**Name of teacher: – MY2**

| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Percentage and fractions**  **One** | **Relationships** | **Change , simplification** | **Globalization and sustainability** | **Financial personal and economic change can be understood and simplified using proportional relationships like ratios and percentages** | **A: knowing and understanding**  **B: investigating patterns**  **C: communicating**    **D: applying mathematics in real-world contexts.** | **Creative- thinking skills**  **Communication skills**  **Transfer skills**  **Information literacy skills** | **What is the relationship between fractions and decimals?**  **How can we visualize percentages and decimals?**  **Activity : decimal numbers**  **How do convert fractions and decimals?**  **What is the best way to find the percentage of something?**  **What is the difference between percentage of and percentage off?**  **Activity : money for nothing?**  **Can percentages go over 100 % ?**  **Activity : ask the experts?**  **Does money make the world go round?**  **Activity : neither a borrower nor a lender be**  **Activity : complete the crossword , backwards**  **How do we simplify a ratio?**  **Ho do we reason with ratios?** |
| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| **Statistics**  **Two** | **Form** | **Systems , patterns** | **Globalization and sustainbility** | **Fair forms of communications help us to reveal patterns and improve our truth- telling systems.** | **A: Knowing and understanding**  **B: Investigating patterns.**  **C: Communicating**    **D: Applying Mathematics in real-life contexts.** | **Communication skills**  **Transfer skills**  **Information literacy skills**  **Critical thinking skills**  **Collaboration skills** | **How do we get our hands on data?**  **Categorical data.**  **How do we organize data?**  **Comparing categorical data.**  **In what forms we can represent data ?**  **Activity : food banks**  **Activity : grouping and classifying data**  **What is a dot plot?**  **What exactly are info graphics?**  **Activity : create your own visually appealing info graphic**  **How do we find patterns in data?**  **Activity : statistical analysis of texts**  **How do we handle results fairly?**  **Data collection.**  **How do we know what to trust?**  **What is a reality check?** |
| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| **All about polygons**  **Three** | **Logic** | **Measurements, generalization** | **Scientific and technical innovation** | **The general properties of shapes and our spatial environment can be measured by logic and manipulated and created by technology.** | **A: knowing and understanding**  **B: investigating patterns**  **C: communicating**    **D: Applying Mathematics in real-life contexts.** | **Creative- thinking skills**  **Affective skills**  **Collaboration skills** | **How do we know about shapes?**  **Activity : diagonals in polygons**  **What about shapes with nine sides or more?**  **Activity : when does a polygon stop?**  **What inside these shapes?**  **Circle , semicircles, and ellipses**  **How do we use**  **What are Triangles?**  **Finding the angles of Triangles.**  **What is the isosceles Triangle?**  **How can we have fun with shapes?**  **How do measure what is inside a shape?** |
| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| **Where do conclusions come from?**  **Four** | **Logic** | **Patterns , quantity** | **Identities and relationships** | **Relationships between variables form patterns which often justify important logical conclusions.** | **A: Knowing and understanding**  **B: Investigating patterns.**  **C: Communicating**    **D: Applying Mathematics in real-life contexts** | **Critical- thinking skills Communication skills:**  **Information literacy skills**  **.** | **What is a mathematical echo?**  **When should the center be the middle?**  **Why does the average person use average?**  **Activity : football's rising stars**  **Which is the best measure of central tendency?**  **Activity : tampering with data**  **How do we keep track of how far we’ve come?**  **How can outliers affect range?**  **How can we visually represent spread?**  **Box-and-whisker plots**  **What steps are needed to draw a box plot?**  **What are positive and negative correlations?**  **Can one positive correlation be 'more positive' than another?**  **Can statisticians replaced by computers?** |
| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| **Coordinate geometry &**  **Transformations**  **Five** | **Relationships** | **Equivalence , justification** | **Personal and cultural expression** | **In many cultures, arguments about what is perceived as beautiful can be justified by a mathematical relationship between equivalent images.** | **A: Knowing and understanding**  **B: Investigating patterns.**  **C: Communicating**    **D: Applying Mathematics in real-life contexts** | **Communication skills**  **Critical-thinking skills**  **Transfer skills** | **From scatter plot to Cartesian plane**  **Where do I stand?**  **Activity : battleships**  **How do I turn a table into graph?**  **Activity : plot it**  **Activity : graphs and equations**  **Activity : gradient/slope investigation**  **What is mathematical about mirrors?**  **Activity : reflect investigation**  **How many ways we can rotate a figure?**  **Activity : just plotting around**  **How do 'two-dimensional figures' move?**  **Activity : on the move**  **What qualifies as 'similar'?**  **How do we enlarge a shape?** |
| **Unit Title** | **Key concept** | **Related concept(s)** | **Global context** | **Statement of inquiry** | **MYP objectives** | **ATL skills** | **Content**  **(topics, knowledge, skills)** |
| **How does it all tie together?**    **six** | **Form** | **Space , representation** | **Orientation in space and time** | **Where we are in space and time changes what we know as much as the form by which is represented.** | **A: Knowing and understanding**  **B: Investigating patterns.**  **C: Communicating**    **D: Applying Mathematics in real-life contexts** | **Communication skills**  **Media literacy skills**  **Creative thinking skills**  **Transfer skills** | **What is meant by mathematical synonyms?**  **Expanding**  **Factorizing**  **Activity : fascinating factors**  **What is binary?**  **How do we generalize patterns in numbers?**  **Is paternity leave a fair benefit ?**  **What makes an image 'mathematical'?**  **Activity : mystic roses**  **Are primes beautiful?**  **Activity : meet the emirps**  **The development of numbers**  **How good is your mental mathematics?**  **Activity : are you a mathematics star?**  **Which structures define your hometown?**  **How can I beat the system?** |