Mathematics
Grade 5

Introduction

Research and experience have consistently shown that the teaching of basic facts, laws and theories alone, no matter how successful, does not meet the pedagogical and societal demands for mathematics education in a sustainable manner, nor do classrooms structured around a behavioral learning theory in which teaching was telling and learning was memorizing. The view of learning mathematics changed from "numbers and computations" to "math as problem solving" leading to the major shifts in math education from:

- mastery of isolated facts and skills to understanding of mathematical concepts to apply to new problem situations.
- applying computation skills and memorizing math facts to get the right answer to problem solving; understanding the conceptual nature of the problem, knowing when to employ skills and facts as tools to solve the problem.
- views of the learner as passive; vessel receiving knowledge from external sources to active; connecting prior knowledge to new formal knowledge.

The mathematics study in grade 5, should be built upon the knowledge what students have already acquired and the skills they have developed in the first cycle of their primary education. Students should be encouraged and assisted to understand concepts and communicate with each other. The teacher and textbook writer should facilitate opportunities for students to apply the mathematical concepts they study to real life situations through various activities, exercises and group works. The teacher should always look for activities which motivate students' work. New subject matter should be linked with deepening of the already existing knowledge, abilities and skills. Attention has to be paid to the assessment of students' performances in order to recognize arising problems and weaknesses in time. Appropriate measures, (revision work, individual help, more investigation, etc) have to be taken to assist all students achieve set objectives.

The Learning Objectives for Grade 5

In connection with the fulfillment of the general objectives of learning mathematics, and in particular in relation to the objectives set for the second cycle of the primary education, the mathematics learning at grade 5 level has to be directed towards to:-

- Developing appropriate abilities and skills in using and operating on numbers based on the knowledge and skills already acquired at grade 4 level
- Strengthening and improving their knowledge of fundamental geometrical concepts and their abilities and skills in drawing and constructing.
- Enabling and encouraging students to apply the knowledge gained and skills developed at school to solve problems encountered in their day to day life activities.
- Assisting students to develop their interest to study mathematics and commitment to pursue with further study of the subject.

These objectives could be attained by involving students in various well planned and organized individual and group activities, project works and selected and appropriate exercises on working with variables, solving equations and inequalities, word problems, estimation and measurement of areas and volumes, gathering and representation of simple data by graph and interpretation of simple bar graphs, etc.

At the end of grade 5, the following subject typical knowledge and capability has to be achieved.

- Read, write, compare and order whole numbers greater than 1,000,000.
- Solve real life problems using whole numbers up to 1,000,000
- Compare, order and use simple fractions
- Express a percentage as a fraction and convert a percentage to fractions and decimals and vice-versa.
- Add and subtract with using whole numbers and decimals up to 3 decimal places.
- Find LCM and HCF of given whole numbers.
- Express product of equal factors as powers and compute using powers.
- Multiply decimals up to 3 decimal places by 10,000 and 1,000.
- Divide 6 digit whole numbers by 3 digit whole numbers.
- Divide decimals up to 3 decimal places by 10,000 and 1,000.
- Use letters to represent numbers.
- Express simple statements as mathematical expressions.
- Solve simple linear equations and inequalities in one unknown
- Calculate the perimeters and areas of squares and rectangles.
- Estimate the volumes of cubes and rectangular prisms.
- Measure angles using protractor.
- Classify triangles and determine lines of symmetry of triangles, rectangles and squares.
- Bisect a line segment and a given angle using ruler and compass.
- Draw bar graphs, interpret simple bar graphs and calculate the average of given data.

