Mathematics
Grade 6

Introduction

In grade 6 students should be assisted and encouraged to be in a position to use mathematics as a tool for better recognition and understanding of their surroundings. Children who regard maths as a useful tool will develop a positive attitude towards it. By planning activities, students can be encouraged to use mathematics creatively and systematically. As students share experiences, they will use mathematics as a form of communication to describe, predict and interpret. Their concentration and persistence will be rewarded by the satisfaction of achievement.

Young children need to develop positive attitude to maths to ensure that they approach the subject keenly and not with a sense of anxiety that inhibits learning. Students who enjoy maths and develop a sense of achievement from it show that they are interested in it. Those who see the relevance and purpose of maths in everyday activities are motivated to learn more.

Creating situations where maths is necessary and easily applicable is essential. Be aware of the mathematical potential of everyday activities and base the students' learning on them. The activities that students participate in teach them not only about mathematical concepts, but also how maths relates to everyday life. Students will learn to understand the importance of number as they count, of time as they wait for the food to cook and even of fractions as they divide a given fruit into equal parts.

Students who experience maths as a meaningful and integral part of everyday life are more likely to develop positive attitude. The first, and probably most challenging task in an effective teaching/learning process is to motivate students to learn. For maths teachers, this task can be even more discouraging, since their subject is highly abstract, complex and appear discouncted from the students' reality. New pedagogic methods indicate that students are motivated when the learning activities are authentic, challenging, multidisciplinary and multi-sensorial. Authentic activities have a close relationship to the "real world", that is to the students' surroundings. They build on experiences that are meaningful to the students and challenge their view of the world and their curiosity. Being authentic, these learning activities help to break the walls between different types of learning: language, arts, mathematics or science.

The Learning Objectives for Grade 6

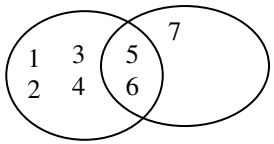
The knowledge and skills that the students developed in grade 5, with respect to number systems, operations on numbers, variables, equations and inequalities, measurements, geometry, data handling and probability will be further developed here and the following levels of mathematical knowledge, abilities and skills are expected to be achieved in grade 6.

- Express the vocabulary of sets correctly.
- Identify subsets, proper subsets, equal sets and equivalent sets.
- Determine the intersection and union of two given sets.
- Draw Venn diagrams to show union and intersection of sets and to solve simple word problems.
- Identify when a whole number is divisible by 2, 3, 4, 5, 6, 8, 9 and 10.
- Multiply a fraction by a decimal.
- Divide fractions by decimals.
- Determine the Least Common Multiple (LCM) and Highest Common Factor (HCF) of two or three natural numbers with one or two digit numerals.
- Identify prime and composite whole numbers.
- Compare and order integers using a number line.
- Add and subtract integer with and without a number line.
- Change a fraction to a decimal and a percentage.
- Convert terminating decimals to fractions and Vice Versa.
- Convert percentages to fractions and decimals.
- Compare and order fractions.
- Solve one - step linear equations and inequalities and show solutions on a number line.
- Explain and use direct proportion and inverse proportion to solve problems.
- Draw graphs to illustrate direct and inverse proportions.
- Determine the coordinates of a point and mark a point whose coordinates are given in the first quadrant.
- Calculate perimeters and areas of triangles, squares and rectangles.
- Calculate the volume of a rectangular prism.
- Convert square centimeters to square meters and Vice Versa.
- Convert cubic centimeters to cubic meters and Vice Versa.
- Solve problems related to angles formed by two parallel lines and a transversal.
- Identify adjacent and vertically opposite angles and determine complementary and supplementary angles.
- Deduce triangle properties from constructing triangles and state them.
- Identify congruent triangles by using the tests for congruency (SSS, SAS, ASA).
- Construct triangles according to given dimensions.

