

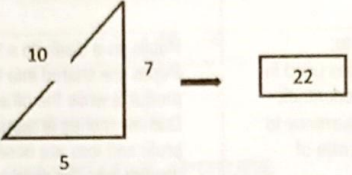
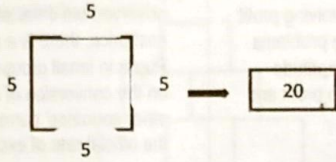
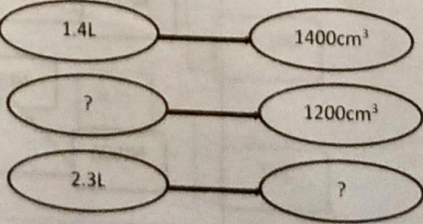


LAGOS STATE MINISTRY OF EDUCATION
UNIFIED SCHEMES OF WORK FOR PRIMARY SCHOOLS

(MATHEMATICS FOR PRIMARY SCHOOL)
PRIMARY FIVE SECOND TERM

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	LEARNING RESOURCES
1	<p>REVISION/ NUMBER LINE</p> <p>Revision of 1st Term's work Addition using number line Subtraction using number line Real life problems Quantitative reasoning</p> <p>Importance: It is used for easy addition and subtraction procedures It helps in the reading of clinical thermometer.</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> revise 1st term's topics add and subtract using number lines solve quantitative aptitude problems related to addition and subtraction of integers using number lines 	<p>Pupils are guided to write numbers -7 to +7 on sticky notes and place them on the floor in the class in ascending or descending order on a number line and allow enough space in-between the numbers. 3-4 pupils select simple addition or subtraction flash cards from a basket, e.g. 1 + 6, 2 - 5, -3 + 4 etc. Each pupil in turns is to stand and walk on the number line for addition or subtraction. Pupil in the class count aloud the movement of the volunteer according to the flash card picked.</p> <p>Pupils in groups use letters to represent numbers on number line. E.g. which letter best represent the number $2\frac{1}{2}$ on the number line?</p> <div style="text-align: center;"> </div> <p>The answer is letter M.</p> <p>QUANTITATIVE APTITUDE Complete the pyramid</p> <div style="text-align: center;"> </div>	<p>Critical thinking and problem solving Communication and Collaboration Leadership and Personal development</p>	<p>LEARNING RESOURCES AUDIO VISUAL RESOURCES Coloring pens Number line Sticky notes Flash cards</p> <p>Site links https://study.com/academy/lesson/number-line-lesson-plan.html</p> <p>Video links https://m.youtube.com/watch?v=WN_Eunh7uY</p>
2	<p>ESTIMATION</p> <p>Rounding up numbers Estimation sums, differences and products Quantitative reasoning</p> <p>Importance: Manipulating and storing of data in a computer system Used in building blocks like logic gates, registers and arithmetic processors Estimating the total cost of items at a departmental store.</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> round up numbers to the nearest 10, 10 and whole numbers rounding numbers to the nearest tenth, hundredth and thousandth estimating sums, differences and products solve quantitative aptitude problems related with binary numbers 	<p>Selected few pupils to be given a handful of raw corns or beans. They are then asked how many are there without counting them</p> <p>Pupils in groups study and work on a receipt of a grocery store or a supermarket to practice estimation.</p> <p>QUANTITATIVE APTITUDE Example:</p> <div style="text-align: center;"> </div>	<p>Communication and collaboration Critical thinking and problem solving Digital literacy Student leadership and personal development</p>	<p>AUDIO VISUAL RESOURCES flash cards charts Erasers -Grocery store receipts.</p> <p>Site links https://study.com/academy/lesson/estimation-lesson-for-kids.html</p> <p>Video links https://m.youtube.com/watch?v=EyC8G6Gthg</p>
3	<p>PERCENTAGES</p> <p>Meaning of percentages Changing a percentage to a fraction of decimal and vice versa Express number as a percentage of another Quantitative reasoning</p> <p>Importance: Percentages are used in calculating discounts on sales of goods, bank interest rates, rates of inflation They are important for understanding the financial aspects of everyday life It helps to interpret a monthly budget.</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> explain the term "Percentage" calculate the ratio of two numbers solve questions related to real life problems on percentages express a number as a percentage of another number solve quantitative related questions on percentages 	<p>Pupils work in pairs. Work on hundred boxes drawn on a piece of cardboard and then shade 10 out of the 100 boxes which is 10 out of 100. The process of percentage have been displayed which is 10%.</p> <p>QUANTITATIVE APTITUDE</p> <div style="text-align: center;"> </div>	<p>Communication and collaboration Critical thinking and problem solving Student leadership and personal development</p>	<p>AUDIO VISUAL RESOURCES Percentage charts Cardboards Pencils Coloring pens</p> <p>Site links https://study.com/academy/lesson/percentages-lesson-plan.html</p> <p>Video links https://m.youtube.com/watch?v=x1w0C2AC9u0</p>

