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Month	IB Unit Topic	Assessments and Activities	ATL Skills	Curriculum Standards and IB Criterion and Strands
September	**Expressions and Equations**	**Activities** 1. Introduce Interactive Notebook Activity 2. Interactive Notebook Compose and Decompose 3. Matching Game on Composing and Decomposing numbers 4. Classwork on Compose and Decompose 5. Interactive Notebook Positive and Negative Numbers 6. Classwork with real life situations positive and negative numbers 7. Interactive Notebook solve one-step addition and subtraction 8. Match Game - Match one step equation with their answer 9. Spin and Solve one step equations game 10. Interactive Notebook Number Sentences **Formative and Summative** -PreTest -Quiz on solving for X	**Communication** **Communication skills** **Reading, writing and using language to gather and communicate information** -Make inferences and draw conclusions -Understand and use mathematical notation -Take effective notes in class -Organize and depict information logically **Self-management** **Organization skills** **Managing time and tasks effectively** -Bring necessary equipment and supplies to class -Keep an organized and logical system of information files/notebooks **Thinking** **Critical-thinking skills** **Analysing and evaluating issues**	**Standards** EE.8.EE.3-4: Compose and decompose whole numbers up to 99. EE.6.NS.5-8: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values e.g., temperature above/below zero). EE.6.EE.1-2: Identify equivalent number sentences. EE.6.EE.5-7: Match an equation to a real-world problem in which variables are used to represent numbers. EE.7.EE.4: Use the concept of equality with models to solve one-step addition and subtraction equations. EE.8.EE.7: Solve simple algebraic equations with one variable using addition and subtraction. **IB Criterion and Strands** **Criterion C: Communicating** ● iii. communicate coherent mathematical lines of reasoning ● iv. organize information using a logical structure. **Criterion D: Applying mathematics in real-life contexts** ● i. identify relevant elements of authentic real-life situations ● ii. select appropriate mathematical

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		-Post Test	**and ideas** -Draw reasonable conclusions and generalizations **Transfer skills** **Using skills and knowledge in multiple contexts** -Apply skills and knowledge in unfamiliar situations	strategies when solving authentic real-life situations • iv. explain the degree of accuracy of a solution • v. describe whether a solution makes sense in the context of the authentic real-life situation.
Month	**IB Unit Topic**	**Assessments and Activities**	**ATL Skills**	**Curriculum Standards and IB Criterion and Strands**
October **November** **December** **January** **February**	**The Number System**	**Activities** 1. Skittles Ratio Introduction Activity 2. Interactive Notebook Sequences 3.Classwork on Sequences 4. Multiplication Chart Sequences 5. 1X1 Interactive Notebook Multiplying Strategies -Groups -Array -Repeated Addition -Skip Counting -Fact Family 6. Classwork using the multiplication strategies from the Interactive Notebook 7. Multiplication worksheets for	**Communication** **Communication skills** **Reading, writing and using language to gather and communicate information** -Use and interpret a range of discipline-specific terms and symbols -Understand and use mathematical notation -Take effective notes in class **Self-management** **Organization skills** **Managing time and tasks effectively** -Bring necessary equipment and	**Standards** EE.8.EE.3-4: Compose and decompose whole numbers up to 99. EE.6.NS.5-8: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values e.g., temperature above/below zero). EE.6.EE.1-2: Identify equivalent number sentences. EE.6.EE.5-7: Match an equation to a real-world problem in which variables are used to represent numbers. EE.7.EE.4: Use the concept or equality with models to solve one-step addition and subtraction equations. EE.8.EE.7: Solve simple algebraic equations with one variable using addition and subtraction. **IB Criterion and Strands**