Unit 1: **Whole numbers and the four operations** *(48 periods)*

*Unit Outcomes***:** Students will be able to:

- understand and have deep knowledge about whole numbers
- perform the four fundamental operations on whole numbers.
- apply their knowledge of whole numbers to solve problems in their environment.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students will be able to: • read whole numbers upto 1,000,000 • write whole numbers upto 1,000,000 • compare whole numbers upto 1, 000,000 • order whole numbers upto 1,000,000	*1.* **Whole numbers and the four operations** **1.1 Whole Numbers Greater than 1,000,000** *(20 periods)* **1.1.1 Revision of whole numbers upto 1,000,000**	• Let the students revise work on whole numbers upto 1,000,000 by reading a given number, by giving example from daily life which are expresses by these numbers, telling the place value, matching a number with its word expression, writing, comparing and ordering whole numbers.	• Ask students to read, write, compare and order whole numbers upto 1,000,000.
• read whole numbers greater than 1,000,000 • write the whole numbers greater than 1,000,000 • compare whole numbers greater than 1,000,000 • order whole numbers greater than 1,000,000 either in increasing or decreasing order • determine the "successor" and the "predecessor" (except zero) of a given whole number	**1.1.2 Whole Numbers greater than 1,000,000**	• You can start the lesson by asking your students question like: • What is the population of Ethiopia? • What is the population of your region? • What is the distance between the earth and the sun? • After introducing the number 1,000,000 by adding 1 to 999,999 encourage your students to generate numbers greater than 1,000,000 and let them read write, compare and order these numbers. • Assist the students to generalize that any whole number **n** different from **0** has a predecessor **"n - 1"** and a successor **"n + 1"** • Guide the students to conclude the following points. - There is no largest whole number - Zero is the smallest whole number.	• Ask students to read, write, compare and order whole numbers greater than 1,000,000 • Ask students to determine the predecessor and successor of a given whole number.

Competencies	*Content*	*Teaching / Learning Activities & Resources*	*Assessment*
• determine the place value of each digit in a given whole number • write a given whole number as sum of integral multiples of 10 • determine the order of given whole numbers by using either place value or number ray	**1.1.3 Place value and ordering of whole numbers**	• Let some students carry number cards and stand in a row, So that the other students read the numbers formed and repeat this by swaping the students with the cards among themselves. • You may discuss the place value of each digit in a given numbers by using place value table • Assist students to write the expansion of a given whole number by using examples like: $5286 = 5000 + 200 + 80 + 6$ $\quad = (5 \times 1000) + (2 \times 100) + (8 \times 10) + 6$ • Encourage your students to represent whole numbers on a number ray and use this number ray to compare as well as order whole numbers.	• Give exercises on place value, ordering and expansion of whole numbers.
• identify even and odd whole numbers	**1.1.4 Even and Odd numbers**	• You can let the students differentiate even and odd numbers by using examples from their experience like: - dividing a given amount of money among themselves - grouping themselves according to their roll number where 1 group is formed by students having even roll numbers and the other by students having odd roll numbers • Encourage students to list the first few even numbers and odd numbers and let them see the pattern of these numbers. • Guide students to conclude that: 1. even + even = even 2. odd + odd = even 3. odd + even = odd = even + odd	• Ask students to list even and odd numbers.
	1.2 Operation on whole numbers *(28 periods)*		
• solve problems of addition • solve problems of subtraction • identify the basic properties of addition on whole numbers	**1.2.1 Addition and subtraction of whole Numbers.**	• You can let students to work out problem involving addition and subtraction and check the result of addition by subtraction vise-versa • You can revise the commutative and associative property of addition. • Properties of 0 on whole numbers, that is $0 + x = x + 0$ for all whole number x Motivate students to solve word problems related to students	• You can give students exercises problems on addition and subtraction • Let them identify the properties of addition.

Competencies	*Content*	*Teaching / Learning Activities & Resources*	*Assessment*

• solve problems on multiplication of whole numbers.
• identify the distributive property of multiplication over addition.
	1.2.2 Multiplication of whole Numbers	real life like
		eg. A printing house printed 453, 2000 books on Monday, 686902 on Tuesday and 282462 books on Wednesday. How many books are printed in the three days?
		
