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 = $\frac{πd^{2}}{8}$
* 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 ExamTEXT BOOK: STP MATHEMATICSAssessment: End of Year Exam | FunctionEquationQuadraticCubicReciprocalGradienty-interceptx-interceptRootSketchPlotKinematicSpeedDistanceTimeAcceleration, DecelerationLinearNon-linearParabolaAsymptoteRate of change | Explaining wordsMy rationale for … is…The definition of … states that… so…Therefore...Hence… |