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		extra practice 8. Dividing into equal shares Activity 9. Interactive Notebook Division -Groups -Array -Repeated Addition -Skip Counting -Fact Family -DMSB (Divide, Multiply, Subtract and Bring Down) 10. Division Worksheets for extra practice 11. Interactive Notebook greater than, less than and equal symbols 12. Classwork using symbols with numbers 13.Interactive Notebook Basic Fractions 14. Create a fraction strips 1-12 15. Understanding size of fractions by coloring parts 16. Fraction Pizza Class Project 17. Classwork on comparing fractions using pictures. 18. Classwork on comparing fractions using numbers. 19. Interactive Notebook Adding Fractions 20. Classwork adding fractions 21. Interactive Notebook	supplies to class -Keep an organized and logical system of information files/notebooks -Use appropriate strategies for organizing complex information **Self-management** **Reflection skills** **(Re)considering the process of learning; choosing and using ATL skills** -Develop new skills, techniques and strategies for effective learning -Demonstrate flexibility in the selection and use of learning strategies **Thinking** **Critical-thinking skills** **Analysing and evaluating issues and ideas** -Use models and simulations to explore complex systems and issues -Identify trends and forecast possibilities **Transfer skills**	**Criterion A: Knowing and understanding** ● i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations **Criterion B: Investigating patterns** ● i. apply mathematical problem-solving techniques to recognize patterns ● ii. describe patterns as relationships or general rules consistent with correct findings ● iii. verify whether the pattern works for other examples. **Criterion C: Communicating** ● ii. use different forms of mathematical representation to present information **Criterion D: Applying mathematics in real-life contexts** ● iii. apply the selected mathematical strategies successfully to reach a solution ● iv. explain the degree of accuracy of a solution

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		Subtracting Fractions 22. Classwork on Subtracting fractions 23. Mixed adding and subtracting fractions 24. BUMP adding and subtracting decimals 25. Interactive Notebook turning a fraction into a decimal 26. Classwork on fractions to decimals 27. Interactive Notebook Ratios 28. Classwork on Ratios **Formative and Summative** -PreTest -Sequence and Multiplication Quiz -Equal Shared and Division Quiz -Fractions and Ratio Quiz -Post Test	**Using skills and knowledge in multiple contexts** -Apply skills and knowledge in unfamiliar situations	
Month	**IB Unit Topic**	**Assessments and Activities**	**ATL Skills**	**Curriculum Standards and IB Criterion and Strands**
February March April	**Graphing**	**Activities** 1. Interactive Notebooks Tally and Frequency Chart 2. Classwork Tally and Frequency Chart	**Communication** **Communication skills Reading, writing and using language to gather and communicate information**	**Standards** EE.7.EE.2 Identify an arithmetic sequence of whole numbers with a whole number common difference. EE.7.NS.2.a: Solve multiplication problems with products to 100.

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		3. Interactive Notebooks Bar Graphs 4. Classwork Bar Graphs 5. Interactive Notebooks Pictograph 6. Classwork Pictograph work 7. Make your own Pictograph 8. Interactive Notebooks Picture Graphs 9. Classwork Picture Graph 10. Interactive Notebooks Pie Charts 11. Classwork Pie Charts 12. Interactive Notebooks Line Graphs 13. Classwork Line Graphs 14. Interactive Notebooks Line Graphs with multiple lines 15. Classwork graphing multiple lines on one graph 16. Interactive Notebooks Line Plot 17. Classwork Line Plot 18. Interactive Notebook Probability 19. Classwork on Probability 20. Under The Big Top - A real world graphing and data project **Formative and Summative**	-Use a variety of organizers for academic writing tasks - Organize and depict information logically **Self-management** **Organization skills** **Managing time and tasks effectively** -Keep an organized and logical system of information files/notebooks **Research** **Information literacy skills** **Finding, interpreting, judging and creating information** - Collect, record and verify data - Access information to be informed and inform others - Make connections between various sources of information **Thinking** **Critical-thinking skills** **Analysing and evaluating issues and ideas** - Interpret data - Draw reasonable conclusions and generalizations	EE.6.NS.2: Apply the concept of share and equal shares to divide. EE.7.NS.2.b: Solve division problems with divisors up to 5 and also with divisors of 10 without remainders. EE.6.NS.1: Compare the relationship between two unit fractions. EE.7.NS.1 Add fractions with like denominators (halves, thirds, fourths, and tenths) with sums less than or equal to one. EE.8.NS.1: Subtract fractions with like denominators (halves, thirds, fourths, and tenths) with minuends less than or equal to one. EE.7.NS.2.c-d: Express a fraction with a denominator of 10 as a decimal. EE.8.NS.2.a: Express a fraction with a denominator of 100 as a decimal. EE.7.NS.3: Compare quantities represented as decimals in real world examples to tenths. EE.6.RP.1: Demonstrate a simple ratio relationship. EE.7.RP.1-3: Use a ratio to model or describe a relationship. **IB Criterion and Strands** **Criterion A: Knowing and understanding** • ii. apply the selected mathematics successfully when solving problems • iii. solve problems correctly in a variety of contexts. **Criterion B: Investigating patterns** • i. apply mathematical problem-solving