Unit 1: Basic concepts of sets *(19 periods)*

Unit Outcomes: Students will be able to:

- understand the concept of set.
- describe the relation between two sets
- perform two operations (intersection & union) on sets.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • explain what is meant by "set" & "element"	***1.Basic concepts of sets*** **1.1 Introduction to sets** *(3 periods)*	• Encourage students to give their own examples of set (like the set of female students in the class) • Guide students to come to an idea of empty set and its symbol by using eg. like The set of students in your class who are 100 years old. • Assist students to use the appropriate symbols and terms related to a set.	• Ask students to give examples of sets.
• describe relationship among sets such as proper subset, subset, equal and equivalent sets.	**1.2 Relations among sets** *(6 periods)*	• Let students identify and practice the notion of sub set, proper subset, equal and equivalent sets using several illustrative examples. (the number of elements may not be greater than 3). Example - let A = {a, b} , determine the proper sub set and subsets of sets A, {a}, {b}, {a, b} ϕ, are subsets of set A, {a}, {b}, ϕ are the proper sub sets of set A.	• Give problems to determine, subsets proper subsets, equal sets and equivalent sets.
• determine the intersection of two given sets. • determine the union of two given sets.	**1.3 Operations on sets** *(10 periods)* **1.3.1 The intersection of sets** **1.3.2 The union of sets**	• Let students practice to determine intersection and union of two sets. • Assist students to represent the intersection and union of two sets by using Venn diagram.	• Ask students to determine the union and intersection of two sets and represent them by Venn diagram.
• use venn diagram to represent union and intersection of two set.	**1.3.3 Venn diagram**	• Help students to solve problems of intersection and union of sets from a given diagram you may use examples like:  	

Competencies	***Content***	***Teaching / Learning activities and Resources***	***Assessment***
		Find A = _____ B = _____ A ∩ B = _____ A ∪ B = _____ and vise - versa. Assist the students to practice in solving simple word problems. You may use examples like: In a certain school the members of math club are Obang, Kebede, Aster and Chaltu and the members of English club are Ahmed, Obang, Wolango and Kebede then use Venn diagram to represent the situation.	

Unit 2: The divisibility of whole numbers *(23 periods)*

Unit Outcomes: Students will be able to:

- know the divisibility tests
- identify prime and composite numbers
- write prime factorization of a given whole number.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • identify whole numbers that are divisible by 2, 3, 4, 5, 6, 8, 9 and 10	***2. The Divisibility of whole numbers*** **2.1 The Notion of Divisibility** *(6 periods)* • Divisibility tests	• Assists students to apply the divisibility tests to check the divisibility of whole numbers: by 2, 3, 4, 5, 6, 8, 9 and 10.	• Ask students to apply the divisibility test, by giving different exercises.
• identify prime and composite numbers • write the prime factorization of a given whole numbers. • explain the concept of common divisor, greatest common divisor (GCD) of two whole numbers • identify relatively prime numbers	**2.2 Multiples and divisors** *(17 periods)* **2.2.1 Revision on multiples and divisors** **2.2.2 prime and composite numbers and prime factorization.**	• Start the lesson by revising how to find multiples and divisors of a given whole numbers • After introducing what prime and composite numbers are, encourage students to identify some prime and composite numbers. • Assist students to express a given whole number as a product of its prime factors (complete factorization) you may use the factor tree method. • Discuss the concepts of common divisors, greatest common divisor of two whole number and relatively prime numbers. • Help students to determine the common divisor and greatest common divisor (G.C.D) of two whole numbers you may use examples like: "Determine the common divisor and the (G.C.D) of 36 and 60. Divisors of 36 = {1,2,3,4,6,9,12, 18,36} Divisors of 60 = {1,2,3,4,5,6,10, 12,15,20,30, 60} common divisors of 36 and 60 = {1,2,3,4,6, 12} G.C.D of 36 and 60 = 12	• Give problem by asking to list all the divisors and some of the multiples of a given numbers. • Ask students to differentiate prime numbers from composite numbers. • Give exercise on finding the prime factorization of some natural numbers.
• determine the common and the least common multiple (LCM) of two whole numbers.	**2.2.3 Common divisors** **2.2.4 Common multiples**	• After introducing the concept of common multiple help the students to determine the least common multiple (LCM) of two or three whole numbers by considering numbers that have one or two digits.	• Give problems on finding L.C.M. and GCD of two numbers and check their work.

Competencies	***Content***	***Teaching / Learning activities and Resources***	***Assessment***
• explain the concept of common multiples of two given whole numbers. • determine the least common multiple (LCM) of two or three natural numbers with one or two digit numerals.			