		• You can let students to work out problems involving multiplication upto 3 digit number from real life.
		• You can revise the commutative and associative property of multiplication.
		• Allow students to discuss the distributive property of multiplication over addition
		• To consolidate you can give examples like:
		  a) $4 \times 7 \times 5 = (4 \times 5) \times 7$
		    $= 20 \times 7$
		    $= 140$
		  b) $23 \times 4 \times 25 = 23 \times (4 \times 25)$
		    $= 23 \times 100$
		    $= 2300$
		  c) $43 \times 7 = (40 + 3) \times 7 = (40 \times 7) + (3 \times 7)$
		    $= 280 + 21$
		    $= 301$
		  d) $16 \times 9 + 4 \times 9 = (16 + 4) \times 9$
		    $= 20 \times 9$
		    $= 180$
		• Assist the students to come to the multiplication properties of 1 and 0 by any whole number.
		• Encourage you students to work with approximate values for determining rough estimation for in multiplying large numbers and comparing it with the real result. You may take examples like:
		    $6127 \times 294 \approx 6000 \times 300 = 1,800,000$
		    $6127 \times 294 = 1,801,338 \approx 1,800,000$
			• Ask students to use properties of multiplication to solve multiplication problems.

• divide whole numbers whose quotient as expressed in decimals (2 decimal places)	**1.2.3 Division of whole numbers.**	• Assist students to exercise division of large whole numbers by two, three or four digits number. • Assist students to divide whole numbers and express the quotients in decimal terminating after 2 decimal places. • Let students discover that division is not commutative as well as associative.	• Give exercises on dividing of large whole numbers by two, three or four digit number.

Competencies	Content	Teaching / Learning Activities & Resources	Assessment
• solve problems containing several operations and brackets	**1.2.4 Problems containing several operations**	• Let students practice solving problems containing several operations	• Ask students to determine rules of succession in calculation and give exercises to check their work.
• find multiples of whole numbers • find divisors of whole numbers	**1.2.5 Multiples and divisors of whole numbers**	• Encourage students to practice finding multiples and divisors of a given whole number.	• Ask students to write multiples and divisors of a given whole number.
• express product of equal factors as powers. • compute using powers.	**1.2.6 Powers of whole numbers**	• Using examples, let the students understand the concept of powers. • Assist the students to practice representing product of equal factors as powers. • encourage students to identify the concepts "power", "base" and "exponent" and let them discover the rules for the product and quotient of powers having the same base. You may use examples like: $2^2 \times 2^3 = 2 \times 2 \times 2 \times 2 \times 2 = 2^5 = 2^{2+3}$ $\dfrac{3^4}{3^2} = \dfrac{3 \times 3 \times 3 \times 3}{3 \times 3} = \dfrac{3}{3} \times \dfrac{3}{3} \times 3 \times 3 = 1 \times 1 \times 3 \times 3$ $= 3 \times 3$ $= 3^2 = 3^{4-2}$ Note:- exponents should be positive integers so, avoid examples like $\dfrac{3^3}{3^5} = 3^{3-5}$	• Ask students to represent products of equal factors as powers and identify power, base & exponent. • Give exercises on the application of rules for the product and quotient of powers having the same base.

Unit 2: **Working with variables** *(24 periods)*

Unit Outcomes: Students will be able to:

- realize the use of variables in mathematics
- understand mathematical terms, expressions and simplification of expressions
- identify equations and inequalities and determine their value by substitution.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*

Students should be able to:
 	
• change simple mathematical statements into mathematical expressions
• identify terms and expressions.
• simplify given expressions by collecting like terms.
	2. .Working With Variables
	
	2.1 Algebric terms and expressions*(17 periods)*
	
	2.1.1 Algebric terms and values of terms
		• Assist students to realize the use of variables
		  e.g - I am third of a numbers = $\frac{1}{3}$ x
		
		   - Twice of two a number = 2 x
		   - The sums of two numbers = a + b
		• Encourage students to explain the meaning of terms and expressions and that the use of letters for numbers is a short hand method for writing mathematics through everyday examples.
		  e.g. If a pen cost x birr and a pencil cost, y birr, how much will 10 pen, and 12 pencil, cost?
			• Give exercises to identify algebric expressions based on their number of terms.
			• Ask students to change simple mathematical statements into mathematical expressions through everyday examples.