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		-PreTest -Under the Big Top Project -Post Test		techniques to recognize patterns ● ii. describe patterns as relationships or general rules consistent with correct findings ● iii. verify whether the pattern works for other examples. **Criterion C: Communicating** ● i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements ● ii. use different forms of mathematical representation to present information ● iii. communicate coherent mathematical lines of reasoning ● iv. organize information using a logical structure. **Criterion D: Applying mathematics in real-life contexts** ● v. describe whether a solution makes sense in the context of the authentic real-life situation.
Month	**IB Unit Topic**	**Assessments and Activities**	**ATL Skills**	**Curriculum Standards and IB Criterion and Strands**
April May June	**Geometry**	**Activities** PRETEST 1. Interactive Notebook lesson on 2D Shapes (Key Words- Sides, Congruent Sides, Parallel, Angles, Right Angles) -Name the Shapes 2D Classwork	**Communication** **Communication skills** **Reading, writing and using language to gather and communicate information** -Understand and use	**Standards** EE.6.SP.5: Summarize data distribution shown in graphs or tables. EE.6.SP.1-2: Display data on a graph or table that shows variability in the data. EE.7.SP.3: Compare two sets of data within a single

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		2. Interactive Notebook lesson on 3D Shapes (Key Words - Vertex, Face, Edge) -Name the 3D Shapes Classwork - Name the shapes Notecards -Game on Recognizing shapes when given specific conditions Worksheet 3. Interactive Notebook lesson on how shapes are Congruent 4. Congruent Shapes Task Cards Activity 5. Quiz on Recognizing shapes when given specific conditions 6. Building 2D and 3D shapes with cubes 7.Interactive Notebook Area Notes and Worksheet 8. Toilet Papering Area Game 9. Area Grid Matching/Drawing and Multiplying 10. Real World Area Problems 11. Area Dream House 12. Area Quiz 13. Perimeter Interactive Notebook 14. Perimeter Classroom Game Perimeter Grid Matching/ Drawing and Adding 15. Practice with real world problems 16. Perimeter Quiz 17. Geometrocity Class Project 18. Interactive Notebook Lesson on angles (Key Words- Parallel, Perpendicular, Intersecting,	mathematical notation -Take effective notes in class **Self-management** **Organization skills** **Managing time and tasks effectively** -Plan short- and long-term assignments; meet deadlines **Reflection skills** **(Re)considering the process of learning; choosing and using ATL skills** -Develop new skills, techniques and strategies for effective learning **Thinking** **Critical-thinking skills** **Analysing and evaluating issues and ideas** -Test generalizations and conclusions -Propose and evaluate a variety of solutions **Transfer skills** **Using skills and knowledge in multiple contexts** -Apply skills and knowledge in	data display such as a picture graph, line plot, or bar graph. EE.7.SP.5-7: Describe the probability of events occurring as possible or impossible EE.8.F.5: Describe how a graph represents a relationship between two quantities. EE.8.SP.4: Construct a graph of table from given categorical data, and compare data categorized in the graph or table EE.8.F.1-3: Given a function table containing at least 2 complete ordered pairs, identify a missing number that completes another ordered pair (limited to linear functions). **IB Criterion and Strands** **Criterion A: Knowing and understanding** i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations ii. apply the selected mathematics successfully when solving problems iii. solve problems correctly in a variety of contexts. **Criterion C: Communicating** i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements **Criterion D: Applying mathematics in real-life contexts** i. identify relevant elements of authentic real-life situations

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		Straight, Right, Acute, Obtuse) 19. Interactive Notebook Measuring and drawing angles 20. What's your angle? 21. Quiz on recognizing angles and comparing angles **<u>Formative and Summative</u>** -PRETEST -Quiz on Recognizing shapes when given specific conditions -Area Quiz -Perimeter Quiz -Geometrocity Project -Quiz on recognizing angles and comparing angles -POST TEST	unfamiliar situations	ii. select appropriate mathematical strategies when solving authentic real-life situations iii. apply the selected mathematical strategies successfully to reach a solution