Unit 3: Fractions and decimals *(41 periods)*

Unit Outcomes: Students will be able to:

- understand fractions and decimals and realize that they are two ways to represent the same numbers
- develop skill in ordering, adding, subtracting, multiplying and dividing fractions and decimals
- work with problems represented by fractions and decimals.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • reduce fractions to lowest term.	***3. Fractions and decimals*** **3.1 The simplification of fraction** *(5 periods)*	• After factoring both the numerator and denominator of a given fraction, assist students to practice using the concept of G.C.D. for reducing fractions to lowest term.	• Give problems on reducing fraction to its lowest term.
• convert fraction to decimal and percentage.	**3.2 The conversion of fractions, decimals and percentage** *(10 periods)* **3.2.1 Conversion of fractions to decimals and percentage.**	• You may start the lesson by introducing the concept of rounding off decimals (terminating and repeating), then assist students to change fraction into decimal and percentage using long division and give their answer by rounding to two or three decimal places.	• Give exercise on conversion fractions to decimal and percentage. For example by considering the numbers of students in a class, check if students can determine the number of boys and girls as fraction, as decimal and as percentage.
• convert terminating decimals to fractions and percentages.	**3.2.2 Conversion of terminating decimals to fractions and percentage.**	• Encourage students to practice on the method of multiplying and dividing decimals by powers of 10. Example change 0.25 and 0.5 to fraction and percentage $0.25 = 0.25 \times \frac{10}{100} = \frac{25}{100} = 25\% \frac{1}{4}$ $0.5 = 0.5 \times \frac{100}{100} = \frac{50}{100} = 50\% = \frac{1}{2}$	• Give problems on conversion of repeating decimals to fractions and percentage.
• convert percentage to fraction and decimal	**3.2.3 Conversion of percentage to fractions and decimals**	• Assist student to practice conversion of percentage to fraction and decimal.	• Give problems on conversion of percentage to fraction and decimal.
• compare fractions • order fractions	**3.3 Comparing and ordering fractions** *(5 periods)*	• Let students revise the concept of equivalent fractions. • Assist students to compare and order fractions and decimals.	• Give exercise on comparing and ordering fractions.

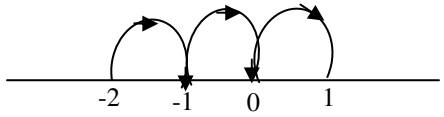
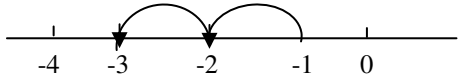
Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
• compute the sum of fractions and decimals • compute the difference of fractions and decimals	**3.4 Further on addition and subtraction of fractions and decimals** *(10 periods)*	• Guide students to add or subtract fractions and decimals by changing to the convenient form. You may use examples eg. Find $\frac{1}{2} + 0.8 = 0.5 + 0.8 = 1.3$	• Give different problems on addition and subtraction of fractions and decimals.
• solve word problems on addition and subtraction	**3.4.1 Addition of fractions and decimals** **3.4.2 Subtraction of fractions and decimals**	$\frac{1}{3} + 0.5 = \frac{1}{3} + \frac{5}{10} = \frac{1}{3} + \frac{1}{2} = \frac{5}{6}$ (when subtracting avoid negative results)	
• find product of fraction and decimal • divide a decimal by decimals	**3.5 Further on multiplication and division of fractions and decimals** *(11 periods)* **3.5.1 Multiplication of fractions and decimals** **3.5.2 Division of decimals**	• Let students revise multiplication of fractions with fractions and decimals with decimals. • Assist students to multiply fraction by decimals after changing to the convenient form (you can take decimals with 2 decimal places) • Encourage students to practice division of decimal by decimal after changing the dividend and divisor to natural numbers by multiplying with powers of 10 (i.e. 10, 100, 1000, ...). You may use examples like:	• Check students work how they give answers to problems on multiplication and division of fractions and decimals.
• express a given natural number in scientific (standard) notation.		e.g. $0.2 \div 0.4 = \frac{0.2}{0.4} = \frac{0.2\times10}{0.4\times10} = \frac{2}{4} = \frac{1}{2} = 0.5$ $25.6 \div 0.16 = \frac{25.6}{0.16} = \frac{25.6\times100}{0.16\times100} = \frac{2560}{16} = 160$ By introducing what is meant by scientific notation • Assist students to write a given natural number in its scientific (standard) notation. You may take example like: $216 = 2.16 \times 10^2$	• Give exercises on expressing a natural number in its scientific (standard) notation.

Unit 4: Integers *(18 periods)*

Unit Outcomes: Students will be able to:

- understand the concept of integers
- represent integers on a number line
- perform the operations addition and subtraction on integers.

