

MATHEMATICS – MYP 2 (YEAR 8) , TERM 2
AL JAZEERA ACADEMY
MIDDLE YEARS PROGRAMME, 2009-2010

TOPICS	OBJECTIVES	AREAS OF INTERACTION	ASSESSMENT CRITERIA
<p>Topic 12: Ratio and Proportion 2 Weeks</p> <p>Unit Question: How do we use ratios and proportions to solve real world problems?</p> <p>Key Questions: How do we:</p> <ul style="list-style-type: none"> ✓ Express quantities of the same kind as a ratio? ✓ Write ratios as fractions? ✓ Find equivalent ratios? ✓ Simplify ratios? ✓ Use proportions to solve ratio problems? ✓ Use ratios to divide quantities? ✓ Read a scale diagram? ✓ Use ratio to calculate actual dimensions in a scale diagram? ✓ Define the gradient as a ratio of rise to run? 	<p>Students should have knowledge of/be able to:</p> <p>A – Knowledge and Understanding</p> <ul style="list-style-type: none"> ⇒ Express quantities of the same kind as a ratio. ⇒ Write ratios as fractions. ⇒ Find equivalent ratios. ⇒ Simplify ratios. ⇒ Use proportions to solve ratio problems. ⇒ Use ratios to divide quantities. ⇒ Read a scale diagram. ⇒ Use ratio calculations to find actual dimensions in a scale diagram. ⇒ Define the gradient as a ratio of rise to run. <p>C – Communication in Mathematics</p> <ul style="list-style-type: none"> ⇒ Show working when using ratios to divide quantities. ⇒ Use ratio to calculate actual dimensions in a scale diagram. 	<p>Approaches to Learning:</p> <ul style="list-style-type: none"> • Problem solving. • Performing basic operations. • Apply mathematical concepts. • Compare and analyse equivalent ways of presenting values. • Assess and evaluate own work. • Use grid paper to enlarge or reduce pictures. <p>Human Ingenuity:</p> <ul style="list-style-type: none"> • Investigate and discuss the Golden Ratio and the human body. 	<p>A: Knowledge and Understanding (8) B: Investigating Patterns (8) C: Communication (6) D: Reflection and Evaluation (6) TOTAL: 28</p> <p>Assessments:</p> <ul style="list-style-type: none"> ▪ Mental Arithmetic Test. (A)