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4	<p>ALGEBRAIC PROCESSES</p> <p>Simple equations Solving equations, using the balance method Solving real life problems using equations Quantitative reasoning</p> <p>Importance: It is necessary for better understanding of balancing quantity of commodities statistics and calculus It is faster and better than basic mathematics It reinforces logical thinking</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> find missing numbers in open sentences use letters to represent boxes in open sentences solve real life problems involving equations calculate the value of algebraic expressions by substitution solve quantitative aptitude problems on algebraic expressions 	<p>Pupils in two groups do a role play on algebraic expression using an longer for hanging dresses. An hanger is on the handle of a classroom door pupils get 8-10 pegs of one colour (blue) and tie a thread to each of them, then tie 6pegs to</p> <p>QUANTITATIVE REASONING left side of the hanger and 2pegs to the right side of the hanger. It is observed that the position of the hanger is not balanced. To balance it, tie thread to another coloured pegs (red) and start to attach it one by one to the side of the hanger that dropped until it balances. Then count the number of pegs used to balance the hanger.</p> <p>THE EQUATION Left Right 6 blue pegs+2blue pegs= 8 blue pegs 6 blue pegs+2blue pegs= 8 blue pegs + 4 red pegs + 4 red pegs 6 pegs+6 pegs= 12 pegs</p>	<p>Role play Student leadership and Physical development Critical thinking and problem solving Digital literacy</p>	<p>AUDIO VISUAL RESOURCES Paper notes e.g. money Recording sheet for pupil's observation Multiplication and division flash cards</p> <p>Site links https://study.com/academy/lesson/solving-algebraic-equations-definition-examples.html</p> <p>Video links https://m.youtube.com/watch?v=F1azJEdfx5C</p>
5	<p>COMMERCIAL MATHS: MONEY</p> <p>Introduction to money Conversion of the currency of a country to another country. Profit and loss Quantitative reasoning</p> <p>Importance: It is a medium of exchange in day to day transactions It helps in payment of services and settling bills for family needs e.g. education, health care, charity, vacation trips etc.</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> recognize currencies used in Nigeria and other countries convert from one currency to another, using the rate of conversion solve problems involving profit and loss in real life problems solve quantitative aptitude problems related to profit and loss in money 	<p>Pupils as a class do a role play of class business. Pupils are shared into two groups. A group sells products while the other buys the products. Dummy money is required for exchange. Also, profit and loss are observed. If the cost price is greater than the selling price, there is loss observed but if the selling price is greater than the cost price, there is a profit.</p> <p>Pupils in small groups use dummy monies to work on the conversion of Nigerian currency (₦) into other countries' currencies and vice versa using the official rate of exchange.</p> <p>QUANTITATIVE REASONING</p>	<p>Digital literacy Critical thinking and problem solving Communication and collaboration Student leadership and personal development</p>	<p>AUDIO VISUAL RESOURCES Paper material e.g. money Recording sheet for pupil's observation</p> <p>Site links https://byjus.com/maths/profit-and-loss/</p> <p>Video links https://m.youtube.com/watch?v=RtqSsqRy8to</p>
6	<p>COMMERCIAL MATHS MONEY</p> <p>Simple interest Discount and commission Money transactions Quantitative Reasoning</p> <p>Importance: Discount on sales draw customers to sales and services Money most important function is as a medium of exchange to facilitate transaction</p>	<p>Pupils should be able to:</p> <ul style="list-style-type: none"> explain the simple interest in business transactions. solve problems on discount and commission find commissions, discount, simple interest on real life problems e.g. post offices, markets, etc. solve problems involving money transactions solve quantitative aptitude problems related to simple interest, discount, commission. 	<p>Charts on money of different denominations are placed around in the classroom and dummy monies are given to the pupils. The pupils in class work in groups brainstorming on giving different ways a smaller denominations can make up a bigger denomination and breaking down of a bigger denomination into smaller denominations. Pupils do a role play on obtaining discount on sales of item(s) and getting commission from a company on sales of products.</p> <p>QUANTITATIVE REASONING</p>	<p>Communication and collaboration Student leadership and personal development Critical thinking and problem solving</p>	<p>AUDIO VISUAL RESOURCES Money charts and flash cards</p> <p>Site links https://betterlesson.com/lesson/553000/simple-interest</p> <p>Video links https://m.youtube.com/watch?v=Y20HH6goRbk</p>