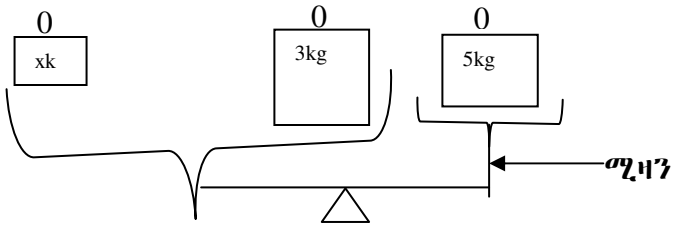
Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • define the set of integers • indicate integers on the number line. • describe the relations, among natural numbers, whole number and intgers (NCWCZ)	***4. Integers*** **4.1 Introduction to integers** *(5 periods)*	• Discuss why we need negative numbers by using different techniques like: temperature below zero, • Introduce the concept integer and the symbol and defining the set of integers. Z = {---, -3, -2, -1, 0, 1, 2, 3, ---} • Assist students to represent integers on the number line. • Let students discuss the relation between the set N, W and Z and show using Venn diagram.	• Ask students to represent the given integers on a number line. • Ask students to explain the relationship among the natural numbers, whole numbers and integers and the corresponding sets.
• compare and order integers using a number line • determine the predecessor and successor of a given integer.	**4.2 Comparing and ordering integers** *(5 periods)*	• Let students practice comparing and ordering integers by plotting them on the number line. (The students at this level should be able to generalize that when points corresponding to two numbers are plotted on the number line, the number corresponding to the point to the left is less than the number corresponding to the point which is to the right side.)	• Give exercise problems on comparing and ordering integers. • Let student compare the given integers by plotting them on the number line on the blackboard. • Ask students to determine the predecessor and successor of some given integers.
• find the sum of integers. • find the difference between two integers.	**4.3 Addition and subtraction of integers** *(8 periods)*	• Let students practice identifying 'plus' sign and 'positive' sign; 'negative' sign and 'minus' sign. eg. 2 + 3, 2 - 3, -2 -3, -2 + 3, 2 + (-3) -3+(-4) • Let students practice adding and subtracting integers eg. 1) -2 + 3 means '-2 add 3'start at -2 and go 3 units to the right -2 + 3 = 1	• Ask students to identify "negative" sign and "minus" sign; also "positive" sign and "plus" sign using different expressions like the one suggested in the activities.

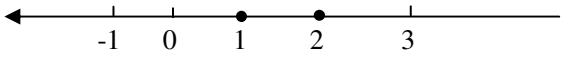
Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
		 eg. 2) -1 + (-2) means '-1 add (-2)' start at -1 and go 2 units to the left. -1 + (-2) = -3  • Encourage students to come to a conclusion - a number subtracted from itself gives zero eg. 2−2 = 0; -1- (-1) = 0 - zero added (subtracted) to (from) a numbr does not alter the number. eg. 3 + 0 = 0 , 4 −0 = 0	• give different exercise problems on addition and subtraction of integers.

Unit 5: Linear equations linear inequalities and proportionality *(25 periods)*

Unit Outcomes: Students will be able to:

