



LOTUS PETAL SENIOR SECONDARY SCHOOL
GRADE - X
SUBJECT -MATHS

Month	Chapter	Learning objectives	Teaching Methods	Learning Outcomes	Subject Enrichment Activity	Art Integration /Multi-Disciplinary
APRIL 18	1. Real Numbers, 2. Polynomials, 3. Pair of Linear Equations in Two Variables 4. Quadratic Equations	<p>students will be able to:</p> <ul style="list-style-type: none"> - Understand the definition and properties of real numbers and irrational numbers - Convert decimal numbers to fractions and vice versa - Compare real numbers and arrange them in ascending or descending order - Apply the properties of real numbers and irrational numbers to solve problems - Understand the real-world applications of real numbers in various fields. - Students will be able to define and explain polynomials. - Students will understand how to classify, add, subtract, multiply, and divide polynomials. - Students will learn how to factorize polynomials and apply polynomial identities. - Students will be able to solve polynomial equations using 	<p># Chapter 1: Real Numbers</p> <ol style="list-style-type: none"> 1. Use visual aids and real-life examples to demonstrate the concept of real numbers. 2. Divide students into groups to work on problems involving real numbers, promoting peer-to-peer learning. 3. Encourage students to solve problems involving real numbers, promoting critical thinking and analytical skills. <p># Chapter 2: Polynomials</p> <ol style="list-style-type: none"> 1. Use visual aids to demonstrate polynomial concepts, such as graphing polynomial functions. 2. Encourage students to explore and discover polynomial properties through guided activities. 3. Divide students into groups to work on polynomial problems, promoting peer-to-peer learning. 4. Encourage students to solve polynomial problems, 	<ol style="list-style-type: none"> 1. Students will understand the concept of real numbers, including rational and irrational numbers. 2. Students will be able to identify and classify real numbers as rational or irrational. 3. Students will apply the properties of real numbers, such as the commutative, associative, and distributive properties. 4. Students will solve problems involving real numbers, including algebraic expressions and equations. 5. Students will visualize real numbers on the number line, understanding the concept of ordering and relationships between numbers. <p style="text-align: center;">Polynomials</p>	<p>Real-World Applications: Provide students with real-world examples of how real numbers are used in science, technology, engineering, and mathematics (STEM) fields.</p>	<p>Mind Maps: Ask students to create mind maps that visualize the relationships between different real number concepts, such as:</p> <ul style="list-style-type: none"> - Rational and irrational numbers - Integers and fractions - Decimal expansions and approximations - Real-world applications of real numbers <p>1. Critical Thinking: Students will develop critical thinking skills by analyzing problems, identifying patterns, and applying real number concepts.</p> <p>2. Problem-Solving:</p>