• compute the values of terms and expressions by substituting whole numbers in the given variables
• identify algebric expressions based on their number of terms.
	2.1.2 The value of simple algebric expression	• Assist students to collect like terms
		  e.g. 2a + 4b + 5a - b
		   = (2a + 5a) + (4b − b)
		   = 7a + 3b
		• Allow students, to practice writing expressions and then substituting numbers for letters using everyday examples.
		• Let students identify monomial and binomial expressions.
			• Give exercises to compute values of terms and expressions by substitution.

• differentiate equations and inequalities • determine the possible solution of the given equations from the given numbers. • determine the possible solution of the given inequalities from the given numbers.	**2.2 Equations and inequalities** *(7 periods)* • Equations and inequalities solved by substitution	• Discuss with students the meaning of equation and inequality by using everyday examples. • Assist students practice making simple equations and inequalities related to important issues (like HIV, buying and selling) e.g If I think of a number and add 6 to it my answer is 15 what was the number I thought of • Facilitate students, work in pairs and ask each other simple problems like	• Ask students to give examples of equations and inequalities from everyday example. • Give exercises on equations and inequalities including/important issues like: shopping, saving, etc.

Competencies	Content	Teaching / Learning activities and Resources	Assessment
• write the given simple word problem as an equations or an inequalitie accordingly.		e.g. If the cost of 3 kg of sugar is 24 birr what is the cost of 1 kg of sugar?	

Unit 3: Fractions, decimals and the four operations *(42 periods)*

Unit Outcomes: Students will be able to:

- know types of fractions.
- understand concept of percentage and principles of conversion of percentage to fraction & decimal.
- know method of comparing fractions.
- perform the four basic fundamental operations on fractions & decimals.

Competencies	Content	Teaching / Learning activities and Resources	Assessment
Students should be able to: • identify proper and improper fraction and mixed numbers. • change improper fraction to mixed numbers and vice versa.	**3. Fractions, decimals and the four operations** **3.1 Types of Fractions** *(4 periods)*	• Remind your students what they had learnt about fractions. • By using simple objects (like 2 and ½ bananas or even their test results say 7½out of 10) • Let students come to the meaning of proper, improper fractions and mixed numbers. • You can use examples like "If a teacher gives ½ of an orange to a student as a reward and has 3½ oranges, how many students can get the reward? This means how many ½ are there in 3½?" • Assist the students to change improper fractions to mixed numbers and vice versa • Lead the students to generality that $a\frac{b}{c} = \frac{(c\times a)+b}{c}$ for all a, b, c, in N and b < c.	• Ask students to change mixed numbers to improper fractions and vice versa and check their work.
• express percentage as a fraction. • convert percentage to decimal	**3.2 Percentage as fractions** *(5 periods)*	• You may use a rectangular region that is divided into 100 equal parts and consider different shaded regions with different colours. • Introduce the concept of percentage as part of a whole that is divided into 100 parts. • Assist students to express percentage as fraction and decimal you can use examples like: $$85\% = \frac{85}{100} = 0.85$$	• Give exercises on converting percentage to fraction & decimal.