- develop their skills in solving linear equations and inequalities (of the form $x + a = b$, $x + a > b$)
- understand the concept of direct and inverse proportionalities and represent them graphically.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • solve one step linear equation of the form $x + a = b$	***5. Linear equations linear inequalities and proportionality*** **5.1 Solution of simple linear equations and inequalities** *(7 periods)* **5.1.1 Solution of one-step linear equations.**	• Let the student review solving linear equation by substituting values from a given list of numbers • Using picture of balance introduce the concept of balancing equation as follows $x + 3 = 5$  • Assist students to discuss the rules of transformation "adding or subtracting the same number to and from both sides of an equation" $a = b \Rightarrow a + c = b + c$ where $a, b, c \in Q$ • Encourage students to solve one step equation by using the rule stated above. $x + 3 = 5$ $x + 3 - 3 = 5 - 3$ $x = 2$	• Give different exercise on solving one step linear equation of the form $x + a = b$
• solve one-step linear inequality of the form $x + a > b$ or $x + a < b$	**5.1.2 Solution of one - step linear inequalities**	• Assist students to demonstrate that the existence of the solution set of an inequality depends on the domain of the variable using examples such as 1) solve $x + 2 < 5$, if the domain is a) the set of whole numbers b) the set of counting numbers $\approx x \in \{-3, -2, -1, 0\ 1, 2, 3, 4\}$	• Give different exercise on solving linear inequalities within given domains.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
		• Assist students how to represent solutions of an in equality using number line. **Examples** Represent the solution set of $x + 2 < 5$ on the number line if the domain of the variable is the set of counting numbers. $x + 2 < 5$ $x < 3$  	
• determine the coordinates of a point in the 1st quadrant • represent a point in the first quadrant given its coordinates.	**5.2 Coordinates** *(6 periods)* • Coordinates of a point	• Revise the concept of data handling to read and indicate the relation in the form of ordered pairs. • Introduce the coordinate system to read the coordinates of a point • Assist students to represent the coordinates of a point using ordered pairs and to plot for given coordinates	• Ask students to determines the ordinate and abscissa of a given point in the 1st quadrant • Ask students to represent different ordered pairs by points in the 1st quadrant
• explain direct proportionality and factor of proportionality • determine the factor of direct proportionality • draw graphs to illustrate direct proportionality • apply the knowledge of direct proportionality to solve word problems.	**5.3 Proportionality** *(12 periods)* **5.3.1 Direct proportion**	• Introduce the concept of direct proportionality by considering examples like: A shop is selling pencils for 50 cents each 2 pencils cost 2×50 cents = 100 cents 3 pencils cost 3×50 cents = 150 cents 6 pencils cost 6×50 cents = 300 cents then define direct proportionality and factor of proportionality • Encourage students to determine the constant of proportionality from a given table. • Assist student to represent the idea of direct proportionality graphically • Assist students to apply the definition of direct proportionality to solve problems like: If 3 meters of cloth for your school uniform cost Birr 60, How much will 5m cost you?	• Give students table of sequences of direct proportionality and ask them to determine constants of proportionality and the missing values of the table like | a | 2 | 3 | 4 | . | | b | 4 | 6 | . | 10 | • Ask students to represent the table of direct proportionality graphically and explain the behavior of the graph:

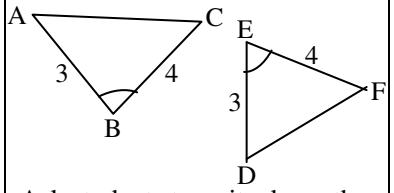
Competencies	***Content***	***Teaching / Learning activities and Resources***	***Assessment***
		• Assist students to describe the constant of direct proportionality expressed graphically as the slope of the line (graph)	• Ask students word problems like: I can make 4 dresses with 16m of cloth. How Much cloth do I need for six dresses?
• explain inverse proportionality and factor of proportionality • determine the factor of inverse proportionality • draw graphs to illustrate proportionality • apply the knowledge of inverse proportionality to solve word problems	**5.3.2 Inverse proportion**	• Revise the concept of direct proportionality and introduce inverse proportionality by considering examples like: Two children can clean a classroom in 20 minutes. How long would three children take? then define inverse proportionality • Encourage students to determine the constant of proportionality from a given table	• Ask students to give their own examples about inverse proportionality from their environment. • Ask students to represent table of inverse proportionality using graph. • Give problems on inverse proportionality.

Unit 6: Geometry and measurement *(44 periods)*

Unit Outcomes: Students will be able to:

- identify angles
- prove congruency of triangles
- construct triangles.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
Students should be able to: • identify adjacent and vertically opposite angles • determine complementary angles • determine supplementary angles	***6. Geometry and measurement*** **6.1 Angles** *(8 periods)* **6.1.1 Related Angles** • Adjacent angles • Vertically opposite angles • Complementary angles • Supplementary angles	• Let students review what they had studied about angles • After introducing adjecent angles and vertically opposite angles encourage students to identify them • Discuss the relations and explain the properties of complementary and supplementary angles.	• Ask students to draw two intersecting lines, identify vertically opposite angles, adjacent angles and supplementary angles. • Ask students to sketch complementary angles • Give students different exercises on complementary and supplementary angles.
• identify a transversal • identify alternate interior angles • identify alternate exterior angles • identify corresponding angles • prove congruency of angles formed by two parallel lines and a transversal by measurement. • solve problems related to angles formed by two parallel lines and a transversal.	**6.1.2 Angles and parallel lines**	• Introduce a transversal to two lines • After introducing, let students determine alternate interior angles and corresponding angles formed by two lines and a transversal. • Let them identify alternate interior angles. • Assist students to demonstrate and to come to the conclusion of congruency of alternate interior angles, alternate exterior angles and corresponding angles, if and only if the two lines are parallel. That is when a transversal is drawn to two parallel lines by using measurement of angles. • Let students work on problem related to angles formed by parallel lines and a transversal.	• Give students to draw parallel lines and a transversal. • Ask students to identify alternate interior angles, alternate exterior angles and corresponding angles. • Give problems on angles formed by parallel lines and a transversal.