		<p>various methods.</p> <ul style="list-style-type: none"> - Students will understand the relationship between polynomials and algebraic expressions. - Students will be able to apply polynomials to real-world problems. <ul style="list-style-type: none"> - Students will be able to understand the concept of linear equations in two variables. - Students will learn to graph linear equations in two variables on a coordinate plane. <ul style="list-style-type: none"> - Students will understand various algebraic methods to solve a pair of linear equations. - Students will be able to solve pair of linear equations using graphical and algebraic methods. - Students will understand the concept of consistency, inconsistency, dependency, and independency of linear equations. - Students will apply pair of linear equations to real-world problems. - Students will be able to define and explain quadratic equations. <ul style="list-style-type: none"> - Students will learn to factorize quadratic expressions and solve quadratic equations by factorization. - Students will understand the quadratic formula and apply it to solve quadratic equations. - Students will determine the nature of the roots of a quadratic equation. 	<p>promoting critical thinking and analytical skills.</p> <p># Chapter 3: Pair of Linear Equations in Two Variables</p> <ol style="list-style-type: none"> 1. Use graphs to demonstrate the concept of linear equations in two variables. 2. Use algebraic techniques, such as substitution and elimination, to solve linear equations. 3. Divide students into groups to work on linear equation problems, promoting peer-to-peer learning. 4. Use real-world examples to illustrate the application of linear equations in two variables. <p># Chapter 4: Quadratic Equations</p> <ol style="list-style-type: none"> 1. Use visual aids to demonstrate quadratic equation concepts, such as graphing quadratic functions. 2. Use algebraic techniques, such as factoring and the quadratic formula, to solve quadratic equations. 3. Divide students into groups to work on quadratic equation problems, promoting peer-to-peer learning. 4. Encourage students to solve quadratic equation problems, promoting critical thinking and analytical skills. 	<ol style="list-style-type: none"> 1. Define and explain polynomials, including degree, coefficients, and terms. 2. Identify and classify polynomials, including monomials, binomials, and trinomials. 3. Apply properties of polynomials, including addition, subtraction, and multiplication. 4. Solve problems involving polynomials, including finding roots and graphing. 5. Visualize and interpret polynomial graphs. <p>Pair of Linear Equations in Two Variables</p> <ol style="list-style-type: none"> 1. Define and explain linear equations in two variables, including graphing and equation forms. 2. Identify and classify linear equations, including consistent, inconsistent, and dependent systems. 3. Apply algebraic and graphical methods to solve linear equations in two variables. 4. Solve problems involving linear equations, including finding solutions and graphing. 5. Interpret and analyze linear equation solutions in real-world contexts. <p>Quadratic Equations</p>		<p>Students will develop problem-solving skills by applying real number concepts to solve problems in mathematics and other subjects.</p> <p>3. Communication: Students will develop communication skills by presenting their solutions to problems, explaining their reasoning, and using mathematical language to describe real number concepts.</p> <p>4. Collaboration: Students will develop collaboration skills by working in groups to solve problems, sharing ideas, and building on each other's strengths.</p> <p>5. Creativity: Students will develop creativity skills by exploring different approaches to solving problems, visualizing real number concepts, and finding innovative solutions.</p>
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		<ul style="list-style-type: none"> - Students will apply quadratic equations to solve problems involving area, perimeter, and other real-world applications. - Students will graph quadratic equations and understand the relationship between the roots and coefficients of a quadratic equation. 		<ol style="list-style-type: none"> 1. Define and explain quadratic equations, including standard form and graphing. 2. Identify and classify quadratic equations, including factorable and non-factorable equations. 3. Apply algebraic methods, including factoring and the quadratic formula, to solve quadratic equations. 4. Solve problems involving quadratic equations, including finding roots and graphing. 5. Interpret and analyze quadratic equation solutions in real-world contexts. 		
MAY 11	5. Arithmetic Progressions 6. Triangles 7. Coordinate Geometry 8. Introduction to Trigonometry	<ul style="list-style-type: none"> - Students will be able to define and explain arithmetic progression. - Students will identify the first term, common difference, and nth term of an AP. - Students will apply formulas to find the nth term and sum of the first n terms of an AP. - Students will determine whether a given sequence is an AP or not. - Students will solve problems involving AP in real-world applications. - Students will understand the concept of arithmetic mean. - Students will be able to define and explain the concept of similar and congruent triangles. - Students will identify and explain the properties of similar and congruent triangles. 	<p>Arithmetic Progression</p> <ol style="list-style-type: none"> 1. Use number lines and graphs to illustrate arithmetic progressions. 2. Provide real-world examples, such as finance and population growth. 3. Encourage students to derive formulas for arithmetic progressions. <p>Triangles</p> <ol style="list-style-type: none"> 1. Use geometric shapes and models to illustrate triangle properties. 2. Encourage students to explore and discover triangle relationships, such as congruence and similarity. 3. Use real-world examples, such as architecture and engineering. 	<p>Arithmetic Progression</p> <ol style="list-style-type: none"> 1. Define and explain arithmetic progression, including first term, common difference, and nth term. 2. Identify and classify arithmetic progressions, including finite and infinite sequences. 3. Apply arithmetic progression formulas to solve problems, including finding nth term and sum of terms. 4. Solve problems involving arithmetic progressions in real-world contexts, such as finance and population growth. 5. Visualize and interpret arithmetic progression graphs. <p># Triangles</p> <ol style="list-style-type: none"> 1. Define and explain triangle 	<p>Arithmetic Progression Games: Develop games or puzzles that involve arithmetic progressions, such as "Guess My Sequence" or "Arithmetic Progression Bingo".</p> <p>Real-World Applications: Ask students to research and present on real-world applications of coordinate geometry, such as GPS or video games.</p> <p>Develop games or puzzles that involve trigonometry, such as "Trigonometry Bingo" or "Trigonometry</p>	<p>Ask students to create artwork that represents arithmetic progressions, using different colors and patterns.</p> <p>Ask students to create a collage that represents a coordinate geometry concept, using different shapes and colors.</p> <p>Ask students to create artwork that represents trigonometric relationships, such as sine, cosine, and tangent.</p>