WKS	TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	MATHEMATICS LEARNING RESOURCES
7	Review of the first half term's work and periodic test	Pupils should be able to: review the first half term's work participate in the periodic test.	Pupils are grouped into three or more groups to do revision on topics treated. A group leader for each of the groups coordinates the activities. Allow the members of each group to participate and interact with each other.	Leadership skill	Past questions Exercises from textbooks and notebook.
8	PLANE SHAPES (PERIMETER) Meaning of perimeter Perimeter of regular plane shapes Perimeter of irregular plane shapes Real life problems on perimeter Quantitative aptitude Importance: They help in quantifying physical space e.g. fencing plots of land, roofing of a house. They provide foundation or more advanced Mathematics found in algebra, trigonometry and calculus e.g. quantity of tiles or rug/carpet to cover living room, rooms or toilet walls.	Pupils should be able to: explain the concept of perimeter find the perimeter of regular and irregular shapes solve the perimeter of a circle relate perimeter to real life problems and solve. solve quantitative aptitude problems related to perimeter of regular and irregular plane shapes	Pupils in pairs are asked to cut a polygon with measured shapes. They join the polygons together to give just a shape. After doing that, measure the total length around the shape being created. Pupils in small groups use tape measure to measure the perimeter of desk in the class. Pupils in groups use a thread or fishing thread, cut into sizeable pieces to form a circle on a bottle. distance round the bottle circle is the circumference. Then, the thread or fishing thread is straightened to form a straight line, use ruler to measure the line. This is the perimeter of the circle. QUANTITATIVE REASONING  	Communication and collaboration Role play Critical thinking and problem solving Digital literacy	AUDIO VISUAL RESOURCES Flash cards on formulas of perimeters of shapes Cardboards to create a polygon Scissors Site links https://study.com/academy/lesson/perimeter-of-irregular-shapes-lesson-plan.html https://study.com/academy/lesson/perimeter-of-regular-shapes-lesson-plan.html Video links https://m.youtube.com/watch?v=YKAvvU1uc
9	PLANE SHAPES (AREA) Area of regular shapes Area of irregular shapes Area of right-angled triangle Real life problems on area Quantitative reasoning IMPORTANCE: -Farmers use it to know the number of seedling to plant on a small piece of land. -Horticulturists use it to plant flowers or carper grasses on a field. -Painters use it to calculate the number of paint buckets to paint a room.	Pupils should be able to: find the area of regular, irregular shapes and its unit. calculate the area of right angled triangle. solve real life problems on area of regular, irregular and right-angled triangles solve quantitative aptitude problems related to area of regular, irregular and right-angled triangles	Pupils : -in pairs use the classroom in unlocking the concept of area. They count the number of columns in the class and multiply it with the number of rows, the resulting figure gives a rough estimate of area of the class. - in small groups draw a diagonal on a rectangular plane sheet to identify a right angle triangle. Use a pair of scissors to cut out the triangle and use a ruler to measure the base and the height. Then use the information to calculate the area. Sing songs on plane shapes.	Critical thinking and problem solving Communication and collaboration Student leadership and personal development Digital literacy	AUDIO VISUAL RESOURCES Cardboards Flash cards to show the formula of areas of shapes Charts containing different shapes with their areas Site links https://study.com/academy/lesson/area-of-irregular-shapes-lesson-plan.html https://study.com/academy/lesson/perimeter-of-regular-shapes-lesson-plan.html Video links https://m.youtube.com/watch?v=5fvXufSE6qk
10	VOLUME AND CAPACITY Measurement of volume in cubes and cuboids using unit cubes Measurement of volume in cubes and cuboids using formula Comparing volume of spheres and cuboids Discovering relationships between litre and cubic centimeter Real life problems. Quantitative reasoning Importance: -It is useful in science laboratories, and catering services.	Pupils should be able to: use units to find the volume of cube and cuboids use formula to find the volume of cuboid find the relationship between litres and cubic centimeters convert cm^3 to litres and vice versa solve given problems in quantitative aptitude on volume and capacity	Pupils in small groups are taken for a gallery work round the school. They observe different storage materials that have their volumes and capacities written on them. For example water storage tank, water buckets, kegs, water bottles etc. They then compare the differences between all various types of materials with their respective volumes and capacities, arranging them in their increasing sizes. QUANTITATIVE REASONING 	Critical thinking and problem solving Communication and collaboration Student leadership and personal development Gallery walk	AUDIO VISUAL RESOURCES Coloring pencils for recording observations Recording sheets for taking observations Site links https://study.com/academy/lesson/volume-capacity-lesson-for-kids.html Video links https://m.youtube.com/watch?v=zVanQrFRtSE