Competencies	Content	Teaching / Learning activities and Resources	Assessment
• compare fractions	**3.3 Comparison and ordering of fractions** *(8 periods)*	• Start the lesson by revising comparision of fractions having the same denominators. • Assist students to compare simple fractions with different denominators using equivalent fraction, use examples like: compare. $\frac{3}{2}$ and $\frac{4}{7}$, solution $\quad \frac{3}{2} = \frac{3 \times 7}{2 \times 7} = \frac{21}{14}$ $\frac{4}{7} = \frac{4 \times 2}{7 \times 2} = \frac{8}{14}$ Since 21 > 8, $\quad \frac{21}{14} > \frac{8}{14}$ That means $\frac{3}{2} > \frac{4}{2}$ • Help students to order two or more given fractions either in an increasing or a decreasing order.	• Give exercises on comparing & ordering fractions with different denominators.
• add fractions with different denominators • subtract fractions with different denominators	**3.4 Operations of fractions** *(13 periods)* **3.4.1 Addition and subtraction of fractions**	• Let the students revise addition and subtraction of fractions with the same denominators • Revise how to find an equivalent fraction, for a given fraction. • By using simple given fraction, assist students to add and subtract fractions of different denominators (during subtraction the difference should be positive). • Encourage students to arrive at and use the following principles; 1) $\frac{a}{b} + \frac{c}{d} = \frac{a \times d}{b \times d} + \frac{c \times b}{b \times d} = \frac{ad + cb}{bd}$ 2) $\frac{a}{b} - \frac{c}{d} = \frac{a \times d}{b \times d} - \frac{c \times b}{d \times b} = \frac{ad - cb}{bd}$ $(ad - cb > 0)$	• Give exercises on addition & subtraction of fractions and check whether they follow the principles or not.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
• multiply fractions • divide fractions	**3.4.2 Multiplication and division of fractions**	• Let students practice multiplication of fractions by using the principle $\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d} = \frac{ac}{bd}$ • Let the students find reciprocal of a given fraction. • Assist students to practice division of fractions by using the principle $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$	• Give exercise on multiplication and division of fractions and check whether they follow the principles or not.
• find the sum of decimals (upto 3 decimal places) • find the difference between two decimals (having upto 3 decimal places)	**3.5 Operations on decimals** *(12 periods)* **3.5.1 Addition and subtraction of decimals (up to 3 decimal places)**	• Start the lesson by revising addition of decimal up to 2 decimal places (use examples from buying and selling goods) • Assist students to add decimals with 1 decimal, 2 decimal and 3 decimal places to 3 decimal places with and with out carrying vertical • You can use vertical addition and making sure they have the decimal points correctly placed below each other. Use examples like $$2.313$$ $$+ 8.1$$ • Assist students to subtract decimals upto 3 decimal places with and without borrowing so that the result is not negative. • Making sure they have the decimals points correctly placed.	• Give exercises on addition & subtractions of decimals.
• find the product of two decimals	**3.5.2 Multiplication of decimals**	• You may start the lesson by discussing multiplication of decimals by 1 digit whole number • Assist students to multiply decimals upto 3 decimal places by powers of 10 such as by 10, 100 and 1000 • Encourage students to multiply two decimals between 0 and 1 (you may use examples like $(0.3 \times 0.2$, $0.12 \times 0.23)$ • Assist the students to multiply two decimals that are greater than 1 (you may use examples like 1.3×2.5; 3.12×2.6, ...) • In all cases discuss how the decimal point of the product	• Give problems on multiplication of decimals.

Competencies	Content	Teaching / Learning activities and Resources	Assessment
• determine quotient of simple decimals	**3.5.3 Division of decimals**	changes. • Discuss the steps of division of simple decimal by one digit natural number or the division of one digit natural number by simple decimal (you may use e.g. like (4 ÷0.5) or (0.6 ÷ 3) $4 \div 0.5 = \frac{4}{0.5} \times \frac{10}{10} = \frac{40}{5} = 8$ • Assist students to divide decimals (having upto 3 decimal places) by powers of 10 (you may use examples like: 0.3 ÷ 10, 12.8 ÷ 100) • Help students to practice division of decimals and let them conclude how the decimal points shifts in the quotient.	• Give exercises on division of decimals and check either they follow the steps or not.