		<ul style="list-style-type: none"> - Students will apply various methods to prove the similarity and congruence of two triangles. - Students will solve problems involving similar and congruent triangles in real-world applications. - Students will understand the concept of coordinate geometry and the coordinate plane. - Students will be able to plot points on the coordinate plane and find their coordinates. <ul style="list-style-type: none"> - Students will apply the distance formula and section formula to solve problems. - Students will solve problems involving coordinate geometry in real-world applications. - Students will understand the concept of trigonometry and its importance. - Students will be able to define and explain the trigonometric ratios and identities. <ul style="list-style-type: none"> - Students will apply trigonometric ratios and identities to solve problems involving right triangles. - Students will solve problems involving trigonometry in real-world applications. 	<p>Coordinate Geometry</p> <ol style="list-style-type: none"> 1. Use graph paper and digital tools to explore coordinate geometry concepts. 2. Encourage students to derive equations of lines and circles. 3. Provide real-world examples, such as navigation and computer graphics. <p>Introduction to Trigonometry</p> <ol style="list-style-type: none"> 1. Use visual aids, such as graphs and diagrams, to illustrate trigonometric relationships. 2. Encourage students to explore and discover trigonometric identities and equations. 3. Provide real-world examples, such as physics and engineering. 	<p>properties, including congruence, similarity, and right triangles.</p> <ol style="list-style-type: none"> 2. Identify and classify triangles, including acute, obtuse, and equilateral triangles. 3. Apply triangle relationships, including Pythagoras' theorem and trigonometric ratios. 4. Solve problems involving triangles in real-world contexts, such as architecture and engineering. 5. Visualize and interpret triangle diagrams and graphs. <p># Coordinate Geometry</p> <ol style="list-style-type: none"> 1. Define and explain coordinate geometry concepts, including points, lines, and circles. 2. Identify and classify coordinate geometry shapes, including quadrilaterals and polygons. 3. Apply coordinate geometry formulas to solve problems, including finding distance and midpoint. 4. Solve problems involving coordinate geometry in real-world contexts, such as navigation and computer graphics. 5. Visualize and interpret coordinate geometry graphs. <p># Introduction to Trigonometry</p> <ol style="list-style-type: none"> 1. Define and explain trigonometric ratios, including 	Challenge".	<p>Arithmetic Progression</p> <ol style="list-style-type: none"> 1. Critical Thinking: Students will develop critical thinking skills by analyzing and solving arithmetic progression problems. 2. Problem-Solving: Students will develop problem-solving skills by applying arithmetic progression concepts to real-world problems. 3. Communication: Students will develop communication skills by presenting their solutions to arithmetic progression problems. 4. Collaboration: Students will develop collaboration skills by working in groups to solve arithmetic progression problems. 5. Creativity: Students will develop creativity skills by finding innovative solutions to arithmetic progression problems. <p># Triangles</p> <ol style="list-style-type: none"> 1. Critical Thinking: Students will develop critical thinking skills by analyzing and solving triangle problems. 2. Problem-Solving: Students will develop
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				<p>sine, cosine, and tangent.</p> <p>2. Identify and classify trigonometric relationships, including complementary and supplementary angles.</p> <p>3. Apply trigonometric formulas to solve problems, including finding unknown angles and sides.</p> <p>4. Solve problems involving trigonometry in real-world contexts, such as physics and engineering.</p> <p>5. Visualize and interpret trigonometric graphs.</p>		<p>problem-solving skills by applying triangle concepts to real-world problems.</p> <p>3. Communication: Students will develop communication skills by presenting their solutions to triangle problems.</p> <p>4. Collaboration: Students will develop collaboration skills by working in groups to solve triangle problems.</p> <p>5. Creativity: Students will develop creativity skills by finding innovative solutions to triangle problems.</p> <p># Coordinate Geometry</p> <p>1. Critical Thinking: Students will develop critical thinking skills by analyzing and solving coordinate geometry problems.</p> <p>2. Problem-Solving: Students will develop problem-solving skills by applying coordinate geometry concepts to real-world problems.</p> <p>3. Communication: Students will develop communication skills by presenting their solutions to coordinate geometry</p>
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problems.
4. Collaboration:
Students will develop
collaboration skills by
working in groups to
solve coordinate
geometry problems.
5. Creativity: Students
will develop creativity
skills by finding
innovative solutions
to coordinate
geometry problems.