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
• construct triangles given three sides • construct triangles given two sides and an included angle. • construct triangles given two angles and an included side. • explain the relation between angles and sides of a triangle. • explain the relation between sides of a triangle.	**6.2 Construction of triangles** *(12 periods)*	• Help students to construct triangles with given lengths of sides using a ruler and a pair of compases. • Lead students conclude the triangle inequality • Help students to construct triangles using a ruler, pair of compases and protractor if: a) The length of two sides and the included angles are given b) The measures of two angles and the length of the included side are given • Guide students to conclude about the relationship between sides and angles of a triangle.	• Ask students to construct angles; given the length of three sides, two sides and the included angle and two angles and the length of one side. • Give students triplets of numbers to represent lengths and ask them whetehr the sides represent a triangle or not. • Ask the students to explain the relationship between sides and angles of a triangles.
• explain the concept of congruency of triangles • check the congruence of given triangles by tracing, cutting and overlapping.	**6.3 Congruent triangles** *(12 periods)* **6.3.1 Congruence of triangles**	• Start the lesson by showing pictures having equal size and same shape • After introducing the concept of congruent figures and the symbol"≡" for congruent. Assist students to explain congruent triangles. • Let them check congruent triangles by tracing cutting and overlap one over the other. • Encourage students to come to conclusion of congruence triangles by classifying congruency of corresponding sides and corresponding angles (for example, you may use models of two congruent scalene triangles)	• Draw different triangles and ask students to determine the congruency of triangles by using congruence definition. • Ask students to prepare a triangle congruent to a given Δ by tracing, cutting and overlapping
• identify the congruence of two given triangles by using the tests for congruence SAS, SSS and ASA	**6.3.2 Tests for congruency of triangles (SAS, SSS and ASA)**	• For instance to teach SAS, you may start the lesson by taking two triangles where given the lengths of two sides and the degree measures of included angles are correspondingly equal. • Assist the students to measure the remaining side and two angles of each triangle and let them write their findings • Encourage your students to conclude the congruence of these two triangles by showing that all conditions in the definition are fulfilled.	• Given two triangles as follows  Ask students to write down the following steps to

Competencies	*Content*	*Teaching / Learning activities and Resources*	*Assessment*
		• Guide the students to reach at the statement which is stated as SAS and let the students also use the "SAS" to refer to this statement. * You may use the same approach suggested for SAS above to teach SSS and ASA.	show they are congruent $\overline{AB} \equiv \overline{DE}$ (given 3 unit) $\hat{B} \equiv \hat{E}$ (given 90^0) $\overline{BC} \equiv \overline{EF}$ (given 4 units) $\therefore \Delta ABC \equiv \Delta DEF$ (by SAS)
• derive the formula of area of right angled triangle from the area of rectangle • calculate the area of right angled triangle • convert square centimeters to square meters and vice versa. • convert hectar into square meters and vice versa. • calcluate the perimeter of triangles.	**6.4 Measurement** *(12 periods)* **6.4.1 Areas of right angled triangles and perimeter of triangles**	• Let students revise the area of rectangle. • Lead students to use the area formula of rectangle to determine the area formula of right angled triangle • Encourage the students to calculate the area of right angled triangle • Assist students to practice converting units of area ($cm^2 \rightarrow m^2$ or vice versa) hectars $\rightarrow$ m^2 or viece versa. • Help students to exercise computing perimeters of triangles.	• Ask students to calculate area of a right angled triangle. • Give problems on conversion of units of areas.
• discover the formula for the volume of a rectangular prism. • calculate the volume of a rectangular prism • convert cubic centimeters to litres and cubic metres and vice versa • convert mililiters to litres and vice versa	**6.4.2 Volume of rectangular prism**	• Encourage students to discover the formula of rectangular prism by counting cubic centimeters. • Motivate students to calculate the volume of rectangular prism. • Assist students to practice converting units of volume.	• Give class work and home works on calculating volume of prism. • Ask students questions on conversion of units of volume, i.e., liter to cm^3 and vice - versa.