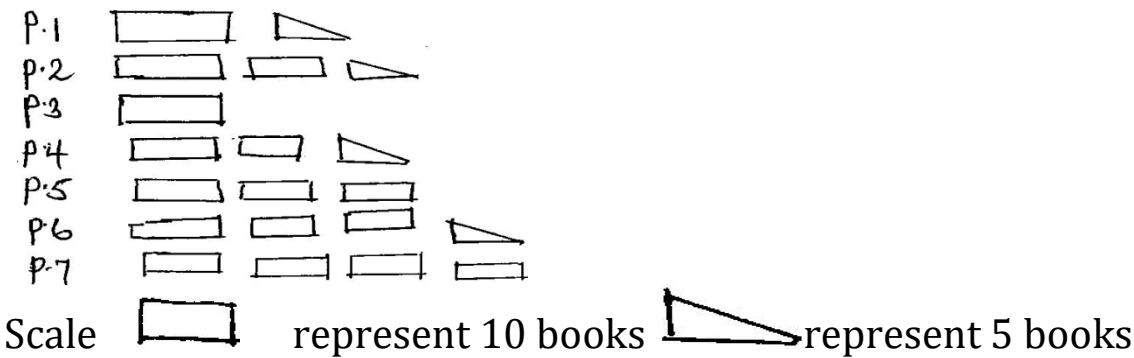
Content

Test

- 1. If 0 represent 1,000 people, how many people will 0000 represent?
- 2. the table shows malaria patients who reported at the hospital in the first 6 months of the year. Use it answer the questions that follow

Month of the year	Jan	Feb	Mar	Apr	May	June
No. of patients	50	30	25	30	40	65

- a) Draw a bar graph to represent the information above
 - b) How many patients reported in January?
 - c) Which two months recorded the same number of malaria?
 - d) If each patients was paying shs 2000. How much money was collected in June?
3. The picto graph below shows the number of books distributed to 7 classes



- a) Which classes received the same numbers of books?
- b) How many books did p5 get?
- c) How many books did p1 get?
- d) How many more books did p7 get than p6?

END