Introduction to
Trigonometry

1. Critical Thinking:
Students will develop
critical thinking skills
by analyzing and
solving trigonometry
problems.

2. Problem-Solving:
Students will develop
problem-solving skills
by applying
trigonometry concepts
to real-world
problems.

3. Communication:
Students will develop
communication skills
by presenting their
solutions to
trigonometry
problems.

4. Collaboration:
Students will develop
collaboration skills by
working in groups to
solve trigonometry
problems.

5. Creativity: Students

						<p>will develop creativity skills by finding innovative solutions to trigonometry problems.</p> <p><u>AP-mosaic art</u> Use mosaic art to teach students about arithmetic sequences and geometric progressions.</p>
JUNE 1	9. Some Applications of Trigonometry	<ul style="list-style-type: none"> - Students will understand the concept of height and distance and how to calculate them using trigonometric ratios. - Students will apply trigonometric ratios to solve problems involving height and distance. - Students will understand the concept of angles of elevation and depression and how to calculate them. - Students will apply trigonometry to solve problems in real-world applications. - Students will calculate distances and directions using bearings and trigonometric ratios. 	<ol style="list-style-type: none"> 1. Demonstration Method: Use real-life examples and visual aids to demonstrate how trigonometry is used to solve problems involving height and distance. 2. Problem-Solving Approach: Encourage students to solve problems involving trigonometry. 3. Collaborative Learning: Divide students into groups to work on problems involving trigonometry, promoting collaboration and peer-to-peer learning. 4. Real-World Applications: Use real-world examples, such as navigation, surveying, and physics, to illustrate the importance and relevance of trigonometry. 5. Think-Pair-Share: Encourage students to think critically about problems, pair with a partner to discuss, and share their solutions with the class. 6. Project-Based Learning: Assign students a project that requires them to apply 	<ol style="list-style-type: none"> 1. Students will be able to apply trigonometric ratios to solve problems involving height and distance. 2. Students will be able to use trigonometric ratios to calculate angles of elevation and depression. 3. Students will be able to apply trigonometric concepts to solve problems in real-world applications, such as navigation, surveying, and physics. 4. Students will be able to use bearings to calculate distances and directions. 5. Students will be able to apply trigonometric ratios to solve problems involving right triangles. 6. Students will be able to visualize and interpret trigonometric relationships using graphs. 7. Students will be able to apply trigonometric concepts to solve problems involving periodic phenomena. 	<p>Research a Trigonometry Application: Ask students to research a real-world application of trigonometry, such as navigation, physics, or engineering, and present their findings to the class.</p> <p>AI Activity Description With the help of the knowledge of trigonometric functions and terminologies, students will be able to understand the concept of Cosine Similarity.</p>	<ol style="list-style-type: none"> 1. Critical Thinking: Students will develop critical thinking skills by analyzing problems, identifying patterns, and applying trigonometry concepts to solve them. 2. Problem-Solving: Students will develop problem-solving skills by applying trigonometry concepts to real-world problems, such as calculating distances and heights. 4. Collaboration: Students will develop collaboration skills by working in groups to solve problems, sharing ideas, and building on each other's strengths. 5. Creativity: Students will develop creativity skills by exploring different approaches to solving problems,

