Gulf English School Term 2 Part 2 Year 9 Mathematics

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| TOPIC Graphs, Area Volume and Similarity |

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| Themes: area of circles and compound shapes, volume of prisms, similar figures | Level: Year 9 |
| Objectives: *to compare lengths, areas and volumes using ratio notation, to calculate perimeters of 2D shapes, including circles, to identify and apply circle definitions and properties, including: centre, radius, chord, diameter, circumference, to solve problems involving different types of proportion, to investigate ways of representing proportion, to understand and solve problems involving congruence.* | |

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| Focussing Questions | Key Words | |
| **1. Area and Volume**   * Convince me C = 2πr = πd. * What is wrong with this statement? How can you correct it? * The area of a circle with radius 7 cm is approximately 441 cm2 because (3 × 7)2 = 441. * Convince me that the area of a semi-circle = * Name a right prism. And another. And another … * Convince me that a cylinder is not a prism   + Assessment: Topic Test   **2. Similar Figures**   * Convince me that this information shows a proportional relationship. * What type of proportion is it?   + Assessment: Topic Test   Review before End of Year Exam  TEXT BOOK: STP MATHEMATICS  Assessment: End of Year Exam | Function  Equation  Quadratic  Cubic  Reciprocal  Gradient  y-intercept  x-intercept  Root  Sketch  Plot  Kinematic  Speed  Distance  Time  Acceleration, Deceleration  Linear  Non-linear  Parabola  Asymptote  Rate of change | Explaining words  My rationale for … is…  The definition of … states that… so…  Therefore...  Hence… |