Unit 4: Data handling *(14 periods)*

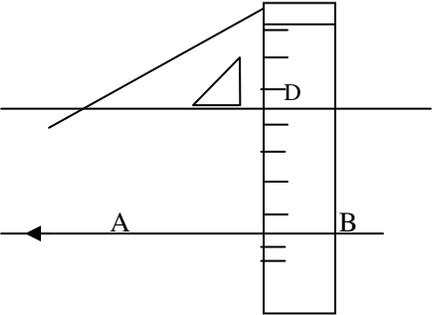*Unit Outcomes***:** Students will be able to:

- understand simple graphical representation of data
- know and calculate average of a given data.

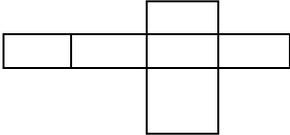| *Competencies*	*Content*	*Teaching & Learning activities and Resources*	*Assessment*

Students should be able to:
• construct bar graphs from a given data.
• interpret the constructed bar graphs
 	
• explain what is meant by the average of a set of numbers
• calculate the average of a given data
	4. Data handling
	4.1 Further on construction and interpretation of bar graphs *(9 periods)*
	
	4.2 The average of numbers *(5 periods)*
		• Encourage students to construct bar graphs by collecting simple data from their lives. you can take examples like:
		  e.g The number of people living in each pupil's home.
		  eg. One taken from school statistics
		• Assist students to interpret bar graphs
		
		• Let students find the average of any given data
			• Give assignment in group to construct bar graphs by collecting data from their environment.
			  eg. Clubs found in the school and their members.
			• Give exercises to calculate the average of numbers/data.

Unit 5: Geometric figures and measurement *(42 periods)*

Unit Outcomes: Students will be able to:

- know important properties of axial symmetry and are able to use this knowledge for carrying out constructions.
- bisect line segments and angles.
- know the unit "degree" and are able to measure the size of a given angle.
- understand and apply the formulas used to compute the areas of rectangles and squares.

Competencies	Content	Teaching / Learning activities and Resources	Assessment
Students should be able to: - draw intersecting lines - draw parallel lines - bisect a line segment - construct a perpendicular line to a given line through a point on the line - construct a perpendicular line to a given line through a point not on the given line.	**5. Geometric figures and measurement** **5.1 Lines** *(8 periods)* **5.1.1 Construction of intersecting and parallel lines** **5.1.2 Bisecting a given line segment** **5.1.3 Construction of perpendicular line to a given line**	- Demonstrate how to draw parallel line to a given line AB through another point D not on the given line as follows: Step 1. Slide the set square along AB until the short side passes through D Step 2. Draw along the short side of the set square. Then slide the set square up the line you have just drawn using your ruler, until it reaches D. Now draw along the long side of the set square. 	Make sure that each student can - Draw the intersection of lines - Draw a line parallel to a given line using a ruler and a set square, bisect a line segment using a ruler and pair of compasses. - Draw a line perpendicular to a given line passing through a point on the line, not on the line. Using a ruler and a pair of compasses
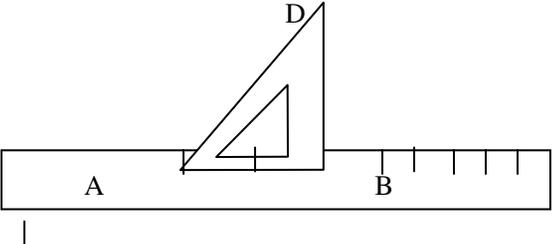
Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
		• Encourage students practice drawing - intersecting lines using ruler - parallel lines using ruler and set square - the bisector of a line segment using ruler and compass. • Lead students to conclude that there are infinitely many bisectors through exercises • Let students practice drawing the perpendicular to a line from a point on the line using ruler and compass. - The perpendicular to a line from a point outside the line using ruler and compass.	