			<p>trigonometric concepts to solve a real-world problem, promoting deeper understanding and critical thinking.</p>			<p>visualizing trigonometry concepts, and finding innovative solutions.</p> <p>6. Analytical Thinking: Students will develop analytical thinking skills by breaking down complex problems into simpler components, identifying patterns, and applying trigonometry concepts to solve them.</p> <p>Trigonometry-Inspired Art: Ask students to create artwork that incorporates trigonometry concepts, such as triangles, angles, and waves.</p> <p><u>TRIGONOMETRY-STAGE DESIGN</u></p> <p>Angles and Trigonometry: Lighting placement can be explored through angles. For example, where the lights are placed (above, below, or to the side) and how they shine on different areas of the stage can be calculated using basic trigonometry.</p>
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JULY
16

10. Circles
11. Areas
Related to
Circles
12. Surface
Areas and
Volumes

1. Define and explain the concept of a circle, including center, radius, diameter, and circumference.
2. Identify and classify different types of circles, including congruent and similar circles.
3. Apply circle properties, including theorems related to angles and arcs.
4. Solve problems involving circles, including finding circumference, area, and arc length.
5. Visualize and interpret circle diagrams and graphs.

Area Related to Circle

1. Define and explain the concept of area related to a circle, including sector area and segment area.
2. Apply formulas to find area of sectors and segments.
3. Solve problems involving area related to circles, including finding area of shaded regions.
4. Visualize and interpret circle diagrams and graphs.
5. Apply circle properties to solve real-world problems.

1. Define and explain the concept of surface area and volume of 3D shapes, including cubes, cuboids, and cylinders.
2. Apply formulas to find surface area and volume of 3D shapes.
3. Solve problems involving surface area and volume,

Circles

1. Demonstration Method: Use visual aids to demonstrate circle properties and theorems.
2. Guided Discovery: Encourage students to explore and discover circle relationships through guided activities.
3. Collaborative Learning: Divide students into groups to work on circle problems, promoting peer-to-peer learning.
4. Problem-Solving Approach: Encourage students to solve circle problems, promoting critical thinking and analytical skills.

Area Related to Circle

1. Visual Learning: Use diagrams and graphs to illustrate area related to circle concepts.
2. Practical Applications: Provide real-world examples of area related to circle, such as architecture and engineering.
3. Collaborative Learning: Divide students into groups to work on area related to circle problems, promoting peer-to-peer learning.
4. Problem-Solving Approach: Encourage students to solve area related to circle problems, promoting critical thinking and analytical skills.

Surface Area and Volume

1. Hands-on Learning: Use manipulatives, such as blocks and cubes, to illustrate surface

1. Define and explain the concept of a circle, including center, radius, diameter, and circumference.
2. Identify and classify different types of circles, including congruent and similar circles.
3. Apply circle properties, including theorems related to angles and arcs.
4. Solve problems involving circles, including finding circumference, area, and arc length.
5. Visualize and interpret circle diagrams and graphs.
6. Define and explain the concept of area related to a circle, including sector area and segment area.
7. Apply formulas to find area of sectors and segments.
8. Solve problems involving area related to circles, including finding area of shaded regions.
9. Visualize and interpret circle diagrams and graphs.
10. Define and explain the concept of surface area and volume of 3D shapes, including cubes, cuboids, and cylinders.
11. Apply formulas to find surface area and volume of 3D shapes.
12. Solve problems involving surface area and volume, including finding surface area and volume of composite shapes.
13. Visualize and interpret 3D

Develop games and puzzles that involve circles and shapes, such as "Circle Trivia" or "Shape Scramble".