TOPICS	LEARNING OBJECTIVES	LEARNING ACTIVITIES	EMBEDDED CORE SKILLS	LEARNING RESOURCES
-It helps in the correct measurement of quantities e.g. groundnut oil, palm oil, kerosene, water etc.				
<p>TIME</p> <p>Average speed Distance Duration Real life problems. Quantitative reasoning</p> <p>Importance: -Used by travelers, motorists, tourists to plan activities and movements.</p>	<p>Pupils should be able to:</p> <p>find the duration between one time and another calculate the distance covered within a length of time solve the average speed of a moving object given the total distance travelled and the time taken convert the units of time express the hours of a clock in minutes, seconds and vice versa solve real life problems on distance, time and speed. solve quantitative aptitude relating to time</p>	<p>Pupils as an individual checks and says the time on a wall clock placed at the front of the class. Pupils work in small groups. A leader is chosen, he chooses another pupil in the group. A distance of about 5m is set between two pupils, a timer is also set to record the time involved in the throwing and catching of a ball over a specified distance. This activity goes on repeatedly for 5m, 10m, 20m, 30m, for each group. respectively. At the end of the activities, the time differences are compared. The pupils will notice that the farther the distance, the more time it takes the ball to reach its final destination</p> <p>QUANTITATIVE REASONING</p>	<p>Critical thinking and problem solving Communication and collaboration Student leadership and personal development Digital literacy</p>	<p>AUDIO VISUAL RESOURCES</p> <p>Timer for checking time Ball Clock</p> <p>Site links https://study.com/academy/lesson/average-speed-velocity-lesson-for-kids.html</p> <p>Video links https://m.youtube.com/watch?v=Q05MCut03Y</p>
<p>PROJECT</p> <p>Pupils are divided into two groups. Each group is to work on types of angles and types of triangles. Materials: ice-cream sticks, markers, cardboards and glue. Procedure: Paint the ice-cream sticks with markers of different colours, arrange the sticks by using glue to paste them on a cardboard to form types of angles and types of triangles in each of the respective groups.</p>	<p>By the end of the lesson, students should be able to:</p> <ol style="list-style-type: none"> interact within the group and discuss how each project work is done. 	<ol style="list-style-type: none"> Choose group leaders in each group. Follow the procedure for the project. Each group leader gives a presentation on mode of operation. The students take a gallery walk where the projects are displayed. 	<p>-Leadership Skill -Communication and collaboration (Team work) -Critical thinking -Citizenship</p>	
Project/Practical work and Revision of first term's work and preparation for Examination.	Pupils should be able to: Realize the areas of weakness in the topics treated for the term.	Pupils are arranged into groups for tutorial. The teacher supervises, corrects and marks the students' exercises/activities in each group	Collaboration Communication Leadership Skills Critical Thinking	
EXAMINATION	EXAMINATION	EXAMINATION	EXAMINATION	EXAMINATION