• give definition of an angle
 • identify the vertex and arms of an angle.
 • draw given angles using a protractor.
 • measure given angles using protractor.
 • classify angles according to their magnitude
 	
 • bisect a given angle
	5.2 Angles and the measurement of angles
	 (8 periods)
	
	 5.2.1 Angles
	
	 5.2.2 Measurement and classification
	
	 5.2.3 Bisecting an angle
		• Explain what is meant by an angle, its vertex and arms and how to measure an angle using protractor.
		 • Assist students how to name an angle and denote its degree measure. You may take example like
		
		 A Names of the angle
		 0
		       $\wedge$ $\wedge$
		   $<AOB$, AOB, O
		 B $\wedge$ $\wedge$
		 m ($<AOB$), m(AOB), m(O)
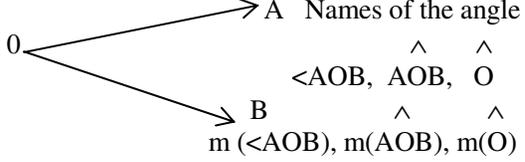		
		 • Encourage students to practice drawing angles, measuring angles and identifying vertices and arms of the angle.
		 • Motivate students to bring geometric instruments to the class room for practicing
		 • Assist students discover that a right angle is 90^0 by measuring.
		 • Let students practice classifying given angles (acute, obtuse or reflex) and draw examples of each.
		 • Assist students to bisect a given angle using ruler and compass.
			Check that students are able to:
			 • Define angle
			 • Identify vertex and arms of an angle.
			 • Draw and measure angle
			 • Classify angles. Using appropriate methodology including letting students perform activities on the blackboard.
			 • Give exercises on bisecting angle.

• classify triangles according to the magnitude of their angles and sides	**5.3 Classification of triangles** *(5 periods)*	• Assist students to classify triangles according to: - angles as: acute, obtuse and right - sides as: equilateral, isosceles and scalene. • Let students draw triangles according to their sides and angles.	Use appropriate technique to ensure that the students are able to classify Δ^s according to their angles and sides; like asking them to produce triangles of all kinds from

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
• determine lines of symmetry of given plane figures. • explain properties of symmetry.	**5.4 Lines of symmetry** *(8 periods)*	• Introduce the concept "line of symmetry" by folding an isosceles triangle across its line of symmetry and letting students find out the line of symmetry of equilateral triangles and squares like wise. • Let students in pairs draw symmetrical figures showing the line of symmetry, find out the properties. • Assist students to construct simple symmetrical figures and line of symmetry to the given figures.	available materials. • Ask students to make paper cutouts of symmetrical figures and show the line(s) of symmetry and demonstrate this to the class. • Ask students to explain the properties of symmetrical figures.
• calculate the perimeter of squares and rectangles • calculate the area of squares and rectangles • find the volumes of cubes and rectangular prisms by counting centimeter cubes.	**5.5 Measurement** *(13 periods)* **5.5.1 The perimeters and areas of squares and rectangles**	• Let students revise perimeter of squares and rectangles by drawing and measuring, • Let students revise areas of squares and rectangles by using square centimeters. • Lead students to reach to the fact that inorder to find the area of rectangles we multiply length by width $A = l \times w$. • To find perimeter we multiply the sum of the length and width by $p = 2 (l \times w)$	• Ask students to find areas of squares and rectangles by dividing them into unit squares and verify the result by multiplication.
• make nets of cubes and rectangular prisms	**5.5.2 Nets of cubes and rectangular prisms**	• Using different nets students make and decorate squares and rectangles e.g	• Let students make nets from different cubes and rectangular prisms. • Ask students to explain the difference between the unit of area and volume.
• find the volumes of cubes and rectangular prisms by counting centimeter cubes	**5.5.3 The volumes of cubes and rectangular prisms**	• Let students practice estimating volumes of cubes and rectangular prisms. • Let students exercise finding volumes of cubes and rectangular prisms by filling them with unit cubes.	• Give different exercise problems on determination of volumes by filling and counting.