Ask students to create artwork that represents different circle properties and theorems.

Ask students to create artwork that represents different circle properties and theorems.

1. Critical Thinking: Students will develop critical thinking skills by analyzing and solving problems involving circles and shapes.
2. Problem-Solving: Students will develop problem-solving skills by applying mathematical concepts to real-world problems.
3. Communication: Students will develop communication skills by presenting their solutions to mathematical problems.
4. Collaboration: Students will develop collaboration skills by working in groups to solve mathematical problems.
5. Creativity: Students will develop creativity skills by finding innovative solutions to mathematical problems.

Surface area and volume- craft
Students create 3D

		<p>including finding surface area and volume of composite shapes.</p> <p>4. Visualize and interpret 3D diagrams and graphs.</p> <p>5. Apply surface area and volume concepts to solve real-world problems.</p>	<p>area and volume concepts.</p> <p>2. Real-World Applications: Provide real-world examples of surface area and volume, such as architecture and engineering.</p> <p>3. Collaborative Learning: Divide students into groups to work on surface area and volume problems, promoting peer-to-peer learning.</p> <p>4. Problem-Solving Approach: Encourage students to solve surface area and volume problems, promoting critical thinking and analytical skills.</p>	<p>diagrams and graphs.</p> <p>14. Apply surface area and volume concepts to solve real-world problems.</p> <p>15. Analyze and solve problems involving surface area and volume of complex shapes.</p>		<p>models using various materials (clay, cardboard, etc.) and calculate the surface area and volume.</p>
<p>AUGUST 14</p>	<p>12. Surface Areas and Volumes.....cont 13. Statistics 14. Probability</p>	<p>1. Define and explain the concept of surface area and volume of 3D shapes, including cubes, cuboids, and cylinders.</p> <p>2. Apply formulas to find surface area and volume of 3D shapes.</p> <p>3. Solve problems involving surface area and volume, including finding surface area and volume of composite shapes.</p> <p>4. Visualize and interpret 3D diagrams and graphs.</p> <p>5. Apply surface area and volume concepts to solve real-world problems.</p> <p>6. Analyze and solve problems involving surface area and volume of complex shapes.</p> <p>7. Define and explain the concept of statistics and probability.</p> <p>8. Apply statistical methods to</p>	<p>1. Demonstration Method: Use visual aids to demonstrate surface area and volume formulas.</p> <p>2. Guided Discovery: Encourage students to explore and discover statistical and probability concepts through guided activities.</p> <p>3. Collaborative Learning: Divide students into groups to work on surface area and volume problems, promoting peer-to-peer learning.</p> <p>4. Technology Integration: Utilize digital tools, such as math software, to explore surface area and volume concepts.</p> <p>5. Problem-Solving Approach: Encourage students to solve statistical and probability problems, promoting critical thinking and analytical skills.</p>	<p>1. Define and explain the concept of surface area and volume of 3D shapes.</p> <p>2. Apply formulas to find surface area and volume of 3D shapes.</p> <p>3. Solve problems involving surface area and volume.</p> <p>4. Visualize and interpret 3D diagrams and graphs.</p> <p>5. Apply surface area and volume concepts to solve real-world problems.</p> <p>6. Define and explain statistical measures, including mean, median, and mode.</p> <p>7. Apply statistical methods to analyze and interpret data.</p> <p>8. Calculate probability using theoretical and experimental methods.</p> <p>9. Apply probability concepts to solve real-world problems.</p> <p>10. Analyze and interpret data</p>	<p>Math Modeling Competition: Ask students to create mathematical models of real-world objects, focusing on surface area and volume.</p> <p>Statistical Analysis Project: Assign students to collect and analyze data on a real-world issue, applying statistical concepts.</p> <p>AI Activity Description</p> <p>Rock-Paper-Scissors: Ask the students to go on the link: https://www.afiniti.com/corporate/rock-paper-scissors and click on play the game.</p>	<p>1. Connecting math to real-world scenarios, such as architecture, engineering, and data analysis.</p> <p>2. Integrating math with science, technology, engineering, and mathematics (STEM) fields.</p> <p>3. Using math to model and solve problems in economics, finance, and social sciences.</p> <p>4. Applying math concepts to environmental and health issues.</p> <p>5. Using technology to visualize and analyze math concepts.</p>

		<p>analyze and interpret data.</p> <p>9. Calculate probability using theoretical and experimental methods.</p> <p>10. Apply probability concepts to solve real-world problems.</p> <p>11. Analyze and interpret data using statistical graphs and charts.</p> <p>12. Apply statistical and probability concepts to solve problems involving uncertainty and risk.</p> <p>13. Use technology to calculate and analyze statistical and probability data.</p> <p>14. Communicate statistical and probability results effectively using graphs, charts, and tables.</p> <p>15. Apply statistical and probability concepts to make informed decisions in real-world contexts.</p>	<p>6. Real-World Applications: Provide real-world examples of surface area and volume, and statistical and probability concepts, such as architecture, engineering, and data analysis.</p> <p>7. Visual Learning: Use diagrams, graphs, and charts to illustrate surface area and volume, and statistical and probability concepts.</p> <p>8. Hands-on Learning: Use manipulatives, such as blocks and cubes, to illustrate surface area and volume concepts.</p> <p>9. Guest Lecture: Invite a guest speaker to talk to the class about how surface area and volume, and statistical and probability concepts are used in their profession or field.</p> <p>10. Project-Based Learning: Assign projects that involve applying surface area and volume, and statistical and probability concepts to real-world problems.</p>	<p>using statistical graphs and charts.</p> <p>11. Apply statistical and probability concepts to make informed decisions.</p> <p>12. Use technology to calculate and analyze statistical and probability data.</p> <p>13. Communicate statistical and probability results effectively.</p> <p>14. Apply statistical and probability concepts to solve problems involving uncertainty and risk.</p> <p>15. Demonstrate understanding of the importance of statistical and probability concepts in real-world contexts.</p>	<p>Students will be able to identify how the AI-enabled machine is taking our choices as data to train itself in such a way that it can predict our future moves and can win against us.</p>	<p>Multidisciplinary Skills</p> <p>1. Critical thinking: Analyzing and solving complex math problems.</p> <p>2. Problem-solving: Applying math concepts to real-world scenarios.</p> <p>3. Communication: Presenting math solutions and results effectively.</p> <p>4. Collaboration: Working in teams to solve math problems and projects.</p> <p>5. Creativity: Finding innovative solutions to math problems and projects.</p> <p>6. Time management: Managing time effectively to complete math assignments and projects.</p> <p>7. Self-directed learning: Taking initiative to learn and explore math concepts independently.</p> <p>8. Adaptability: Adapting to new math concepts and technologies.</p> <p><u>STATISTICS-</u> <u>MUSIC</u></p> <p>Conduct surveys on costume popularity, analyzing trends using</p>
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						measures such as variance, standard deviation, and percentiles to understand the diversity in costume choices across regions.
SEPTEMBER 8	EXAMS	-	-	-	-	-
OCTOBER	REVISION	<ol style="list-style-type: none"> 1. Recall and apply mathematical concepts, formulas, and theorems. 2. Develop problem-solving skills using mathematical models. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>demonstration, guided discovery, collaborative learning, technology integration, and problem-solving approaches. These methods enable students to actively engage with mathematical concepts, develop critical thinking skills, and apply knowledge to real-world scenarios. Technology integration enhances student learning through interactive simulations and visualizations.</p>	<ol style="list-style-type: none"> 1. Define and explain mathematical concepts, formulas, and theorems. 2. Apply mathematical concepts to solve problems. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	Students participate in math fairs, competitions, and projects to apply mathematical concepts to real-world scenarios.	Students develop critical thinking, problem-solving, communication, collaboration, creativity, and time management skills through mathematical applications and projects.
NOVEMBER	REVISION	<ol style="list-style-type: none"> 1. Recall and apply mathematical concepts, formulas, and theorems. 2. Develop problem-solving skills using mathematical models. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>demonstration, guided discovery, collaborative learning, technology integration, and problem-solving approaches. These methods enable students to actively engage with mathematical concepts, develop critical thinking skills, and apply knowledge to real-world scenarios. Technology integration enhances student learning through interactive simulations and visualizations.</p>	<ol style="list-style-type: none"> 1. Define and explain mathematical concepts, formulas, and theorems. 2. Apply mathematical concepts to solve problems. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	Students participate in math fairs, competitions, and projects to apply mathematical concepts to real-world scenarios.	Students develop critical thinking, problem-solving, communication, collaboration, creativity, and time management skills through mathematical applications and projects.

DECEMBER	REVISION	<ol style="list-style-type: none"> 1. Recall and apply mathematical concepts, formulas, and theorems. 2. Develop problem-solving skills using mathematical models. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>demonstration, guided discovery, collaborative learning, technology integration, and problem-solving approaches. These methods enable students to actively engage with mathematical concepts, develop critical thinking skills, and apply knowledge to real-world scenarios. Technology integration enhances student learning through interactive simulations and visualizations.</p>	<ol style="list-style-type: none"> 1. Define and explain mathematical concepts, formulas, and theorems. 2. Apply mathematical concepts to solve problems. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>Students participate in math fairs, competitions, and projects to apply mathematical concepts to real-world scenarios.</p>	<p>Students develop critical thinking, problem-solving, communication, collaboration, creativity, and time management skills through mathematical applications and projects.</p>
JANUARY	REVISION	<ol style="list-style-type: none"> 1. Recall and apply mathematical concepts, formulas, and theorems. 2. Develop problem-solving skills using mathematical models. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>demonstration, guided discovery, collaborative learning, technology integration, and problem-solving approaches. These methods enable students to actively engage with mathematical concepts, develop critical thinking skills, and apply knowledge to real-world scenarios. Technology integration enhances student learning through interactive simulations and visualizations.</p>	<ol style="list-style-type: none"> 1. Define and explain mathematical concepts, formulas, and theorems. 2. Apply mathematical concepts to solve problems. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>Students participate in math fairs, competitions, and projects to apply mathematical concepts to real-world scenarios.</p>	<p>Students develop critical thinking, problem-solving, communication, collaboration, creativity, and time management skills through mathematical applications and projects.</p>
FEBRUARY	REVISION, EXAMS	<ol style="list-style-type: none"> 1. Recall and apply mathematical concepts, formulas, and theorems. 2. Develop problem-solving skills using mathematical models. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>demonstration, guided discovery, collaborative learning, technology integration, and problem-solving approaches. These methods enable students to actively engage with mathematical concepts, develop critical thinking skills, and apply knowledge to real-world scenarios. Technology integration enhances student learning through interactive simulations and visualizations.</p>	<ol style="list-style-type: none"> 1. Define and explain mathematical concepts, formulas, and theorems. 2. Apply mathematical concepts to solve problems. 3. Analyze and interpret data using statistical methods. 4. Apply mathematical concepts to real-world scenarios. 5. Develop critical thinking and logical reasoning skills. 	<p>Students participate in math fairs, competitions, and projects to apply mathematical concepts to real-world scenarios.</p>	<p>Students develop critical thinking, problem-solving, communication, collaboration, creativity, and time management skills through mathematical applications and projects.</p>

MARCH	EXAMS					